

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549  
**FORM 10-K**

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the year ended December 31, 2017

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number: 001-37352

**Virtu Financial, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of incorporation or organization)

**32-0420206**

(I.R.S. Employer Identification No.)

**300 Vesey Street**

**New York, New York 10282**

(Address of principal executive offices)

**10282**

(Zip Code)

**(212) 418-0100**

(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

The aggregate market value of voting and non-voting common stock held by non-affiliates of the registrant as of June 30, 2017 was approximately \$699.7 million, based on the closing price of \$17.65 per share as reported by NASDAQ on such date.

As of March 13, 2018, the Company has the following classes of common stock outstanding:

Class of Stock	Shares Outstanding as of March 13, 2018
Class A common stock, par value \$0.00001 per share	91,512,582
Class C common stock, par value \$0.00001 per share	17,066,564
Class D common stock, par value \$0.00001 per share	79,610,490

Portions of Part III of this Form 10-K are incorporated by reference from the Registrant's definitive proxy statement (the "2018 Proxy Statement") for its 2018 annual meeting of shareholders to be filed with the Securities and Exchange Commission no later than 120 days after the end of the Registrant's fiscal year.

**VIRTU FINANCIAL, INC. AND SUBSIDIARIES  
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FOR THE YEAR ENDED DECEMBER 31, 2017**

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Unless the context otherwise requires, the terms “we,” “us,” “our,” “Virtu” and the “Company” refer to Virtu Financial, Inc., a Delaware corporation, and its consolidated subsidiaries and the term “Virtu Financial” refers to Virtu Financial LLC, a Delaware limited liability company and a consolidated subsidiary of ours.

## PART I

### CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

This Form 10-K contains forward-looking statements, including certain statements contained in the risk factors. You should not place undue reliance on forward-looking statements because they are subject to numerous uncertainties and factors relating to our operations and business environment, all of which are difficult to predict and many of which are beyond our control. Forward-looking statements include information concerning our possible or assumed future results of operations, including descriptions of our business strategy. These forward-looking statements can be identified by the use of forward-looking terminology, including the terms “may,” “will,” “should,” “believe,” “expect,” “anticipate,” “intend,” “plan,” “estimate,” “project” or, in each case, their negative, or other variations or comparable terminology and expressions. These statements are based on assumptions that we have made in light of our experience in the industry as well as our perceptions of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances. As you read and consider this Form 10-K, you should understand that these statements are not guarantees of performance or results and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate, may differ materially from those made in or suggested by the forward-looking statements contained in this Form 10-K. By their nature, forward-looking statements involve known and unknown risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. Although we believe that the forward-looking statements contained in this Form 10-K are based on reasonable assumptions, you should be aware that many factors could affect our actual financial results or results of operations and cash flows, and could cause actual results to differ materially from those in such forward-looking statements, including but not limited to:

- reduced levels of overall trading activity;
- dependence upon trading counterparties and clearing houses performing their obligations to us;
- failures of our customized trading platform;
- risks inherent to the electronic market making business and trading generally;
- increased competition in market making activities and execution services;
- dependence on continued access to sources of liquidity;
- risks associated with self-clearing and other operational elements of our business;
- compliance with laws and regulations, including those specific to our industry;
- obligation to comply with applicable regulatory capital requirements;
- litigation or other legal and regulatory-based liabilities;
- proposed legislation that would impose taxes on certain financial transactions in the European Union, the U.S. and other jurisdictions;
- obligation to comply with laws and regulations applicable to our international operations;
- enhanced media and regulatory scrutiny and its impact upon public perception of us or of companies in our industry;
- need to maintain and continue developing proprietary technologies;

- failure to maintain system security or otherwise maintain confidential and proprietary information;
- the effect of the Acquisition of KCG (as defined below) on existing business relationships, operating results, and ongoing business operations generally;
- the significant costs and significant indebtedness that we incurred in connection with the Acquisition of KCG, and the integration of KCG into our business;
- the risk that we may encounter significant difficulties or delays in integrating the two businesses and the anticipated benefits, costs savings and synergies or capital release may not be achieved;
- the assumption of potential liabilities relating to KCG's business;
- capacity constraints, system failures, and delays;
- dependence on third party infrastructure or systems;
- use of open source software;
- failure to protect or enforce our intellectual property rights in our proprietary technology;
- risks associated with international operations and expansion, including failed acquisitions or dispositions;
- the effects of and changes in economic conditions (such as volatility in the financial markets, inflation, monetary conditions and foreign currency and exchange rate fluctuations, foreign currency controls and/or government mandated pricing controls, as well as in trade, monetary, fiscal and tax policies in international markets) and political conditions (such as military actions and terrorist activities);
- risks associated with potential growth and associated corporate actions;
- inability to, or delay, in accessing the capital markets to sell shares or raise additional capital;
- loss of key executives and failure to recruit and retain qualified personnel; and
- risks associated with losing access to a significant exchange or other trading venue.

We undertake no obligation to publicly update or revise any forward-looking statements to reflect events or circumstances that may arise after the date of this Form 10-K.

## **ITEM 1. BUSINESS**

### **BUSINESS**

#### **Overview**

We are a leading financial services firm that leverages cutting edge technology to deliver liquidity to the global markets and innovative, transparent trading solutions to our clients. We believe that our broad diversification, in combination with our proprietary technology platform and low-cost structure, enables us to facilitate risk transfer between global capital markets participants by supplying execution services and competitive liquidity in over 25,000 securities and other financial instruments, on over 235 venues, in 36 countries worldwide while at the same time earning attractive margins and returns.

Technology and operational efficiency are at the core of our business, and our focus on market making and order routing technology is a key element of our success. We have developed a proprietary, multi-asset, multi-currency technology platform that is highly reliable, scalable and modular, and we integrate directly with exchanges and other liquidity centers. Our market data, order routing, transaction processing, risk management and market surveillance technology modules manage our market making and institutional agency activities in an efficient manner that enables us to scale our activities globally across additional securities and other financial instruments and asset classes without significant incremental costs or third-party licensing or processing fees.

We believe that technology-enabled market makers like Virtu serve an important role in maintaining and improving the overall health and efficiency of the global capital markets by continuously posting bids and offers for financial instruments and thereby providing market participants a transparent and efficient means to transfer risk. All market participants benefit from the increased liquidity, lower overall trading costs and improve execution certainty that Virtu provides.

As described in “Acquisition of KCG” below, on July 20, 2017 (the “Closing Date”), we completed our all-cash acquisition (the “Acquisition”) of KCG Holdings, Inc. (“KCG”). KCG was a leading independent securities firm offering clients a range of services designed to address trading needs across asset classes, product types and geographies. KCG combined advanced technology with specialized client service across market making, agency execution and trading venues and also engaged in principal trading via electronic market making.

Prior to the Acquisition, Virtu operated as a single reportable business segment. As a result of the Acquisition, beginning in the third quarter of 2017, we have three operating segments: Market Making, Execution Services, and Corporate. Our management allocates resources, assesses performance and manages our business according to these segments.

We primarily conduct our Americas Equities business through our three SEC registered broker-dealers. We are registered with the Central Bank of Ireland and the Financial Conduct Authority (“FCA”) in the UK for our European trading and the Monetary Authority of Singapore and Australian Securities and Investments Commission for our Asia Pacific trading. We register as a market maker or liquidity provider and/or enter into direct obligations to provide liquidity on nearly every exchange or venue that offers such programs. We engage regularly with regulators around the world on issues affecting electronic trading and to advocate for increased transparency. In the U.S., we conduct our business from our headquarters in New York, New York and our trading centers in Austin, Texas and Chicago, Illinois. Abroad, we conduct our business through trading centers located in London, England, Dublin, Ireland and Singapore.

## **Market Making**

Our Market Making segment principally consists of market making in the cash, futures, and options markets across global equities, options, fixed income, currencies and commodities. As a leading, low-cost market maker dedicated to improving efficiency and providing liquidity across multiple securities, asset classes and geographies, we aim to provide critical market functionality and robust price competition in the securities and other financial instruments in which we provide liquidity. This contribution to the financial markets, and the scale and diversity of our market making activities, provides added liquidity and transparency, which we believe are necessary and valuable components to the efficient functioning of market infrastructure and benefit all market participants. We support transparent and efficient, technologically advanced marketplaces, and advocate for legislation and regulation that promotes fair and transparent access to markets.

As a market maker, we commit capital on a principal basis by offering to buy securities from, or sell securities to, broker dealers, banks and institutions. We engage in principal trading in the Market Making segment direct to clients as well as in a supplemental capacity on exchanges and on alternative trading systems (“ATs”). As a complement to electronic market making, our cash trading business handles specialized orders and transacts on the OTC Bulletin Board marketplaces operated by the OTC Markets Group Inc. and the Alternative Investment Market of the London Stock Exchange (“AIM”).

We make markets in a number of different assets classes, which are discussed in more detail below. We register as market makers and liquidity providers where available and support affirmative market making obligations.

We provide competitive and deep liquidity that helps to create more efficient markets around the world. We stand ready, at any time, to buy or sell a broad range of securities, and we generate revenue by buying and selling large volumes of securities and other financial instruments and earning small bid/ask spreads. Our market structure expertise, broad diversification, and execution technology enables us to provide competitive bids and offers in over 25,000 securities and other financial instruments, at over 235 venues, in 36 countries worldwide.

We believe the overall level of volumes and realized volatility in the various markets we serve have the greatest impact on our businesses. Increases in market volatility can cause bid/ask spreads to widen as market participants are more willing to transact immediately and as a result market makers' capture rate per notional amount transacted will increase.

We believe that the most relevant asset class distinctions and venues for the markets we serve include the following:

Asset Classes	Percentage of Adjusted Net Trading Income(1) (Year Ended December 31, 2017)	Selected Venues in Which We Make Markets
Americas Equities	50 %	BATS, BM&F Bovespa, CHX, CME, MexDer, NASDAQ, NYSE, NYSE Arca, NYSE American, TSX, major private liquidity pools
Rest Of World ("ROW") Equities	17 %	Amsterdam, Aquis, ASX, BATS Europe, Bolsa de Madrid, Borsa Italiana, Brussels, EUREX, Euronext - Paris, ICE Futures Europe, Johannesburg Stock Exchange, Lisbon, LSE, OSE, SBI Japannext, SGX, SIX Swiss Exchange, TOCOM, TSE
Global Fixed Income, Currencies, Commodities ("FICC"), Options and Other	23 %	BOX, BrokerTec, CME, Currenex, EBS, eSpeed, Hotspot, ICE, ICE Futures Europe, LMAX, NASDAQ Energy Exchange, NYSE Arca Options, PHLX, Reuters/Fxall, SGX, TOCOM

(1) For a full description of Adjusted Net Trading Income and a reconciliation of Adjusted Net Trading Income to trading income, net, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations"

Technology is at the core of our business. Our team of in-house software engineers develops our software and applications, and we utilize optimized infrastructure to integrate directly with the exchanges and other trading venues on which we provide liquidity. Our focus on technology and our ability to leverage our technology enables us to be one of the lowest cost providers of liquidity to the global electronic trading marketplace.

Leveraging the scalability and low costs of our platform, we are able to test and rapidly deploy new liquidity provisioning strategies, expand to new securities, asset classes and geographies and increase transaction volumes at little incremental cost. These efficiencies are central to our ability to deliver consistently positive Adjusted Net Trading Income as our profitability per trade and per instrument is not significant, particularly in U.S. equities.

Our transaction processing is automated over the full life cycle of a trade. Our market making platform generates and disseminates continuous bid and offer quotes. At the moment when a trade is executed, our systems capture and deliver this information back to the source, in most cases within a fraction of a second, and the trade record is written into our clearing system, where it flows through a chain of control accounts that allow us to automatically and efficiently reconcile trades, positions and payments until the final settlement occurs.

We have built and continuously refine our automated and integrated, real time systems for global trading, risk management, clearing and cash management, among other purposes. We have also assembled a proprietary connectivity network between us and exchanges around the world. Efficiency and speed in performing prescribed functions are always crucial requirements for our systems, and generally we focus on opportunities in markets that are sufficiently advanced to allow the seamless deployment of our automated strategies, risk management system and core technology.

Our systems are monitored 24 hours a day, five days a week by our core operations team and are substantially identical across our offices, in New York, New York; Austin, Texas; Chicago, Illinois; Dublin, Ireland; London, England; and Singapore. This redundancy covers our full technology platform, including our market data, order routing, transaction processing, risk management and market surveillance technology modules.

### **Clients and Products**

We offer direct-to-client market making services across multiple asset classes primarily to sell-side clients including global, national and regional broker dealers and banks as well as buy-side clients comprising, among others, mutual funds, pension plans, plan sponsors, hedge funds, trusts and endowments in North America, Europe and Asia.

We generally compete based on execution quality and immediacy, market coverage, price-improvement, payment for order flow, fulfillment rates and client service. In direct-to-client electronic market making in U.S. equities, execution quality is generally accepted as speed, spread and price improvement under SEC Rule 605. In other asset classes, standards for execution quality are both mandatory by applicable regulation and in many cases, client defined.

We continually work to provide clients with high quality, low-cost trade executions that enable them to satisfy their fiduciary obligation to seek the best execution on behalf of the end client. We continually refine our automated order routing models so that we may remain competitive.

### ***Americas Equities***

Americas Equities trading accounted for approximately 50% and 29% of our Adjusted Net Trading Income for the years ended December 31, 2017 and 2016, respectively. We trade over 25,000 listed Americas equity securities including, among others, equity related futures and exchange traded products, on thirteen U.S. Securities and Exchange Commission (“SEC”) registered exchanges as well as other ATSS, including the New York Stock Exchange (“NYSE”), the NASDAQ, NYSE Arca, Cboe BATS, Chicago Stock Exchange, the TSX in Canada, Bovespa in Brazil and BMV in Mexico, and we connect to more than 20 private liquidity pools.

As exchange traded products, or “ETPs,” and other similar products have proliferated both domestically and internationally, demand has increased for trading the underlying assets or hedging such funds. Our technology has enabled us to expand into providing liquidity to this growing area by making markets across these assets in a variety of trading venues globally. We are authorized participants, and can create and/or redeem ETPs in the Americas. As of December 31, 2017, we are the Lead Market Maker or Designated Liquidity Provider in over 600 ETPs listed in the Americas.

### ***Rest of World (“ROW”) Equities***

ROW equities trading accounted for approximately 17% and 22% of our Adjusted Net Trading Income for the years ended December 31, 2017 and 2016, respectively. Similar to our strategy in the Americas, we utilize direct connections to all of the registered exchanges in a particular jurisdiction including the London Stock Exchange, Cboe BATS Europe, NYSE Euronext, Six Swiss Exchange, Australian Securities Exchange, Tokyo Stock Exchange and Singapore Exchange, as well as other trading venues and additional pools of liquidity to which we can gain access either directly or through a broker.

We are also well positioned in European ETPs, as an authorized participant in many European ETPs. We are authorized participants in over 2,000 ETPs and can create and/or redeem ETPs listed outside the Americas. As of December 31, 2017, we are the registered Market Maker in over 500 ETPs listed abroad.

We increased our presence in APAC equities in 2016 by completing the acquisition of a minority stake in SBI Japannext Co., Ltd. (“SBI”), a leading Proprietary Trading System in Japan.

### ***Global FICC, Options, and Other***

Trading in Global FICC, Options, and Other accounted for approximately 23% and 46% of our Adjusted Net Trading Income for the years ended December 31, 2017 and 2016, respectively.

Our Fixed Income market making includes our activity in U.S. Treasury securities and other sovereign debt, corporate bonds, and other debt instruments. We trade these products on a variety of specialized exchanges, direct to counterparties, and other trading venues, including BrokerTec, eSpeed, DealerWeb, and BGS’s Fenics UTS.

Our Currencies market making, including spot, futures and forwards, comprises our activity in over 80 currencies, including deliverable, non-deliverable, fiat, and digital currencies, across dozens of venues and direct to counterparties. During the years ended December 31, 2017 and 2016, we were a leading participant in the major foreign exchange venues, including Reuters, Currenex, Cboe FX and NEX.

Our Commodities market making on both the CME, ICE, and Nasdaq Futures in crude oil, natural gas, heating oil, gasoline futures. We trade approximately 100 energy products and futures on the ICE, CME, and TOCOM. We also actively trade precious metals, including gold, silver, platinum and palladium, as well as base metals such as aluminum and copper.

Our Options and Other market making includes our activity on all of the U.S. options exchanges of which we are a member (i.e., Cboe, ISE and NYSE Arca) and through the U.S. futures exchanges.

### **Execution Services**

Virtu offers agency execution services in global equities, ETFs, futures and fixed income to institutions, banks and broker dealers. We generally earn commissions as an agent when executing orders on behalf of clients. Agency based, execution-only trading is done primarily through: (a) algorithmic trading and order routing; (b) institutional sales traders who offer portfolio trading and single stock sales trading which provides execution expertise for program, block and riskless principal trades in global equities and ETFs; and (c) matching of client orders in Virtu MatchIt (our registered ATS for U.S. equities) and in Virtu BondPoint (our fixed income ECN, which we sold in January 2018 as described in Note 4 “Business Held for Sale” of the Company’s Consolidated Financial Statements included in Part II Item 8 herein). Additionally we do act as principal on occasions, either when we manually work an order for a client, or more often, via electronic trading algorithms, executing against our firm’s liquidity. We also earn technology services revenues by providing our proprietary technology and infrastructure to select third parties for a service fee.

### **Clients and Products**

We offer agency execution services across multiple asset classes to buy-side clients including mutual funds, pension plans, plan sponsors, hedge funds, trusts and endowments and sell-side clients including global, national and regional broker dealers and banks in North America, Europe and Asia. In 2017, our Execution Services segment did not have any client that accounted for more than 10% of our commissions earned.

In this segment, we generally compete on trading technology, execution performance, costs, client service, market coverage, liquidity, platform capabilities and anonymity. We draw on in-house developed trading technologies to meet client criteria for best execution and for managing trading costs. As a result, we are able to attract a diverse array of clients



in terms of strategy, size and style. We also provide algorithmic trading and order routing that combine technology, access to our differentiated liquidity and support from experienced professionals to help clients execute trades.

We offer electronic execution services in global equities, options, futures and commodities via algorithmic trading, order routing and an execution management system (“EMS”) as well as internal crossing through our registered ATS. Our ATS provides clients with an anonymous source of non-displayed liquidity.

We offer clients a broad range of products and services and voice access to global markets including sales and trading for equities, ETFs and options. Additionally, we provide buy-side clients with deep liquidity, actionable market insights, anonymity and trade executions with minimal market impact and offer comprehensive trade execution services covering the depth and breadth of the market. We handle large complex trades, accessing liquidity from our order flow and other sources. We also provide soft dollar and commission recapture programs.

## **Corporate**

Our Corporate segment contains investments principally in strategic financial services-oriented opportunities and maintains corporate overhead expenses and all other income and expenses that are not attributable to our other segments.

## **Risk Management**

We are intensely focused on risk management and it is at the core of our trading infrastructure. Our real time risk controls monitor all of our market making positions, incorporating market data and evaluating our risk exposure to continuously update our outstanding bid and offer quotes, often many times per second. Although the majority of our market making is automated, the trading process and our risk exposure are monitored by a team of individuals, including members of our senior management team, who oversee our risk management processes in real-time. Our risk management system is intrinsic to our trading infrastructure that is utilized in each of our trading centers.

Our on exchange market making strategies are designed to put minimal capital at risk at any given time by limiting the notional size of our positions. Our strategies are also designed to lock in returns through precise hedging in the primary instrument or in one or more economically equivalent instruments, as we seek to eliminate the price risk in any positions held. Our real-time risk management system is built into our trading platform and is an integral part of our order life-cycle, analyzing real-time pricing data and ensuring that our order activity is conducted within strict pre-determined trading and position limits. If our risk management system detects that a trading strategy is generating revenues or losses in excess of our preset limits, it will lockdown that strategy and alert management.

The market making activities, where we interact with customers, involve the taking on of position risks. The risks at any point in time are limited by the notional size of positions as well as other factors. The overall portfolio risks are quantified using internal risk models and monitored by the Chief Risk Officer (“CRO”), the independent risk group and senior management.

In addition, our risk management system continuously reconciles our internal transaction records against the records of the exchanges and other liquidity centers with which we interact.

Our risk management policies and risk limits are set by our Risk Advisory Committee, and overseen by our CRO, who also reports independently into the Board Risk Committee.

We utilize the following approach to managing risk:

- **On Exchange Market Making Strategy Lockdowns.** Messages that leave our trading environment must first pass through a series of preset risk controls, or “lockdowns,” which are intended to minimize the likelihood of unintended activities by our market making algorithms, and which cannot be modified by our traders. Not only do we implement preset risk controls to limit downside risk, but we also do the same to limit upside risk — if our risk management system detects that a trading strategy is generating revenues or losses in excess of our

preset limits, a lockdown will be triggered. When a lockdown is triggered, our risk management system alerts us and automatically freezes the applicable trading strategy, cancels all applicable open orders and prevents the placement of additional related orders. Following a lockdown, a trader must manually reset the applicable trading strategy. While this risk prevention layer adds a degree of latency to our trading infrastructure and can prevent us from earning outsized returns in times of extreme market volatility, we believe that this trade off is necessary to properly limit our downside risk.

- Customer Market Making Model Restrictions. All models have limits in place which restrict individual position sizes, sector exposures and imbalanced portfolios with significant directional risks. Strategies are designed to automatically reduce exposures when limits are reached. The models are monitored by the trading team and the risk managers constantly.
- *Aggregate Exposure Monitoring.* Pursuant to our risk management policies, our automated management information systems monitor in real-time and generate report on daily and periodic bases. Exposures monitored include:
  - Risk Profiles
  - Statistical Risk Measures including Value at Risk (“VaR”), and Equity Betas
  - Stress and Scenario analysis
  - Concentration measures
  - Profit and Loss analysis
  - Trading performance reports
- Our assets and liabilities are marked-to-market daily for financial reporting purposes by reference to official exchange prices, and they are re-valued continuously throughout the trading day for risk management and asset/liability management purposes.
- *Operational Controls.* We have a series of fully automated controls over of our business. Key automated controls include:
  - Our technical operations system continuously monitors our network and the proper functioning of each of our trading centers around the world;
  - Our market making system continuously evaluates the listed securities in which we provide bid and offer quotes and changes its bids and offers in such a way as to minimize exposure to directional price movements. The speed of communicating with exchanges and market centers is maximized through continuous software and network engineering innovation, allowing us to achieve real-time controls over market exposure. We connect to exchanges and other electronic venues through a network of co-location facilities around the world that are monitored 24 hours a day, five days a week, by our staff of experienced network professionals;
  - Our clearing system captures trades in real-time and performs automated reconciliations of trades and positions, corporate action processing, options exercises, securities lending and inventory management, allowing us to effectively manage operational risk;
  - Software developed to support our market making systems performs daily profit and loss and position reconciliations; and
  - After event reviews where operational issues are evaluated and risk mitigations are identified and subsequently implemented
- *Credit Controls.* Trading notional limits are applied to customers and counterparties. These are monitored throughout the day by trading support and risk.
- *Liquidity Controls.* We seek to minimize liquidity risk by focusing the majority of trading in highly active and liquid instruments. Less liquid securities are identified and restrictions are in place as to the size of positions we hold in such instruments.

We rely heavily on technology and automation to perform many functions within Virtu, which exposes us to various forms of cyberattacks, including data loss or destruction, unauthorized access, unavailability of service or the introduction of malicious code. We have taken significant steps to mitigate the various cyber threats, and we devote significant resources to maintain and regularly upgrade our systems and networks and review the ever changing threat landscape. We have created a Risk Advisory Committee, which includes key personnel from each of our locations globally and is comprised of our CRO and our Chief Compliance Officer, members of our senior management team, senior technologists and traders, and certain senior officers. We will continue to periodically review policies and procedures to ensure they are effective in mitigating current cyber and other information security threats. In addition to the policy reviews, we continue to look to implement technology solutions that enhance preventive and detection capabilities. We also maintain insurance coverage that may, subject to policy terms and conditions, cover certain aspects of cyber risks. However, such insurance may be insufficient to cover all losses.

Our board of directors, through the Board Risk Committee, is regularly apprised of risk events, risk profiles, trends and the activities of our Risk Advisory Committee, including our risk management policies, procedures and controls.

### **Competition**

Historically, our competition has been registered market making firms ranging from sole proprietors with very limited resources to large, integrated broker-dealers. Today, a range of market participants may compete with us for revenues generated by market making activities across one or more asset classes and geographies, including market participants, such as Citadel Securities, Susquehanna International Group LLP, Two Sigma, Jane Street, DRW Holdings, IMC, and Optiver. Some of our competitors in market making are larger than we are and have more captive order flow in certain assets. We believe that the high cost of developing a competitive technological framework is a significant barrier to entry by new market participants.

Technology and software innovation is a primary focus for us, rather than relying solely on the speed of our network. We believe that our scalable technology allows us to access new markets and increase volumes with limited incremental costs.

### **Intellectual Property and Other Proprietary Rights**

We rely on federal and state laws that govern trade secrets, trademarks, domain names, copyright and contract law to protect our intellectual property and proprietary technology. We enter into confidentiality, intellectual property invention assignment and/or non-competition and non-solicitation agreements or restrictions with our employees, independent contractors and business partners, and we control access to, and distribution of, our intellectual property.

### **Employees**

As of March 5, 2018, we had approximately 560 employees, all of whom were employed on a full-time basis. None of our employees are covered by collective bargaining agreements. We believe that our employee relations are good.

### **Regulation**

We conduct our U.S. equities and options market making and provide execution services through our three SEC-registered broker-dealers, Virtu Financial BD LLC, Virtu Financial Capital Markets LLC, and Virtu Americas LLC. Virtu Financial BD LLC is a self-clearing broker-dealer, is regulated by the SEC and its designated examining authority is the Chicago Stock Exchange. Both Virtu Americas LLC and Virtu Financial Capital Markets LLC are dual-clearing broker-dealers (which means each self-clears certain proprietary and customer transactions and clears and settles the majority of customer transactions through fully disclosed clearing arrangements), are regulated by the SEC and their designated examining authority is the Financial Industry Regulatory Authority, Inc. ("FINRA").

Our activities in U.S. equities are primarily self-cleared. We are a full clearing member of the National Securities Clearing Corporation (NSCC), and the DTCC. Merrill Lynch, Pierce, Fenner & Smith Incorporated acts as our

clearing broker and carries and clears, on a fully disclosed basis, accounts for our institutional customers and acts as a prime broker for certain of our market making accounts. In other asset classes, we use the services of prime brokers who provide us direct market access to markets and often cross-margining and margin financing in return for an execution and clearing fee. We continually monitor the credit quality of our prime brokers and rely on large multinational banks for most of our execution and clearing needs globally.

Our energy, commodities and currency market making and trading activities are primarily conducted through Virtu Financial Global Markets LLC.

We conduct our European, Middle Eastern and African (“EMEA”) market making and trading activities from Dublin and through our Irish subsidiary, Virtu Financial Ireland Limited, which is authorized as an “Investment Firm” with the Central Bank of Ireland. Execution Services and market making are also conducted through KCG Europe Limited. In order to reduce the complexity of compliance with the requirements of the Markets in Financial Instruments Directive (“MiFID”) and Markets in Financial Instruments Directive II (“MiFID II”), the operations of KCG Europe Limited, including all of its clients, are being transitioned to Virtu Financial Ireland Limited. Virtu Financial Ireland Limited has received authorization from the Central Bank of Ireland to provide agency execution services to customers and to operate a branch office in London. Once the transition is complete, KCG Europe Limited will cease operations and withdraw its authorization with the FCA.

We conduct our Asia-Pacific (“APAC”) market making and trading activities from Singapore and through our Singapore subsidiary, Virtu Financial Singapore Pte. Ltd. Virtu Financial Singapore Pte. Ltd. is registered with the Monetary Authority of Singapore for an investment incentive arrangement.

Most aspects of our business are subject to extensive regulation under federal, state and foreign laws and regulations, as well as the rules of the various self-regulatory organization (“SROs”) of which our subsidiaries are members. The SEC, the U.S. Commodity Futures Trading Commission (“CFTC”), state securities regulators, FCA, the Securities and Futures Commission (“SFC”), FINRA, National Futures Association (“NFA”), other SROs and other U.S. and foreign governmental regulatory bodies promulgate numerous rules and regulations that may impact our business. As a matter of public policy, regulatory bodies are charged with safeguarding the integrity of the securities and other financial markets and with protecting the interests of investors in those markets. Regulated entities are subject to regulations concerning all aspects of their business, including but not limited to trading practices, order handling, best execution practices, anti-money laundering and financial crimes, handling of material non-public information, safeguarding data, compliance with exchange and clearinghouse rules, capital adequacy, reporting, record retention, market access and the conduct of officers, employees and other associated persons. Virtu Americas LLC carries certain customer accounts and is therefore subject to applicable SEC requirements relating to the protection of customer securities and the maintenance of a cash reserve account for the benefit of customers.

Rulemaking by these and other regulators (foreign and domestic), including resulting market structure changes, has had an impact on our regulated subsidiaries by directly affecting our method of operation and, at times, our profitability. Legislation can impose, and has imposed, significant obligations on broker-dealers, including our regulated subsidiaries. These increased obligations require the implementation and maintenance of internal practices, procedures and controls which have increased our costs and may subject us to government and regulatory inquiries, claims or penalties.

Failure to comply with any laws, rules or regulations could result in administrative or court proceedings, censures, fines, penalties, judgments, disgorgement, restitution and censures, suspension or expulsion from a certain jurisdiction, SRO or market, the revocation or limitation of licenses, the issuance of cease-and-desist orders or injunctions or the suspension or disqualification of the entity and/or its officers, employees or other associated persons. These administrative or court proceedings, whether or not resulting in adverse findings, can require substantial expenditures of time and money and can have an adverse impact on a firm’s reputation, customer relationship and profitability. We and other broker dealers and trading firms have been the subject of requests for information and documents from the SEC, FINRA and other regulators. We have cooperated and complied with the requests for information and documents.

The regulatory environment in which we operate is subject to constant change. Our business, financial condition and operating results may be adversely affected as a result of new or revised legislation or regulations imposed by the U.S. Congress, foreign legislative bodies, state securities regulators, U.S. and foreign governmental regulatory bodies and SROs. Additional regulations, changes in existing laws and rules, or changes in interpretations or enforcement of existing laws and rules often directly affect the method of operation and profitability of regulated broker-dealers. We cannot predict what effect, if any, the above-noted legislation, regulation or changes might have. However, there have been in the past, and could be in the future, significant technological, operational and compliance costs associated with the obligations which derive from compliance with such regulations.

On July 21, 2010, the Dodd-Frank Act was enacted in the U.S. Implementation of the Dodd-Frank Act is being accomplished through extensive rulemaking by the SEC, the CFTC and other governmental agencies. The Dodd-Frank Act includes the “Volcker Rule,” which significantly limits the ability of banks and their affiliates to engage in proprietary trading, and Title VII, which provides a framework for the regulation of the swap markets. The CFTC has largely finalized its rules with respect to those swaps markets and participants it regulates, while the SEC has not yet completed all of its rules relating to security-based swaps. One of our subsidiaries is registered with the CFTC as a floor trader, and is exempt from registration as a swap dealer based on its current activity. Registration as a swap dealer would subject our subsidiary to various requirements, including those related to capital, conduct, and reporting.

The SEC and other regulatory bodies have enacted and are actively considering rules that may affect our operations and profitability. In particular, on November 15, 2016, the SEC approved an NMS Plan to create a single, comprehensive database known as the Consolidated Audit Trail (“CAT”) to enable regulators to track all data relating to US equity and options market activity. The current compliance date for large reporting broker-dealers is November 15, 2018. Among other things, the NMS Plan will impose substantial new reporting obligations and costs on broker-dealers. Regulators may propose other market structure changes particularly considering the continued regulatory scrutiny of high frequency trading, alternative trading systems, market fragmentation, colocation, access to market data feeds, and remuneration arrangements such as payment for order flow and exchange fee structures.

We have foreign subsidiaries and plan to continue to expand our international presence. The market making industry in many foreign countries is heavily regulated, much like in the U.S. The varying compliance requirements of these different regulatory jurisdictions and other factors may limit our ability to conduct business or expand internationally. MiFID, which was implemented in November 2007, has been replaced by a more prescriptive MiFIR Regulation and MiFID II. MiFID II represents the most significant change to take place in the operation of European capital markets to date and became effective on January 3, 2018. MiFID II introduces requirements for increased pre and post trade transparency, technological and organizational requirements for firms deploying algorithmic trading techniques, restrictions on dark trading, and the roll out of a new bi-lateral OTC equity trading regime called the Systematic Internalizer regime. MiFID II will require European firms to conduct all trading on European Trading Venues including Regulated Markets, Multilateral Trading Facilities, Systematic Internalisers or equivalent third country venues, require market makers like us to post firm quotes at competitive prices and will supplement current requirements with regard to investment firms’ pre-trade risk controls related to the safe operation of electronic systems. MiFID II also imposes additional requirements on trading platforms, such as additional technological requirements, clock synchronization, microsecond processing granularity, pre-trade risk controls, transaction reporting requirements and limits on the ratio of unexecuted orders to trades. Each of these requirements imposes additional technological, operational and compliance costs on us. New laws, rules or regulations as well as any regulatory or legal actions or proceedings, changes in legislation or regulation and changes in market customs and practices could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Certain of our subsidiaries are subject to regulatory capital rules of the SEC, FINRA, other SROs and foreign regulators. These rules, which specify minimum capital requirements for our regulated subsidiaries, are designed to measure the general financial integrity and liquidity of a broker-dealer and require that at least a minimum part of its assets be kept in relatively liquid form. Failure to maintain required minimum capital may subject a regulated subsidiary to a fine, requirement to cease conducting business, suspension, revocation of registration or expulsion by applicable regulatory authorities, and ultimately could require the relevant entity’s liquidation. See “Item 1A. Risk Factors — Risks Related to Our Business — Failure to comply with applicable regulatory capital requirements could subject us to sanctions imposed by the SEC, FINRA and other SROs or regulatory bodies.”

## Corporate History

We and our predecessors have been in the electronic trading and market making business for more than 15 years. We conduct our business through Virtu Financial LLC (“Virtu Financial”) and its subsidiaries. We completed our initial public offering (“IPO”) in April 2015, after which shares of our Class A common stock began trading on NASDAQ under the ticker symbol “VIRT.”

Prior to our initial public offering, we completed a series of reorganization transactions (the “Reorganization Transactions”) pursuant to which we became the sole managing member of Virtu Financial, all of the existing equity interests in Virtu Financial were reclassified into non-voting common interest units (“Virtu Financial Units”), our certificate of incorporation was amended and restated to authorize the issuance of four classes of common stock: Class A, Class B, Class C and Class D, and the holders of Virtu Financial Units other than us subscribed for shares of Class C common stock or Class D common stock (in the case of the Founder Post-IPO Member, as defined below) in an amount equal to the number of Virtu Financial Units held by such member.

The Class A common stock and Class C common stock each provide holders with one vote on all matters submitted to a vote of stockholders, and the Class B common stock and Class D common stock each provide holders with 10 votes on all matters submitted to a vote of stockholders. The holders of Class C common stock and Class D common stock do not have any of the economic rights (including rights to dividends and distributions upon liquidation) provided to holders of Class A common stock and Class B common stock. Shares of our common stock generally vote together as a single class on all matters submitted to a vote of our stockholders.

On July 20, 2017, the Company completed the all-cash acquisition of KCG Holdings, Inc. In connection with the Acquisition, the Company issued 8,012,821 shares of the Company’s Class A stock to Aranda Investments Pte. Ltd. (together with Havelock Fund Investments Pte. Ltd., the “Temasek Stockholders”), an affiliate of Temasek Holdings (Private) Limited (“Temasek”) for an aggregate purchase price of approximately \$125.0 million and 40,064,103 shares of the Company’s Class A stock to an affiliate of North Island Holdings (the “North Island Stockholder”) for an aggregate purchase price of approximately \$618.7 million, in each case in accordance with terms of an investment agreement in a private placement exempt from the registration requirements of the Securities Act of 1933, as amended, pursuant to Section 4(a)(2) of the Securities Act of 1933, as amended (collectively, the “July 2017 Private Placement”).

As a result of the completion of the IPO, the Reorganization Transactions, the July 2017 Private Placement, and certain other secondary offerings and permitted exchanges by current and former employees of Virtu Financial common units for shares of the Company’s Class A common stock, the Company holds an approximately 48.3% interest in Virtu Financial at December 31, 2017. The remaining issued and outstanding Virtu Financial Units are held by an affiliate of Mr. Viola (the “Founder Post-IPO Member”), two entities whose equityholders include certain members of the management of Virtu Financial and certain other current and former members of management of Virtu Financial (collectively, the “Virtu Post-IPO Members”). The Founder Post-IPO Member controls approximately 88.1% of the combined voting power of our outstanding common stock as of December 31, 2017. As a result, the Founder Post-IPO Member controls any actions requiring the general approval of our stockholders, including the election of our board of directors, the adoption of amendments to our certificate of incorporation and bylaws and the approval of any merger or sale of substantially all of our assets. The Founder Post-IPO Member is controlled by family members of Mr. Viola, our Founder and Chairman Emeritus.

## Available Information

Our website address is [www.virtu.com](http://www.virtu.com). The information on our website is not, and shall not be deemed to be, a part of this Annual Report on Form 10-K or incorporated into any other filings we make with the Securities and Exchange Commission (the “SEC”). Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the “Exchange Act”) are available free of charge on our website as soon as possible after we electronically file them with, or furnish them to, the SEC. You can also read, access and copy any document that we file, including this Annual Report on Form 10-K, at the SEC’s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Call the SEC at 1-800-SEC-0330 for information on the operation of the Public Reference

Room. In addition, the SEC maintains a website at [www.sec.gov](http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers, including Virtu, that are electronically filed with the SEC.

Our Investor Relations Department can be contacted at Virtu Financial, Inc., 300 Vesey Street, New York, NY, 10282, Attn: Investor Relations, e-mail: [investor\\_relations@virtu.com](mailto:investor_relations@virtu.com).

## ITEM 1A. RISK FACTORS

### Risks Related to Our Business

***Because our revenues and profitability depend on trading volume and volatility in the markets in which we operate, they are subject to factors beyond our control, are prone to significant fluctuations and are difficult to predict.***

Our revenues and profitability depend in part on the level of trading activity of securities, derivatives and other financial products on exchanges and in other trading venues in the U.S. and abroad, which are directly affected by factors beyond our control, including economic and political conditions, broad trends in business and finance and changes in the markets in which such transactions occur. Weaknesses in the markets in which we operate, including economic slowdowns in recent years, have historically resulted in reduced trading volumes for us. Declines in trading volumes generally result in lower revenues from market making and transaction execution activities. Lower levels of volatility generally have the same directional impact. Declines in market values of securities or other financial instruments can also result in illiquid markets, which can also result in lower revenues and profitability from market making and transaction execution activities. Lower price levels of securities and other financial instruments, as well as compressed bid/ask spreads, which often follow lower pricing, can further result in reduced revenues and profitability. These factors can also increase the potential for losses on securities or other financial instruments held in inventory and failures of buyers and sellers to fulfill their obligations and settle their trades, as well as claims and litigation. Declines in the trading activity of institutional or “buy-side” market participants may result in lower revenue and/or diminished opportunities for us to earn commissions from execution activities. Any of the foregoing factors could have a material adverse effect on our business, financial condition, results of operations and cash flows. In the past, our revenues and operating results have varied significantly from period to period due primarily to movements and trends in the underlying markets and to fluctuations in trading volumes and volatility levels. As a result, period to period comparisons of our revenues and operating results may not be meaningful, and future revenues and profitability may be subject to significant fluctuations or declines.

***We are dependent upon our trading counterparties and clearing houses to perform their obligations to us.***

Our business consists of providing consistent two-sided liquidity to market participants across numerous geographies and asset classes. In the event of a systemic market event, resulting from large price movements or otherwise, certain market participants may not be able to meet their obligations to their trading counterparties, who, in turn, may not be able to meet their obligations to their other trading counterparties, which could lead to major defaults by one or more market participants. Following the implementation of certain mandates under the Dodd-Frank Act in the U.S. and similar legislation worldwide, many trades in the securities and futures markets, and an increasing number of trades in the over-the-counter derivatives markets, are cleared through central counterparties. These central counterparties assume, and specialize in managing, counterparty performance risk relating to such trades. However, even when trades are cleared in this manner, there can be no assurance that a clearing house’s risk management methodology will be adequate to manage one or more defaults. Given the concentration of counterparty performance risk that is concentrated in central clearing parties, any failure by a clearing house to properly manage a default could lead to a systemic market failure. If our trading counterparties do not meet their obligations to us, or if any central clearing parties fail to properly manage defaults by market participants, we could suffer a material adverse effect on our business, financial condition, results of operations and cash flows.



***We may incur losses in our market making activities and our execution services businesses in the event of failures of our customized trading platform.***

The success of our market making business is substantially dependent on the accuracy and performance of our customized trading platform, which evaluates and monitors the risks inherent in our market making strategies and execution services business, assimilates market data and reevaluates our outstanding quotes and positions continuously throughout the trading day. Our strategies are designed to automatically rebalance our positions throughout the trading day to manage risk exposures on our positions. Flaws in our strategies, order management system, latencies or inaccuracies in the market data that we use to generate our quotes, or human error in managing risk parameters or other strategy inputs, may lead to unexpected and unprofitable trades, which may result in material trading losses and could have a material adverse effect on our business, financial condition, results of operations and cash flows.

***We may incur material trading losses from our market making activities.***

A significant portion of our revenues are derived from our trading as principal in our role as a formal or registered market maker and liquidity provider on various exchanges and markets, as well as direct to customer market making. We may incur trading losses relating to these activities since each primarily involves the purchase, sale or short sale of securities, futures and other financial instruments for our own account. In any period, we may incur significant trading losses for a variety of reasons, including price changes, performance, size and volatility of portfolios we may hold in connection with our customer market making activities, lack of liquidity in instruments in which we have positions and the required performance of our market making obligations. Furthermore, we may from time to time develop large position concentrations in securities or other financial instruments of a single issuer or issuers engaged in a specific industry, or alternatively a single future or other financial instrument, which would result in the risk of higher trading losses than if our concentration were lower.

These risks may limit or restrict, for example, our ability to either resell securities we have purchased or to repurchase securities we have sold. In addition, we may experience difficulty borrowing securities to make delivery to purchasers to whom we have sold securities short or lenders from whom we have borrowed securities.

In our role as a market maker, we attempt to derive a profit from bid/ask spreads. However, competitive forces often require us to match or improve upon the quotes that other market makers display, thereby narrowing bid/ask spreads, and to hold long or short positions in securities, futures or other financial instruments. We cannot assure you that we will be able to manage these risks successfully or that we will not experience significant losses from such activities, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our risk management activities related to our on exchange market making strategies utilize a four-pronged approach, consisting of strategy lockdowns, centralized strategy monitoring, aggregate exposure monitoring and operational controls. In particular, messages that leave our trading environment first must pass through a series of preset risk controls or “lockdowns” that are intended to minimize the likelihood of unintended activities. In certain cases this layer of risk management, which adds a layer of latency to our process, may limit our ability to profit from acute volatility in the markets. This would be the case, for example, where a particular strategy being utilized by one of our traders is temporarily locked down for generating revenue in excess of the preset risk limit. Even if we are able to quickly and correctly identify the reasons for a lockdown and quickly resume the trading strategy, we may limit our potential upside as a result of our risk management policies.

***The valuation of the securities we hold at any particular time may result in large and occasionally anomalous swings in the value of our positions and in our earnings in any period.***

The market prices of our long and short positions are reflected on our books at closing prices, which are typically the last trade prices before the official close of the primary exchange on which each such security trades. Given that we manage a globally integrated portfolio, we may have large and substantially offsetting positions in securities that trade on different exchanges that close at different times of the trading day and may be denominated in different currencies. Further, there may be large and occasionally anomalous swings in the value of our positions on any particular day and in our earnings in any period. Such swings may be especially pronounced on the last business day of each



calendar quarter, as the discrepancy in official closing prices resulting from the asynchronous closing times may cause us to recognize a gain or loss in one quarter which would be substantially offset by a corresponding loss or gain in the following quarter.

***We are exposed to losses due to lack of perfect information.***

As a market maker, we provide liquidity by consistently buying securities from sellers and selling securities to buyers. We may at times trade with others who have information that is more accurate or complete than the information we have, and as a result we may accumulate unfavorable positions preceding large price movements in a given instrument. Should the frequency or magnitude of these events increase, our losses would likely increase correspondingly, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

***We face substantial competition which would harm our financial performance.***

Revenues from our market making activities depend on our ability to offer to buy and sell financial instruments at prices that are attractive and represent the best bid and/or offer in a given instrument at a given time. To attract order flow, we compete with other firms not only on our ability to provide liquidity at competitive prices, but also on other factors such as order execution speed and technology. Similarly, revenues from our technology services and agency execution services depend on our ability to offer cutting edge technology and risk management solutions.

Our competitors include other registered market makers, as well as unregulated or lesser-regulated trading and technology firms that also compete to provide liquidity and Execution Services. Our competitors range from sole proprietors with very limited resources to highly sophisticated groups, hedge funds, well-capitalized broker-dealers and proprietary trading firms or other market makers that have substantially greater financial and other resources than we do. These larger and better capitalized competitors may be better able to respond to changes in the market making industry, to compete for skilled professionals, to finance acquisitions, to fund internal growth, to manage costs and expenses and to compete for market share generally. Trading firms that are not registered as broker-dealers or broker-dealers not registered as market makers may in some instances have certain advantages over more regulated firms, including our subsidiaries that may allow them to bypass regulatory restrictions and trade more cheaply than more regulated participants on some markets or exchanges. In addition, we may in the future face enhanced competition from new market participants that may also have substantially greater financial and other resources than we do, which may result in compressed bid/ask spreads in the marketplace that may negatively impact our financial performance. Moreover, current and potential competitors may establish cooperative relationships among themselves or with third parties or may consolidate to enhance their services and products. The trend toward increased competition in our business is expected to continue, and it is possible that our competitors may acquire increased market share. Increased competition or consolidation in the marketplace could reduce the bid/ask spreads on which our business and profitability depend, and may also reduce commissions paid by institutional clients for execution services, negatively impacting our financial performance. As a result, there can be no assurance that we will be able to compete effectively with current or future competitors, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

***Our market making business is concentrated in U.S. equities; accordingly, our operating results may be negatively impacted by changes that affect the U.S. equity markets.***

Approximately 81% of our market making revenues for 2017 were derived from our market making in U.S. equities. The level of activity in the U.S. equity markets is directly affected by factors beyond our control, including U.S. economic and political conditions, broad trends in business and finance, legislative and regulatory changes and changes in volume and price levels of U.S. equity transactions. As a result, to the extent these or other factors reduce trading volume or volatility or result in a downturn in the U.S. equity markets, we may experience a material adverse effect on, our business, financial condition and operating results.

***We could lose significant sources of revenues if we lose any of our larger clients.***

At times, a limited number of clients could account for a significant portion of our order flow, revenues

and profitability, and we expect a large portion of the future demand for, and profitability from, our trade execution services to remain concentrated within a limited number of clients. The loss of one or more larger clients could have an adverse effect on our revenues and profitability in the future. None of these clients is currently contractually obligated to utilize us for trade execution services and, accordingly, these clients may direct their trade execution activities to other execution providers or market centers at any time. Some of these clients have grown organically or acquired market makers and specialist firms to internalize order flow or will have entered into strategic relationships with competitors. There can be no assurance that we will be able to retain these significant clients or that such clients will maintain or increase their demand for our trade execution services. Further, the continued integration of legacy systems and the development of new systems could result in disruptions to our ongoing businesses and relationships or cause issues with standards, controls, procedures and policies that adversely affect our ability to maintain relationships with customers, or to solicit new customers. The loss, or a significant reduction, of demand for our services from any of these clients could have a material adverse effect on our business, financial condition, results of operations and cash flows.

***We are subject to liquidity risk in our operations.***

We require liquidity to fund various ongoing obligations, including operating expenses, capital expenditures, debt service and dividend payments. Our main sources of liquidity are cash flow from the operations of our subsidiaries, our broker-dealer revolving credit facility (described under “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Long-Term Borrowings”), margin financing provided by our prime brokers and cash on hand. Our liquidity could be materially impaired by a number of factors, including reduced business activity due to a market downturn, adverse regulatory action or a downgrade of our credit rating. If our business activities decrease or we are unable to borrow additional funds in the future on terms that are acceptable to us, or at all, we could suffer a material adverse effect on our business, financial condition, results of operations and cash flows.

***Self-clearing and other elements of our trade processing operations expose us to significant operational, financial and liquidity risks.***

We currently self-clear substantially all of our domestic equity trades and may expand our self-clearing operations internationally and across product offerings and asset classes in the future. Self-clearing exposes our business to operational risks, including business disruption, operational inefficiencies, liquidity, financing risks, counterparty performance risk and potentially increased expenses and lost revenue opportunities. While our clearing platform, operational processes, risk methodologies, enhanced infrastructure and current and future financing arrangements have been carefully designed, we may nevertheless encounter difficulties that may lead to operating inefficiencies, including delays in implementation, disruption in the infrastructure that supports the business, inadequate liquidity and financial loss. Any such delay, disruption or failure could negatively impact our ability to effect transactions and manage our exposure to risk and could have a material adverse effect on our business, financial condition, results of operations cash flows.

***We have a substantial amount of indebtedness, which could negatively impact our business and financial condition, and our debt agreements contain restrictions that will limit our flexibility in operating our business.***

We are a highly leveraged company. As of December 31, 2017, we had an aggregate of \$1,431 million outstanding indebtedness under our long-term borrowings. If we cannot generate sufficient cash flow from operations to service our debt, we may need to refinance our debt, dispose of assets or issue equity to obtain necessary funds. We do not know whether we will be able to take any of such actions on a timely basis, on terms satisfactory to us or at all.

Additionally, we are party to the \$150.0 million uncommitted facility (the “Uncommitted Facility”) under which we had \$25.0 million of borrowings outstanding as of December 31, 2017. We are also party to the \$500.0 million revolving credit facility (the “Revolving Credit Facility”) under which we had \$7.0 million of borrowing outstanding as of December 31, 2017. Also, certain of our non-guarantor subsidiaries are party to various short-term credit facilities with various prime brokers and other financial institutions in an aggregate amount of \$543.0 million under which we had \$205.7 million in borrowings outstanding at December 31, 2017.

The Fourth Amended and Restated Credit Agreement and the indenture governing the Notes contain, and any other existing or future indebtedness of ours may contain a number of covenants that impose significant operating and financial restrictions on us, including restrictions on our and our restricted subsidiaries' ability to, among other things:

- incur additional debt, guarantee indebtedness or issue certain preferred equity interests;
- pay dividends on or make distributions in respect of, or repurchase or redeem, our equity interests or make other restricted payments;
- prepay, redeem or repurchase certain debt;
- make loans or certain investments;
- sell certain assets;
- create liens on our assets;
- consolidate, merge or sell or otherwise dispose of all or substantially all of our assets;
- enter into certain transactions with our affiliates;
- enter into agreements restricting our subsidiaries' ability to pay dividends; and
- designate our subsidiaries as unrestricted subsidiaries.

As a result of these covenants, we are limited in the manner in which we conduct our business, and we may be unable to successfully execute our strategy, engage in favorable business activities or finance future operations or capital needs. In addition, our Fourth Amended and Restated Credit Agreement requires us to maintain specified financial ratios and tests, including interest coverage and total leverage ratios, which may require us to take action to reduce our debt or to act in a manner contrary to our business objectives.

We may be unable to remain in compliance with the financial maintenance and other covenants contained in the Fourth Amended and Restated Credit Agreement, and our obligation to comply with these covenants may adversely affect our ability to operate our business. A failure to comply with the covenants under the Fourth Amended and Restated Credit Agreement, the Notes or any of our other future indebtedness could result in an event of default, which, if not cured or waived, could have a material adverse effect on our business, financial condition, results of operations and cash flows. If any such event of default has occurred and is continuing, the lenders under our Fourth Amended and Restated Credit Agreement, among other things:

- will not be required to lend any additional amounts to us;
- could elect to declare all borrowings outstanding, together with accrued and unpaid interest and fees, to be immediately due and payable and terminate all commitments to extend further credit; or
- could effectively prevent us from making debt service payments on the Notes;

any of which could result in an event of default under the Notes or cause cross defaults under our other indebtedness. If we default on our indebtedness, our business, financial condition and results of operation could suffer a material adverse effect.

We pledge substantially all of our and our guarantor subsidiaries' assets as collateral under the Fourth Amended and Restated Credit Agreement and the Notes. If we were unable to repay such indebtedness, the lenders under the Fourth Amended and Restated Credit Agreement and, subject to certain intercreditor arrangements, the holders of the Notes, could proceed to exercise remedies against the collateral granted to them to secure that indebtedness. If any of our outstanding indebtedness under the Fourth Amended and Restated Credit Agreement, the Notes or our other indebtedness were to be accelerated, there can be no assurance that our assets would be sufficient to repay such indebtedness in full. We do not have sufficient working capital to satisfy our debt obligations in the event of an acceleration of all or a significant part of our outstanding indebtedness.

Despite our substantial indebtedness, we may still be able to incur significantly more debt, which could intensify the risks associated with our substantial indebtedness.

Borrowings under the Fourth Amended and Restated Credit Agreement, the Uncommitted Facility and the Revolving Credit Facility are at variable rates of interest and expose us to interest rate risk. If interest rates increase, our debt service obligations on certain of our variable rate indebtedness will increase even though the amount borrowed

remained the same, and our net income and cash flows, including cash available for servicing our indebtedness, will correspondingly decrease. We may enter into interest rate swaps that involve the exchange of floating for fixed rate interest payments in order to reduce interest rate volatility. However, we may not maintain interest rate swaps with respect to all of our variable rate indebtedness, and any swaps we enter into may not fully mitigate our interest rate risk, may prove disadvantageous or may create additional risks. Rising interest rates could also limit our ability to refinance existing debt when it matures or cause us to pay higher interest rates upon refinancing.

***Regulatory and legal uncertainties could harm our business.***

Securities and derivatives businesses are heavily regulated. Firms in the financial services industry have been subject to an increasingly regulated environment over recent years, and penalties and fines sought by regulatory authorities have increased considerably. In addition, following recent news media attention to electronic trading and market structure, the regulatory and enforcement environment has created uncertainty with respect to various types of transactions that historically had been entered into by financial services firms and that were generally believed to be permissible and appropriate. “High frequency” and other forms of low latency or electronic trading strategies continue to be the focus of extensive regulatory scrutiny by federal, state and foreign regulators and SROs, and such scrutiny is likely to continue. Our market making and trading activities are characterized by substantial volumes, an emphasis on technology and certain other characteristics that are also commonly associated with high frequency trading. Specifically, both the SEC and the CFTC have issued general concept releases on market structure requesting comment from market participants on topics including, among others, high frequency trading, co-location, dark liquidity, pre- and post-trade risk controls and system safeguards. The SEC has adopted rules that, among other results, have significantly limited the use of sponsored access by market participants to the U.S. equities exchanges, imposed large trader reporting requirements, restricted short sales in listed securities under certain conditions and required the planning and creation of a new comprehensive consolidated audit trail. The SEC has also approved by order a pilot proposal by the FINRA and the national securities exchanges establishing a “Limit Up-Limit Down” mechanism to address market volatility.

In addition, certain market participants, SROs, government officials and regulators have requested that the U.S. Congress, the SEC, and the CFTC propose and adopt additional laws and rules, including rules relating to additional registration requirements, restrictions on co-location, order-to-execution ratios, minimum quote life for orders, incremental messaging fees to be imposed by exchanges for “excessive” order placements and/or cancellations, further transaction taxes, tick sizes, changes to maker/taker rebates programs, and other market structure proposals. For example, the SEC adopted Regulation SCI, which imposes compliance and other costs on market centers that may have to pass such costs on to their users, including us, and could impact our future business plans of establishing a market center to avoid or reduce market center costs for certain of our transactions. Similarly, CAT imposes new reporting requirements and additional costs on U.S. broker-dealers. The Tick Pilot program, which is currently underway, includes a “trade at” component, requiring that certain of these transactions occur only on an exchange. If the trade at feature is adopted permanently for small capitalization securities without the trade at exemptions that currently exist, and it is not accompanied by a reduction in the fees paid to access liquidity on exchanges, the trade at requirement may increase the costs for certain of our transactions. Finally, the SEC has proposed amendments to regulations that would require our registered broker-dealer that is not currently a FINRA member to become a member of FINRA, which, if adopted as proposed, would subject the broker-dealer to FINRA’s rules and require payment of additional fees per trade that could adversely affect our profits given that we seek to make small profits on individual trades. Additionally, the CFTC has proposed the adoption of Regulation Automated Trading, which would, among other requirements, require registration by direct market participants, mandate the use of certain types of risk controls, and require the maintenance of a source code repository in accordance with certain specifications.

Any or all of these proposals or additional proposals may be adopted by the SEC, CFTC or other U.S. or foreign legislative or regulatory bodies, and recent news media attention to electronic trading and market structure could increase the likelihood of adoption. These potential market structure and regulatory changes could cause a change in the manner in which we make markets, impose additional costs and expenses on our business or otherwise have a material adverse effect on our business, financial condition, results of operations and cash flows.

In addition, the financial services industry is heavily regulated in many foreign countries, much like in the U.S. The varying compliance requirements of these different regulatory jurisdictions and other factors may limit our ability to conduct business or expand internationally. For example, MiFID, which was implemented in November 2007, has been

replaced by MiFID II/Markets in Financial Investments Regulation (“MiFIR”), which was adopted by the European Parliament on April 15, 2014 and by the Council on May 13, 2014, entered into force on July 2, 2014, and became effective on January 3, 2018. Many MiFID II changes are likely to affect our business. For example, MiFID II requires certain types of firms, including us, to post firm quotes at competitive prices and will supplement current requirements with regard to investment firms’ risk controls related to the safe operation of electronic systems. MiFID II will also impose additional requirements on market structure, such as the introduction of a harmonized tick size regime, the introduction of new trading venues known as Organized Trading Facilities, and the promulgation of a new bilateral trading arrangement called the Systematic Internaliser regime, new open access provisions, market making requirements and various other pre- and post-trade risk management requirements. Each of these and other proposals may impose technological and compliance costs on us. Any of these laws, rules or regulations, as well as changes in legislation or regulation and changes in market customs and practices could have a material adverse effect on our business, financial condition, results of operations and cash flows. These risks may be enhanced by recent scrutiny of electronic trading and market structure from regulators, lawmakers and the financial news media.

In addition, we maintain borrowing facilities with banks, prime brokers and Futures Commission Merchants (“FCMs”), and we obtain uncommitted margin financing from our prime brokers and FCMs, which are in many cases affiliated with banks. In response to the financial crisis, the Basel Committee on Banking Supervision issued a new, more stringent capital and liquidity framework known as Basel III, which national banking regulators are in the process of implementing in the various jurisdictions in which our lenders may be incorporated. As these rules are implemented and impose more stringent capital and liquidity requirements, certain of our lenders may revise the terms of our borrowing facilities or margin financing arrangements, reduce the amount of financing they provide, or cease providing us financing, each of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

***Non-compliance with applicable laws or regulatory requirements could negatively impact our reputation, prospects, revenues and earnings.***

Our subsidiaries are subject to regulations in the U.S., and our foreign subsidiaries are subject to regulations abroad, in each case covering all aspects of their business. Regulatory bodies that exercise or may exercise authority over us include, without limitation, in the U.S., the SEC, FINRA, the Chicago Stock Exchange, the Chicago Mercantile Exchange, the Intercontinental Exchange, the CFTC, the NFA and the various state securities regulators; in Ireland, the Central Bank of Ireland; in Switzerland, the Swiss Financial Market Supervisory Authority; in France, the Autorité des Marchés Financiers (“AMF”); in the United Kingdom, the FCA; in Hong Kong, the SFC; in Australia, the Australian Securities and Investment Commission; in Canada, the Investment Industry Regulatory Organization of Canada and various Canadian provincial securities commissions; in Singapore, the Monetary Authority of Singapore and the Singapore Exchange; and in Japan, the Financial Services Agency and the Japan Securities Dealers Association. Our mode of operation and profitability may be directly affected by additional legislation and changes in rules promulgated by various domestic and foreign government agencies and SROs that oversee our businesses, as well as by changes in the interpretation or enforcement of existing laws and rules, including the potential imposition of additional capital and margin requirements and/or transaction taxes. While we endeavor to timely deliver required annual filings in all jurisdictions, we cannot guarantee that we will meet every applicable filing deadline globally. Noncompliance with applicable laws or regulations could result in sanctions being levied against us, including fines, penalties, judgments, disgorgement, restitution and censures, suspension or expulsion from a certain jurisdiction, SRO or market or the revocation or limitation of licenses. Noncompliance with applicable laws or regulations could also negatively impact our reputation, prospects, revenues and earnings. In addition, changes in current laws or regulations or in governmental policies could negatively impact our operations, revenues and earnings.

Domestic and foreign stock exchanges, other SROs and state and foreign securities commissions can censure, fine, impose undertakings, issue cease-and-desist orders and suspend or expel a broker-dealer or other market participant or any of its officers or employees. Our ability to comply with all applicable laws and rules is largely dependent on our internal systems to ensure compliance, as well as our ability to attract and retain qualified compliance personnel. We could be subject to disciplinary or other actions in the future due to claimed noncompliance, which could have a material adverse effect on our business, financial condition, results of operations and cash flows. We have been, are currently, and may in the future be, the subject of one or more regulatory or SRO enforcement actions, including but not limited to targeted and routine regulatory inquiries and investigations involving Regulation NMS, Regulation SHO, market access

rules, capital requirements and other domestic and foreign securities rules and regulations. We and other broker-dealers and trading firms have also been the subject of requests for information and documents from the SEC and other regulators. We have cooperated and complied with these requests for information and documents. Our business or reputation could be negatively impacted if it were determined that disciplinary or other enforcement actions were required. Additionally, in December 2015, the enforcement committee of the AMF fined our European subsidiary in the amount of €5.0 million (approximately \$5.4 million) based on its conclusion that the subsidiary engaged in price manipulation and violations of the AMF General Regulation and Euronext Market Rules. In May 2017, the fine was reduced to €3.0 million (approximately \$3.5 million), subject to an incremental charge of €0.3 (approximately \$0.4 million). The relevant trading activities were conducted on or around 2009, prior to our acquisition of that subsidiary from Madison Tyler Holdings, which acquisition was consummated in 2011. To continue to operate and to expand our services internationally, we will have to comply with the regulatory controls of each country in which we conduct or intend to conduct business, the requirements of which may not be clearly defined. The varying compliance requirements of these different regulatory jurisdictions, which are often unclear, may limit our ability to continue existing international operations and further expand internationally.

***Failure to comply with applicable regulatory capital requirements could subject us to sanctions imposed by the SEC, FINRA and other SROs or regulatory bodies.***

Certain of our subsidiaries are subject to regulatory capital rules of the SEC, FINRA, other SROs and foreign regulators. These rules, which specify minimum capital requirements for our regulated subsidiaries, are designed to measure the general financial integrity and liquidity of a broker-dealer and require that at least a minimum part of its assets be kept in relatively liquid form. In general, net capital is defined as net worth (assets minus liabilities), plus qualifying subordinated borrowings, less certain mandatory deductions that result from, among other things, excluding assets that are not readily convertible into cash and from valuing conservatively certain other assets. Among these deductions are adjustments, commonly called haircuts, which reflect the possibility of a decline in the market value of an asset before disposition, and non-allowable assets.

Failure to maintain the required minimum capital may subject our regulated subsidiaries to a fine, requirement to cease conducting business, suspension, revocation of registration or expulsion by the applicable regulatory authorities, reputational harm and ultimately could require the relevant entity's liquidation. Events relating to capital adequacy could give rise to regulatory actions that could limit business expansion or require business reduction. SEC and SRO net capital rules prohibit payments of dividends, redemptions of stock, prepayments of subordinated indebtedness and the making of any unsecured advances or loans to a stockholder, employee or affiliate, in certain circumstances, including if such payment would reduce the firm's net capital below required levels. Similar issues and risks arise in connection with the capital adequacy requirements of foreign regulators.

A change in the net capital rules, the imposition of new rules or any unusually large charges against net capital could limit our operations that require the intensive use of capital and also could restrict our ability to withdraw capital from our broker-dealer subsidiaries. A significant operating loss or any unusually large charge against net capital could negatively impact our ability to expand or even maintain our present levels of business. Similar issues and risks arise in connection with the capital adequacy requirements of foreign regulators. Any of these results could have a material adverse effect on our business, financial condition, results of operations and cash flows.

***We are subject to risks relating to litigation and potential securities law liability.***

We are exposed to substantial risks of liability under federal and state securities laws and other federal and state laws and court decisions, as well as rules and regulations promulgated by the SEC, the CFTC, state securities regulators, SROs and foreign regulatory agencies. These risks may be enhanced by recent scrutiny of electronic trading and market structure from regulators, lawmakers and the financial news media. We are also subject to the risk of litigation and claims that may be without merit. At present and from time to time, we, our past and present officers, directors and employees are and may be named in legal actions, regulatory investigations and proceedings, arbitrations and administrative claims and may be subject to claims alleging the violations of laws, rules and regulations, some of which may ultimately result in the payment of fines, awards, judgments and settlements. We could incur significant legal expenses in defending ourselves against and resolving lawsuits or claims even if we believe them to be meritless. An adverse resolution of any current or future lawsuits or claims against us could result in a negative perception of our



Company and cause the market price of our common stock to decline or otherwise have a material adverse effect on our business, financial condition, results of operations and cash flows.

***Proposed legislation in the European Union, the U.S. and other jurisdictions that would impose taxes on certain financial transactions could have a material adverse effect on our business and financial results.***

On September 28, 2011, the former president of the European Commission officially presented a plan to create a new financial transactions tax which in February 2013 was formally presented for consideration by the European Commission under an enhanced cooperation procedure among 11 European Union Member States (Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia) for the purposes of a financial transaction tax among those Member States (the “EU Financial Transaction Tax”). The EU Financial Transaction Tax was initially intended to be implemented within those 11 European Union Member States in January 2014. As of December 31, 2017 such tax has not yet been implemented within the European Union and no final political or legislative proposal has been presented for consideration. In 2016, Estonia, of the original members withdrew its support for the proposal. Similarly, in 2013, U.S. Representative Peter DeFazio and former Senator Thomas Harkin introduced proposed legislation, a bill entitled the “Wall Street Trading and Speculators Tax Act,” which would have, subject to certain exceptions, imposed an excise tax on the purchase of a security, including equities, bonds, debentures, other debt and interests in derivative financial instruments, if the purchase occurred or was cleared on a trading facility in the U.S. and the purchaser or seller is a U.S. person. More recently, U.S. Representative Chris Van Hollen presented an “action plan” that included a financial transaction fee. These proposed transaction taxes would apply to certain aspects of our business and transactions in which we are involved. Any such tax would increase our cost of doing business to the extent that (i) the tax is regularly applicable to transactions in the markets in which we operate, (ii) the tax does not include exceptions for market makers or market making activities that is broad enough to cover our activities or (iii) we are unable to widen our bid/ask spreads in the markets in which such a tax would be applicable to compensate for its imposition. Furthermore, the proposed taxes may reduce or negatively impact trading volume and transactions on which we are dependent for revenues. While it is difficult to assess the impact the proposed taxes could have on us, if either transaction tax is implemented or any similar tax is implemented in any other jurisdiction in which we operate, our business, financial condition, results of operations and cash flows could suffer a material adverse effect, and could be impacted to a greater degree than other market participants.

***We depend on our technology, and our future results may be negatively impacted if we cannot remain technologically competitive.***

We believe that our success in the past has largely been attributable to our technology, which has taken many years to develop. If technology equivalent to ours becomes more widely available for any reason, our operating results may be negatively impacted. Additionally, adoption or development of similar or more advanced technologies by our competitors may require that we devote substantial resources to the development of more advanced technology to remain competitive. Regulators and exchanges may also introduce risk control and other technological requirements on our business that could result in increased costs of compliance and divert our technological resources away from their primary strategy development and maintenance duties. The markets in which we compete are characterized by rapidly changing technology, evolving industry standards and changing trading systems, practices and techniques. The widespread adoption of new internet, networking or telecommunications technologies or other technological changes could require us to incur substantial expenditures to modify or adapt our services or infrastructure. We may not be able to anticipate or respond adequately or in a cost-efficient and competitive manner to technological advancements (including advancements related to low-latency technologies, execution and messaging speeds) or changing industry standards. If any of these risks materialize, it could have a material adverse effect on our business, financial condition, results of operations and cash flows.

***Our reliance on our computer systems and software could expose us to material financial and reputational harm if any of our computer systems or software were subject to any material disruption or corruption.***

We rely significantly on our computer systems and software to receive and properly process internal and external data and utilize such data to generate orders and other messages. A disruption or corruption of the proper functioning of our computer systems or software could cause us to make erroneous trades, which could result in material losses or reputational harm. We cannot guarantee that our efforts to maintain competitive computer systems and software will be successful. Our computer systems and software may fail or be subject to bugs or other errors, resulting in service

interruptions or other unintended consequences. If any of these risks materialize, they could have a material adverse effect on our business, financial condition, results of operations and cash flows.

***We could be the target of a significant cyber-attack, threat or incident that impairs internal systems, results in adverse consequences to information our system process, store or transmit or causes reputation damages as a consequence.***

Our business relies on technology and automation to perform significant functions within our firm. Because of our reliance on technology, we may be susceptible to various forms of cyber-attacks by third parties or insiders. Though we take steps to mitigate the various cyber threats and devote significant resources to maintain and update our systems and networks, we may be unable to anticipate attacks or to implement adequate preventative measures. Our cybersecurity measures may not detect or prevent all attempts to compromise our systems, including denial-of-service attacks, viruses, malicious software, break-ins, phishing attacks, social engineering, security breaches or other attacks and similar disruptions that may jeopardize the security of information stored in and transmitted by our systems or that we otherwise maintain. Although we maintain insurance coverage that may, subject to policy terms and conditions, cover certain aspects of cyber risks, such insurance coverage may be insufficient to cover all losses. Breaches of our cybersecurity measures could result in any of the following: unauthorized access to our systems; unauthorized access to and misappropriation of information or data, including confidential or proprietary information about ourselves, third parties with whom we do business or our proprietary systems; viruses, worms, spyware or other malware being placed in our systems and intellectual property; deletion or modification of client information; or a denial-of-service or other interruptions to our business operations. While we have not suffered a material breach of our cybersecurity, any actual or perceived breach of our cybersecurity could damage our reputation, expose us to a risk of loss or litigation and possible liability, require us to expend significant capital and other resources to alleviate problems caused by such breaches and otherwise have a material adverse effect on our business, financial condition, results of operations and cash flows.

***Capacity constraints, systems failures, malfunctions and delays could harm our business.***

Our business activities are heavily dependent on the integrity and performance of the computer and communications systems supporting them. Our systems and operations are vulnerable to damage or interruption from human error, software bugs and errors, electronic and physical security breaches, natural disasters, power loss, utility or internet outages, computer viruses, intentional acts of vandalism, terrorism and other similar events. Extraordinary trading volumes or other events could cause our computer systems to operate in ways that we did not intend, at an unacceptably low speed or even fail. While we have invested significant amounts of capital to upgrade the capacity, reliability and scalability of our systems, there can be no assurance that our systems will always operate properly or be sufficient to handle such extraordinary trading volumes. Any disruption for any reason in the proper functioning or any corruption of our software or erroneous or corrupted data may cause us to make erroneous trades or suspend our services and could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Although our systems and infrastructure are generally designed to accommodate additional growth without redesign or replacement, we may need to make significant investments in additional hardware and software to accommodate growth. Failure to make necessary expansions and upgrades to our systems and infrastructure could not only limit our growth and business prospects but could also cause substantial losses and have a material adverse effect on our business, financial condition, results of operations and cash flows.

Since the timing and impact of disasters and disruptions are unpredictable, we may not be able to respond to actual events as they occur. Business disruptions can vary in their scope and significance and can affect one or more of our facilities. Further, the severity of the disruption can also vary from minimal to severe. Although we have employed efforts to develop, implement and maintain reasonable disaster recovery and business continuity plans, we cannot guarantee that our systems will fully recover after a significant business disruption in a timely fashion or at all. If we are prevented from using any of our current trading operations, or if our business continuity operations do not work effectively, we may not have complete business continuity, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.



***Failure or poor performance of third-party software, infrastructure or systems on which we rely could adversely affect our business.***

We depend on third parties to provide and maintain certain infrastructure that is critical to our business. For example, we rely on third parties to provide software, data center services and dedicated fiber optic, microwave, wireline and wireless communication infrastructure. This infrastructure may malfunction or fail due to events outside of our control, which could disrupt our operations and have a material adverse effect on our business, financial condition, results of operations and cash flows. Any failure to maintain and renew our relationships with these third parties on commercially favorable terms, or to enter into similar relationships in the future, could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We also rely on certain third-party software, third-party computer systems and third-party service providers, including clearing systems, exchange systems, alternate trading systems, order routing systems, internet service providers, communications facilities and other facilities. Any interruption in these third-party services or software, deterioration in their performance, or other improper operation could interfere with our trading activities, cause losses due to erroneous or delayed responses, or otherwise be disruptive to our business. If our arrangements with any third party are terminated, we may not be able to find an alternative source of software or systems support on a timely basis or on commercially reasonable terms. This could also have a material adverse effect on our business, financial condition, results of operations and cash flows.

***The use of open source software may expose us to additional risks.***

We use software development tools covered by open source licenses and may incorporate such open source software into our proprietary software from time to time. “Open source software” refers to any code, shareware or other software that is made generally available to the public without requiring payment of fees or royalties and/or that may require disclosure or licensing of any software that incorporates such source code, shareware or other software. Given the nature of open source software, third parties might assert contractual or copyright and other intellectual property-related claims against us based on our use of such tools and software programs or might seek to compel the disclosure of the source code of our software or other proprietary information. If any such claims materialize, we could be required to (i) seek licenses from third parties in order to continue to use such tools and software or to continue to operate certain elements of our technology, (ii) release certain proprietary software code comprising our modifications to such open source software, (iii) make our software available under the terms of an open source license, (iv) re-engineer all, or a portion of, that software, any of which could materially and adversely affect our business, financial condition, results of operations and cash flows or (v) be required to pay significant damages as a result of substantiated unauthorized use. While we monitor the use of all open source software in our solutions, processes and technology and try to ensure that no open source software is used (i) in such a way as to require us to disclose the source code to the related solution when we do not wish to do so nor (ii) in connection with critical or fundamental elements of our software or technology, such use may have inadvertently occurred in deploying our proprietary solutions. If a third-party software provider has incorporated certain types of open source software into software we license from such third party for our products and solutions, we could, under certain circumstances, be required to disclose the source code to our solutions. In addition to risks related to license requirements, usage of open software can lead to greater risks than use of third-party commercial software because open source licensors generally do not provide warranties or controls on the origin of the software. Many of the risks associated with usage of open source software cannot be eliminated and could potentially have a material adverse effect on our business, financial condition, results of operations and cash flows.

***We may not be able to protect our intellectual property rights or may be prevented from using intellectual property necessary for our business.***

We rely on federal and state law, trade secrets, trademarks, domain names, copyrights and contract law to protect our intellectual property and proprietary technology. It is possible that third parties may copy or otherwise obtain and use our intellectual property or proprietary technology without authorization or otherwise infringe on our rights. For example, while we have a policy of entering into confidentiality, intellectual property invention assignment and/or non-competition and non-solicitation agreements or restrictions with our employees, independent contractors and business partners, such agreements may not provide adequate protection or may be breached, or our proprietary technology may otherwise become available to or be independently developed by our competitors. The promulgation of

laws or rules which require the maintenance of source code or other intellectual property in a repository subject to certain requirements and/or which enhance or facilitate access to such source code by regulatory authorities could inhibit our ability to protect against unauthorized dissemination or use of our intellectual property. Third parties have alleged and may in the future allege that we are infringing, misappropriating or otherwise violating their intellectual property rights. Third parties may initiate litigation against us without warning, or may send us letters or other communications that make allegations without initiating litigation. We may elect not to respond to these letters or other communications if we believe they are without merit, or we may attempt to resolve these disputes out of court by negotiating a license, but in either case it is possible that such disputes will ultimately result in litigation. Any such claims could interfere with our ability to use technology or intellectual property that is material to the operation of our business. Such claims may be made by competitors seeking to obtain a competitive advantage or by other parties, such as entities that purchase intellectual property assets for the purpose of bringing infringement claims. We also periodically employ individuals who were previously employed by our competitors or potential competitors, and we may therefore be subject to claims that such employees have used or disclosed the alleged trade secrets or other proprietary information of their former employers.

At times we rely on litigation to enforce our intellectual property rights, protect our trade secrets, determine the validity and scope of the proprietary rights of others or defend against claims of infringement or invalidity. Any such litigation, whether successful or unsuccessful, could result in substantial costs and the diversion of resources and the attention of management. If unsuccessful, such litigation could result in the loss of important intellectual property rights, require us to pay substantial damages, subject us to injunctions that prevent us from using certain intellectual property, require us to make admissions that affect our reputation in the marketplace and require us to enter into license agreements that may not be available on favorable terms or at all. Finally, even if we prevail in any litigation, the remedy may not be commercially meaningful or fully compensate us for the harm we suffer or the costs we incur. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and cash flows.

***We are exposed to risks associated with our international operations and expansion and failure to comply with laws and regulations applicable to our international operations may increase costs, reduce profits, limit growth or subject us to broader liability.***

We are exposed to risks and uncertainties inherent in doing business in international markets, particularly in the heavily regulated broker-dealer industry. Such risks and uncertainties include political, economic and financial instability, unexpected changes in regulatory requirements, tariffs and other trade barriers, exchange rate fluctuations, applicable currency controls, the imposition of restrictions on currency conversion or the transfer of funds, limitations on our ability to repatriate non-U.S. earnings in a tax efficient manner and difficulties in staffing and managing foreign operations, including reliance on local experts. Such restrictions generally include those by imposed by the Foreign Corrupt Practices Act (the “FCPA”) and trade sanctions administered by the Office of Foreign Assets Control (“OFAC”). The FCPA is intended to prohibit bribery of foreign officials and requires companies whose securities are listed in the U.S. to keep books and records that accurately and fairly reflect those companies’ transactions and to devise and maintain an adequate system of internal accounting controls. OFAC administers and enforces economic and trade sanctions based on U.S. foreign policy and national security goals against designated foreign states, organizations and individuals. Though we have policies in place designed to comply with applicable OFAC sanctions, rules and regulations as well as the FCPA and equivalent laws and rules of other jurisdictions, if we fail to comply with these laws and regulations, we could be exposed to claims for damages, financial penalties, reputational harm, incarceration of employees and restrictions on our operations and cash flows.

In addition, the varying compliance requirements of these different regulatory jurisdictions and other factors may limit our ability to successfully conduct or expand our business internationally and may increase our costs of investment. Expansion into international locations involves substantial operational and execution risk. We may not be able to manage these costs or risks effectively.

***The results of the United Kingdom’s referendum on withdrawal from the European Union may negatively impact the global economy, financial markets and our business.***

In June 2016, the United Kingdom voted in an advisory referendum to leave the European Union (commonly referred to as “Brexit”). The outcome of the negotiations between the U.K. and the European Union in connection with

the referendum and withdrawal is highly uncertain and may significantly affect the fiscal, monetary and regulatory landscape in the U.K., and could have a material impact on its economy and the future growth of its various industries, including the financial services industry, as well as global economic conditions and financial markets. We presently access the E.U. markets primarily through our Irish regulated subsidiary and we do not expect any impact on our access to E.U. markets as a result of Brexit. However, it is not possible at this point in time to predict fully the effects of an exit of the U.K. from the E.U., especially with respect to our activities in the U.K. or the potential impact of interacting with U.K. based market participants, and it could have a material adverse effect on our business, financial condition, results of operations and cash flows.

***Fluctuations in currency exchange rates could negatively impact our earnings.***

A significant portion of our international business is conducted in currencies other than the U.S. dollar, and changes in foreign exchange rates relative to the U.S. dollar can therefore affect the value of our non-U.S. dollar net assets, revenues and expenses. Although we closely monitor potential exposures as a result of these fluctuations in currencies, and where cost-justified we adopt strategies that are designed to reduce the impact of these fluctuations on our financial performance, including the financing of non-U.S. dollar assets with borrowings in the same currency and the use of various hedging transactions related to net assets, revenues, expenses or cash flows, there can be no assurance that we will be successful in managing our foreign exchange risk. Our exposure to currency exchange rate fluctuations will grow if the relative contribution of our operations outside the U.S. increases. Any material fluctuations in currencies could have a material effect on our financial condition, results of operations and cash flows.

***We may experience risks associated with future growth or expansion of our operations or acquisitions, strategic investments or dispositions of businesses, and we may never realize the anticipated benefits of such activities.***

As a part of our business strategy, we may make acquisitions or significant investments in and/or disposals of businesses. Any such future acquisitions, investments and/or dispositions would be accompanied by risks such as assessment of values for acquired businesses, intangible assets and technologies, difficulties in assimilating the operations and personnel of acquired companies or businesses, diversion of our management's attention from ongoing business concerns, our potential inability to maximize our financial and strategic position through the successful incorporation or disposition of operations, maintenance of uniform standards, controls, procedures and policies and the impairment of existing relationships with employees, contractors, suppliers and customers as a result of the integration of new management personnel and cost-saving initiatives. We cannot guarantee that we will be able to successfully integrate any company or business that we might acquire in the future, and our failure to do so could harm our current business.

In addition, we may not realize the anticipated benefits of any such transactions, and there may be other unanticipated or unidentified effects. While we would seek protection, for example, through warranties and indemnities in the case of acquisitions, significant liabilities may not be identified in due diligence or come to light after the expiration of warranty or indemnity periods. Additionally, while we would seek to limit our ongoing exposure, for example, through liability caps and period limits on warranties and indemnities in the case of disposals, some warranties and indemnities may give rise to unexpected and significant liabilities. If we fail to realize any such anticipated benefits, or if we experience any such unanticipated or unidentified effects in connection with any future acquisitions, investments or dispositions, we could suffer a material adverse effect on our business, financial condition, results of operations and cash flows. Finally, strategic investments may involve additional risks associated with holding a minority or non-controlling position in an illiquid business or asset.

***Our future efforts to sell shares of our common stock or raise additional capital may be delayed or prohibited by regulations.***

As certain of our subsidiaries are members of FINRA and other SROs, we are subject to certain regulations regarding changes in ownership or control and material changes in operations. For example, FINRA's NASD Rule 1017 generally provides that FINRA approval must be obtained in connection with certain change of ownership or control transactions, such as a transaction that results in a single entity or person owning 25% or more our equity. Similarly, Virtu Financial Ireland Limited, one of our Irish subsidiaries, is subject to change in control regulations promulgated by the Central Bank of Ireland, and other registered or regulated foreign subsidiaries may be subject to similar regulations in

applicable jurisdictions. As a result of these regulations, our future efforts to sell shares of our common stock or raise additional capital may be delayed or prohibited. We may be subject to similar restrictions in other jurisdictions in which we operate.

***We are dependent on the continued service of certain key executives, the loss or diminished performance of whom could have a material adverse effect on our business.***

Our performance is substantially dependent on the performance of our senior management, Mr. Cifu, our Chief Executive Officer and Mr. Molluso, our Chief Financial Officer. In connection with and subsequent to the IPO, we have entered into employment and other related agreements with certain members of our senior management team that restrict their ability to compete with us should they decide to leave our Company. Even though we have entered into these agreements, we cannot be sure that any member of our senior management will remain with us or that they will not compete with us in the future. The loss of any member of our senior management team could impair our ability to execute our business plan and growth strategy and have a negative impact on our revenues, in addition to potentially causing employee morale problems and/or the loss of key employees. In particular, Mr. Cifu invests in other businesses and spends time on such matters, which could divert their attention from us. Our employment agreement with Mr. Cifu specifically permits his participation in and attention to certain other business activities, including but not necessarily limited to his role as the Vice Chairman and Alternate Governor of the Florida Panthers, a National Hockey League franchise, and his role as a director of the Independent Bank Group, Inc., a regional bank holding company. We cannot guarantee that these or other permitted outside activities will not impact his performance as Chief Executive Officer.

***Our success depends, in part, on our ability to identify, recruit and retain skilled management and technical personnel. If we fail to recruit and retain suitable candidates or if our relationship with our employees changes or deteriorates, it could have a material adverse effect on our business.***

Our future success depends, in part, upon our continued ability to identify, attract, hire and retain highly qualified personnel, including skilled technical, management, product and technology, trading, sales and marketing personnel, all of whom are in high demand and are often subject to competing offers. Competition for qualified personnel in the financial services industry is intense and we cannot assure you that we will be able to hire or retain a sufficient number of qualified personnel to meet our requirements, or that we will be able to do so at salary, benefit and other compensation costs that are acceptable to us or that would allow us to achieve operating results consistent with our historical results. A loss of qualified employees, or an inability to attract, retain and motivate additional highly skilled employees in the future, could have a material adverse effect on our business.

***We could lose significant sources of revenues if we were to lose access to an important exchange or other trading venue.***

Changes in applicable laws, regulations or rules promulgated by exchanges could conceivably prevent us from providing liquidity to an exchange or other trading venue where we provide liquidity today. Though our revenues are diversified across exchanges and other trading venues, asset classes and geographies, the loss of access to one or more significant exchanges and other trading venues for any reason could have a material adverse effect on our business, financial condition, results of operations and cash flows.

#### **Risks Related to the Acquisition of KCG**

***Significant costs and significant indebtedness were incurred in connection with the consummation of the Acquisition of KCG, and the integration of KCG into our business, including legal, accounting, financial advisory and other costs.***

We expect to incur significant costs in connection with integrating the operations, products and personnel of KCG into our business. These costs may include:

- employee retention, redeployment, relocation or severance;
- integration of information systems;

- combination of corporate and administrative functions; and
- potential or pending litigation or other proceedings related to the Acquisition of KCG.

The costs related to the Acquisition of KCG could be higher than currently estimated, depending on how difficult it will be to integrate our business with that of KCG, and the expected cost reductions and synergies may not be achieved.

In addition, we expect to incur a number of non-recurring costs associated with combining the operations of KCG with ours, which cannot be estimated accurately at this time. While we expected to and incurred a significant amount of transaction fees and other costs related to the consummation of the Acquisition of KCG, additional unanticipated costs may yet be incurred. Any expected elimination of duplicative costs, as well as the expected realization of other cost reductions, efficiencies and synergies related to the integration of our operations with those of KCG, that may offset incremental transaction and transaction-related costs over time, may not be achieved as projected, or at all.

In addition, we incurred \$1,650.0 million of new indebtedness in connection with the Acquisition of KCG, \$526 million of which we have prepaid as of March 13, 2018. The debt we have incurred in connection with the Acquisition of KCG may limit our financial and operating flexibility, and we may incur additional debt, which could increase the risks associated with our substantial indebtedness. Our substantial indebtedness may have material consequences for our business, prospects, results of operations, financial condition and/or cash flows.

***Integrating KCG's business into our business may divert management's attention away from operations, and we may also encounter significant difficulties in integrating the two businesses.***

The Acquisition of KCG involves the integration of two companies that have previously operated independently. The success of the Acquisition of KCG and their anticipated financial and operational benefits, including increased revenues, synergies and cost reductions, will depend in part on our ability to successfully combine and integrate KCG's business into ours, and there can be no assurance regarding when or the extent to which we will be able to realize these increased revenues, synergies, cost reductions or other benefits. These benefits may not be achieved within the anticipated time frame, or at all.

Successful integration of KCG's operations, products and personnel may place a significant burden on management and other internal resources. The diversion of management's attention, and any difficulties encountered in the transition and integration process, could harm our business, prospects, results of operations, financial condition and/or cash flows.

In addition, the overall integration of the businesses may result in material unanticipated problems, expenses, liabilities, and competitive responses. The difficulties of combining the operations of the companies include, among others:

- difficulties in achieving anticipated cost reductions, synergies, business opportunities and growth prospects from the combination;
- difficulties in the integration of operations and systems;
- conforming standards, controls, procedures and accounting and other policies, business cultures and compensation structures between the two companies;
- difficulties in the assimilation of employees and the integration of the companies' different organizational structures;
- difficulties in managing the expanded operations of a larger and more complex company with increased international operations;

- challenges in integrating the business culture of each company;
- challenges in attracting and retaining key personnel; and
- difficulties in replacing numerous systems, including those involving management information, purchasing, accounting and finance, sales, billing, employee benefits, payroll, data privacy and security and regulatory compliance, many of which may be dissimilar.

These factors could result in increased costs, decreases in the amount of expected revenues and diversion of management's time and energy, which could materially impact our business, prospects, results of operations, financial condition and/or cash flows.

***We may not realize the anticipated synergies, net cost reductions and growth opportunities from the Acquisition of KCG.***

The benefits that we expect to achieve as a result of the Acquisition of KCG will depend, in part, on the ability of the combined company to realize anticipated growth opportunities, net cost reductions and synergies. Our success in realizing these growth opportunities, net cost reductions and synergies, and the timing of this realization, depends on the successful integration of our historical business and operations and the historical business and operations of KCG. Even if we are able to integrate the businesses and operations of the Company and KCG successfully, this integration may not result in the realization of the full benefits of the growth opportunities, net cost reductions and synergies that we currently expect from this integration within the anticipated time frame or at all. For example, we may be unable to eliminate duplicative costs. Moreover, we may incur substantial expenses in connection with the integration of our business and KCG's business. While we anticipate that certain expenses will be incurred, such expenses are difficult to estimate accurately and may exceed current estimates. Accordingly, the benefits from the Acquisition of KCG may be offset by costs or delays incurred in integrating the businesses. We projected net cost reductions and synergies are based on a number of assumptions relating to our business and KCG's business. Those assumptions may be inaccurate, and, as a result, our projected net cost reductions and synergies may be inaccurate, and our business, prospects, results of operations, financial condition and/or cash flows could be materially and adversely affected.

***The Company will be subject to business uncertainties that could materially and adversely affect our business.***

Uncertainty about the effect of the Acquisition of KCG on employees, customers and suppliers may have both a material and adverse effect on the Company. These uncertainties may impair the Companies' ability to attract, retain and motivate key personnel, and could cause customers, suppliers and others who deal with the Company to seek to end, suspend or change existing business relationships. If key employees depart because of issues related to the uncertainty and difficulty of integration or a desire not to remain with us, or if customers, suppliers or others seek to end, suspend or change their dealings with us as a result of the Acquisition of KCG, our business could be materially and adversely impacted.

***In connection with the Acquisition of KCG, we have assumed potential liabilities relating to KCG's business.***

In connection with the Acquisition of KCG, we have assumed potential regulatory, litigation and other liabilities relating to KCG's business. For example, KCG is currently the subject of various regulatory reviews and investigations by federal, state and foreign regulators and SROs, including the SEC, FINRA and the FCA. In some instances, these matters may rise to a disciplinary action and/or a civil or administrative action, penalties, fines, judgments, censures and settlements. To the extent we have not identified such liabilities or miscalculated their potential financial impact, these liabilities could have a material adverse effect on our business, prospects, results of operations, financial condition and/or cash flows.

## Risks Related to Our Organization and Structure

***We are a holding company and our principal asset is our 48.3% of equity interest in Virtu Financial, and we are accordingly dependent upon distributions from Virtu Financial to pay dividends, if any, taxes and other expenses.***

We are a holding company and our principal asset is our direct and indirect ownership of 48.3% of the Virtu Financial Units as of December 31, 2017. We have no independent means of generating revenue. As the sole managing member of Virtu Financial, we cause Virtu Financial to make distributions to its equityholders, including the Founder Post-IPO Member, Virtu Employee Holdco, certain current and former members of management of the Company and their affiliates (the “Management Members”) and us, in amounts sufficient to fund dividends to our stockholders in accordance with our dividend policy and, as further described below, to cover all applicable taxes payable by us and any payments we are obligated to make under the tax receivable agreements we entered into as part of the Reorganization Transactions, but we are limited in our ability to cause Virtu Financial to make these and other distributions to us (including for purposes of paying corporate and other overhead expenses and dividends) under our Fourth Amended and Restated Credit Agreement governing our term loan facility (the “Term Loan Facility”), and the indenture pursuant to which we have issued senior secured second lien notes (the “Notes”). In addition, certain laws and regulations may result in restrictions on Virtu Financial’s ability to make distributions to its equityholders (including us), or the ability of its subsidiaries to make distributions to it. These include:

- the SEC Net Capital Rule (Rule 15c3-1), which requires each of Virtu Financial’s registered broker-dealer subsidiaries to maintain specified levels of net capital;
- FINRA Rule 4110, which imposes a requirement of prior FINRA approval for any distribution by Virtu Financial’s FINRA member registered broker-dealer subsidiary in excess of 10% of its excess net capital; and
- the requirement for prior approval from the Central Bank of Ireland before Virtu Financial’s regulated Irish subsidiary completes any distribution or dividend.

To the extent that we need funds and Virtu Financial is restricted from making such distributions to us, under applicable law or regulation, as a result of covenants in our Fourth Amended and Restated Credit Agreement, the indenture governing our Notes or otherwise, we may not be able to obtain such funds on terms acceptable to us or at all and as a result could suffer a material adverse effect on our liquidity and financial condition.

Under the Third Amended and Restated Limited Liability Company Agreement of Virtu Financial (as amended, the “Amended and Restated Virtu Financial LLC Agreement”), Virtu Financial from time to time makes pro rata distributions in cash to its equityholders, including the Founder Post-IPO Member, the trust that holds equity interests in Virtu Financial on behalf of certain employees of ours based outside the United States, which we refer to as the “Employee Trust”, Virtu Employee Holdco and us, in amounts sufficient to cover the taxes on their allocable share of the taxable income of Virtu Financial. As a result of (i) potential differences in the amount of net taxable income allocable to us and to Virtu Financial’s other equityholders, (ii) the lower tax rate applicable to corporations than individuals and (iii) the favorable tax benefits that we anticipate from (a) the exchange of Virtu Financial Units and corresponding shares of Class C common stock or Class D common stock, (b) payments under the tax receivable agreements and (c) future deductions attributable to the prior acquisition of interests in Virtu Financial by certain affiliates of Silver Lake Partners and Temasek, we expect that these tax distributions will be in amounts that exceed our tax liabilities. Our board of directors will determine the appropriate uses for any excess cash so accumulated, which may include, among other uses, the payment of obligations under the tax receivable agreements, the payment of other expenses or the repurchase of shares of common stock or Virtu Financial Units. We will have no obligation to distribute such cash (or other available cash) to our shareholders. No adjustments to the exchange ratio for Virtu Financial Units and corresponding shares of common stock will be made as a result of any cash distribution by us or any retention of cash by us, and in any event the ratio will remain one-to-one.



***We are controlled by the Founder Post-IPO Member, whose interests in our business may be different than yours, and certain statutory provisions afforded to stockholders are not applicable to us.***

The Founder Post-IPO Member controls approximately 88% of the combined voting power of our common stock as a result of its ownership of our Class D common stock, each share of which is entitled to 10 votes on all matters submitted to a vote of our stockholders.

The Founder Post-IPO Member has the ability to substantially control our Company, including the ability to control any action requiring the general approval of our stockholders, including the election of our board of directors, the adoption of amendments to our certificate of incorporation and by-laws and the approval of any merger or sale of substantially all of our assets. This concentration of ownership and voting power may also delay, defer or even prevent an acquisition by a third party or other change of control of our Company and may make some transactions more difficult or impossible without the support of the Founder Post-IPO Member, even if such events are in the best interests of minority stockholders. This concentration of voting power with the Founder Post-IPO Member may have a negative impact on the price of our Class A common stock. In addition, because shares of our Class B common stock and Class D common stock each have 10 votes per share on matters submitted to a vote of our stockholders, the Founder Post-IPO Member is able to control our Company as long as it owns at least 25% of our issued and outstanding common stock.

The Founder Post-IPO Member's interests may not be fully aligned with yours, which could lead to actions that are not in your best interest. Because the Founder Post-IPO Member holds part of its economic interest in our business through Virtu Financial, rather than through the public company, it may have conflicting interests with holders of shares of our Class A common stock. For example, the Founder Post-IPO Member may have a different tax position from us, which could influence its decisions regarding whether and when we should dispose of assets or incur new or refinance existing indebtedness, especially in light of the existence of the tax receivable agreements that we entered into in connection with the IPO, and whether and when we should undergo certain changes of control within the meaning of the tax receivable agreements or terminate the tax receivable agreements. In addition, the structuring of future transactions may take into consideration these tax or other considerations even where no similar benefit would accrue to us. See "Item 1A. Risk Factors — Risks Related to Our Organizational Structure — We are required to pay the Virtu Post IPO Members and the Investor Post IPO Stockholders for certain tax benefits we may claim, and the amounts we may pay could be significant." In addition, pursuant to an exchange agreement, the holders of Virtu Financial Units and shares of our Class C common stock or Class D common stock are not required to participate in a proposed sale of our Company that is tax-free for our stockholders unless the transaction is also tax-free for such holders of Virtu Financial Units and shares of our Class C common stock or Class D common stock. This requirement could limit structural alternatives available to us in any such proposed transaction and could have the effect of discouraging transactions that might benefit you as a holder of shares of our Class A common stock. In addition, the Founder Post-IPO Member's significant ownership in us and resulting ability to effectively control us may discourage someone from making a significant equity investment in us, or could discourage transactions involving a change in control, including transactions in which you as a holder of shares of our Class A common stock might otherwise receive a premium for your shares over the then-current market price.

We have opted out of Section 203 of the General Corporation Law of the State of Delaware (the "Delaware General Corporation Law"), which prohibits a publicly held Delaware corporation from engaging in a business combination transaction with an interested stockholder for a period of three years after the interested stockholder became such unless the transaction fits within an applicable exemption, such as board approval of the business combination or the transaction which resulted in such stockholder becoming an interested stockholder. Therefore, the Founder Post-IPO Member is able to transfer control of us to a third party by transferring its shares of our common stock (subject to certain restrictions and limitations), which would not require the approval of our board of directors or our other stockholders.

Our amended and restated certificate of incorporation provides that, to the fullest extent permitted by law, the doctrine of "corporate opportunity" does not apply against the Founder Post-IPO Member, Mr. Viola, Temasek, any of our non-employee directors or any of their respective affiliates in a manner that would prohibit them from investing in competing businesses or doing business with our clients or customers. In addition, subject to the restrictions on competitive activities described below, Mr. Cifu is permitted to become engaged in, or provide services to, any other business or activity in which Mr. Viola is currently engaged or permitted to become engaged, to the extent that Mr. Cifu's level of participation in such businesses or activities is consistent with his current participation in such



businesses and activities. The Amended and Restated Virtu Financial LLC Agreement provides that Mr. Viola, in addition to our other executive officers and our employees that are Virtu Post-IPO Members, including Mr. Cifu, may not directly or indirectly engage in certain competitive activities until the third anniversary of the date on which such person ceases to be an officer, director or employee of ours. Temasek and our non-employee directors are not subject to any such restriction. To the extent that the Founder Post-IPO Member, Mr. Viola, Temasek, our non-employee directors or any of their respective affiliates invests in other businesses, they may have differing interests than our other stockholders. Messrs. Viola and Cifu also have business relationships outside of our business.

***We may be unable to remain in compliance with the financial maintenance and other covenants contained in our Fourth Amended and Restated Credit Agreement and the indenture governing our Notes and our obligation to comply with these covenants may adversely affect our ability to operate our business.***

The covenants in our Fourth Amended and Restated Credit Agreement and indenture governing our Notes may negatively impact our ability to finance future operations or capital needs or to engage in other business activities. Our Fourth Amended and Restated Credit Agreement and the indenture governing our Notes requires us to maintain specified financial ratios and tests, including interest coverage and total leverage ratios, which may require us to take action to reduce our debt or to act in a manner contrary to our business objectives. Our Fourth Amended and Restated Credit Agreement and the indenture governing our Notes also restrict our ability to, among other things, incur additional indebtedness, dispose of assets, guarantee debt obligations, repay other indebtedness, pay dividends, pledge assets, make investments, including in certain of our operating subsidiaries, make acquisitions or consummate mergers or consolidations and engage in certain transactions with subsidiaries and affiliates.

A failure to comply with the restrictions contained in our Fourth Amended and Restated Credit Agreement and indenture governing our Notes could lead to an event of default, which could result in an acceleration of our indebtedness. Our future operating results may not be sufficient to enable compliance with the covenants in our Fourth Amended and Restated Credit Agreement or indenture governing our Notes or to remedy such a default. In addition, in the event of an acceleration, we may not have or be able to obtain sufficient funds to refinance our indebtedness or to make any accelerated payments. Even if we were able to obtain new financing, we would not be able to guarantee that the new financing would be on commercially reasonable terms. If we default on our indebtedness, our business, financial condition and results of operation could suffer a material adverse effect.

***Our reported financial results depend on management’s selection of accounting methods and certain assumptions and estimates.***

Our accounting policies and assumptions are fundamental to our reported financial condition, and results of operations and cash flows. Our management must exercise judgment in selecting and applying many of these accounting policies and methods to comply with generally accepted accounting principles and reflect management’s judgment of the most appropriate manner to report our financial condition, results of operations and cash flows. In some cases, management must select the accounting policy or method to apply from multiple alternatives, any of which may be reasonable under the circumstances, yet each may result in the reporting of materially different results than would have been reported under a different alternative.

Certain accounting policies are critical to presenting our reported financial condition and results. They require management to make difficult, subjective or complex judgments about matters that are uncertain. Materially different amounts could be reported under different conditions or using different assumptions or estimates. If such estimates or assumptions underlying our financial statements are incorrect, we may experience material losses.

Additionally, from time to time, the Financial Accounting Standards Board and the SEC change the financial accounting and reporting standards or the interpretation of those standards that govern the preparation of our financial statements. These changes are beyond our control, can be difficult to predict and could materially impact how we report our financial condition, results of operations and cash flows. Changes in these standards are continuously occurring, and given the current economic environment, more drastic changes may occur. The implementation of such changes could have a material adverse effect on our business, financial condition and results of operation.

***We are exempt from certain corporate governance requirements since we are a “controlled company” within the meaning of the NASDAQ rules, and as a result our stockholders do not have the protections afforded by these corporate governance requirements.***

The Founder Post-IPO Member controls more than 50% of our combined voting power. As a result, we are considered a “controlled company” for purposes of the NASDAQ rules and corporate governance standards, and therefore we are permitted and have elected not to, comply with certain NASDAQ corporate governance requirements, including those that would otherwise require our board of directors to have a majority of independent directors and require that we either establish a Compensation and Nominating and Corporate Governance Committees, each comprised entirely of independent directors, or otherwise ensure that the compensation of our executive officers and nominees for directors are determined or recommended to the board of directors by the independent members of the board of directors. Accordingly, holders of our Class A common stock do not have the same protections afforded to stockholders of companies that are subject to all of the NASDAQ rules and corporate governance standards, and the ability of our independent directors to influence our business policies and affairs may be reduced.

***We are required to pay the Virtu Post-IPO Members and the Investor Post-IPO Stockholders for certain tax benefits we may claim, and the amounts we may pay could be significant.***

In connection with the Reorganization Transactions, we acquired equity interests in Virtu Financial from an affiliate of Silver Lake Partners (which, following a secondary offering completed in November 2015 (the “November 2015 Secondary Offering”), no longer holds any equity interest in us) and the an affiliate of the Temasek Pre-IPO Member in the Mergers. In addition, we used a portion of the net proceeds from our IPO and our Secondary Offerings (as defined below) to purchase Virtu Financial Units and corresponding shares of Class C common stock from certain Virtu Post-IPO Members, including affiliates of the Silver Lake Partners (the “Silver Lake Post-IPO Members”), and certain employees. These acquisitions of interests in Virtu Financial, along with certain subsequent exchanges of interests in Virtu Financial by current and former employees, resulted in tax basis adjustments to the assets of Virtu Financial that were allocated to us and our subsidiaries. Future acquisitions of interests in Virtu Financial are expected to produce favorable tax attributes. In addition, future exchanges by the Virtu Post-IPO Members of Virtu Financial Units and corresponding shares of Class C common stock or Class D common stock, as the case may be, for shares of our Class A common stock or Class B common stock, respectively, are expected to produce favorable tax attributes. These tax attributes would not be available to us in the absence of such transactions. Both the existing and anticipated tax basis adjustments are expected to reduce the amount of tax that we would otherwise be required to pay in the future.

We entered into three tax receivable agreements with the Virtu Post-IPO Members and the Investor Post-IPO Stockholders (one with the Founder Post-IPO Member, the Employee Trust, Virtu Employee Holdco and other post IPO investors, other than affiliates of Silver Lake Partners and affiliates of Temasek, another with the Investor Post-IPO Stockholders and the other with the Silver Lake Post-IPO Members) that provide for the payment by us to the Virtu Post-IPO Members and the Investor Post-IPO Stockholders (or their transferees of Virtu Financial Units or other assignees) of 85% of the amount of actual cash savings, if any, in U.S. federal, state and local income tax or franchise tax that we actually realize as a result of (i) any increase in tax basis in Virtu Financial's assets resulting from (a) the acquisition of equity interests in Virtu Financial from an affiliates of Silver Lake Partners and Temasek, and the Temasek Pre-IPO Member in the Reorganization Transactions (which represents the unamortized portion of the increase in tax basis in Virtu Financial's assets resulting from a prior acquisition of interests in Virtu Financial by an affiliates of Silver Lake Partners and Temasek, and the Temasek Pre-IPO Member), (b) the purchases of Virtu Financial Units (along with the corresponding shares of our Class C common stock or Class D common stock, as applicable) from certain of the Virtu Post-IPO Members using a portion of the net proceeds from the IPO or in any future offering, (c) exchanges by the Virtu Post-IPO Members of Virtu Financial Units (along with the corresponding shares of our Class C common stock or Class D common stock, as applicable) for shares of our Class A common stock or Class B common stock, as applicable, or (d) payments under the tax receivable agreements, (ii) any net operating losses available to us as a result of the Mergers and (iii) tax benefits related to imputed interest deemed arising as a result of payments made under the tax receivable agreements.

The actual increase in tax basis, as well as the amount and timing of any payments under these tax receivable agreements, will vary depending upon a number of factors, including the timing of exchanges by the Virtu Post-IPO Members, the price of our Class A common stock at the time of the exchange, the extent to which such exchanges are taxable, the amount and timing of the taxable income we generate in the future and the tax rate then applicable and the portion of our payments under the tax receivable agreements constituting imputed interest.

The payments we are required to make under the tax receivable agreements, which represent 85% of the amount of actual cash savings, if any, in U.S. federal, state and local income tax or franchise tax that we actually realize, could be substantial. We expect that, as a result of the amount of the increases in the tax basis of the tangible and intangible assets of Virtu Financial, assuming no material changes in the relevant tax law and that we earn sufficient taxable income to realize in full the potential tax benefits described above, future payments to the Virtu Post-IPO Members and the Investor Post-IPO Stockholders in respect of the purchases, the exchanges and the Mergers in connection with the IPO, and the purchases and exchanges completed in connection with our subsequent public offering will aggregate to approximately \$147.0 million and range from approximately \$0.3 million to \$12.8 million per year over the next 15 years. Future payments under the tax receivable agreements in respect of subsequent exchanges would be in addition to these amounts. The payments under the tax receivable agreements are not conditioned upon the Virtu Post-IPO Members' or the Investor Post-IPO Stockholders' continued ownership of us.

In addition, although we are not aware of any issue that would cause the Internal Revenue Service (the "IRS") to challenge the tax basis increases or other benefits arising under the tax receivable agreements, the Virtu Post-IPO Members and the Investor Post-IPO Stockholders (or their transferees or other assignees) will not reimburse us for any payments previously made if such tax basis increases or other tax benefits are subsequently disallowed, except that any excess payments made to the Virtu Post-IPO Members and the Investor Post-IPO Stockholders will be netted against future payments otherwise to be made under the tax receivable agreements, if any, after our determination of such excess. As a result, in such circumstances we could make payments to the Virtu Post-IPO Members and the Investor Post-IPO Stockholders under the tax receivable agreements that are greater than our actual cash tax savings and may not be able to recoup those payments, which could negatively impact our liquidity.

In addition, the tax receivable agreements provide that, upon certain mergers, asset sales or other forms of business combination, or certain other changes of control, our or our successor's obligations with respect to tax benefits would be based on certain assumptions, including that we or our successor would have sufficient taxable income to fully utilize the increased tax deductions and tax basis and other benefits covered by the tax receivable agreements. As a result, upon a change of control, we could be required to make payments under a tax receivable agreement that are greater than the specified percentage of our actual cash tax savings, which could negatively impact our liquidity.

In addition, the tax receivable agreements provide that in the case of a change in control of the Company, the Virtu Post-IPO Members and the Investor Post-IPO Stockholders have the option to terminate the applicable tax

receivable agreement, and we are required to make a payment to such electing party in an amount equal to the present value of future payments (calculated using a discount rate equal to the lesser of 6.5% or LIBOR plus 100 basis points, which may differ from our, or a potential acquirer's, then-current cost of capital) under the tax receivable agreement, which payment would be based on certain assumptions, including those relating to our future taxable income. In these situations, our obligations under the tax receivable agreements could have a substantial negative impact on our, or a potential acquirer's, liquidity and could have the effect of delaying, deferring, modifying or preventing certain mergers, asset sales, other forms of business combinations or other changes of control. These provisions of the tax receivable agreements may result in situations where the Virtu Post-IPO Members and the Investor Post-IPO Stockholders have interests that differ from or are in addition to those of our other shareholders. In addition, we could be required to make payments under the tax receivable agreements that are substantial and in excess of our, or a potential acquirer's, actual cash savings in income tax.

Finally, because we are a holding company with no operations of our own, our ability to make payments under the tax receivable agreements are dependent on the ability of our subsidiaries to make distributions to us. Our Fourth Amended and Restated Credit Agreement restricts the ability of our subsidiaries to make distributions to us, which could affect our ability to make payments under the tax receivable agreements. To the extent that we are unable to make payments under the tax receivable agreements for any reason, such payments will be deferred and will accrue interest until paid, which could negatively impact our results of operations and cash flows and could also affect our liquidity in periods in which such payments are made.

#### **Risks Related to Our Class A Common Stock**

##### ***Substantial future sales of shares of our Class A common stock in the public market could cause our stock price to fall.***

As of December 31, 2017, we had 89,798,609 shares of Class A common stock outstanding, excluding 14,540,911 shares of Class A common stock issuable pursuant to the 2015 Management Incentive Plan and 97,490,729 shares of Class A common stock issuable upon potential exchanges and/or conversions. Of these shares, the 29,404,003 shares sold in the IPO and the Secondary Offerings are freely tradable without further restriction under the Securities Act. The remaining 158,738,382 shares of Class A common stock outstanding as of December 31, 2017 (including shares issuable upon exchange and/or conversion) are "restricted securities," as that term is defined under Rule 144 of the Securities Act. The holders of these remaining 158,738,382 shares of our Class A common stock, including shares issuable upon exchange or conversion as described above, are entitled to dispose of their shares pursuant to (i) the applicable holding period, volume and other restrictions of Rule 144 or (ii) another exemption from registration under the Securities Act. Additional sales of a substantial number of our shares of Class A common stock in the public market, or the perception that sales could occur, could have a material adverse effect on the price of our Class A common stock.

We have filed a registration statement under the Securities Act registering 16,000,000 shares of our Class A common stock reserved for issuance under our 2015 Amended and Restated Management Incentive Plan, 14,540,911 of which are issuable, and we entered into the Registration Rights Agreement pursuant to which we granted demand and piggyback registration rights to the Founder Post-IPO Member, Temasek, the North Island Stockholder and piggyback registration rights to certain of the other Virtu Post-IPO Members.

##### ***Failure to establish and maintain effective internal control over financial reporting could have a material adverse effect on our business, financial condition, results of operations and cash flows, and stock price.***

Maintaining effective internal control over financial reporting is necessary for us to produce reliable financial reports and is important in helping to prevent financial fraud. If we are unable to maintain adequate internal controls over financial reporting, our business and operating results could be harmed. We have begun to develop and implement a plan to test our internal controls over financial reporting to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley") and the related rules of the SEC, which require, among other things, our management to assess annually the effectiveness of our internal control over financial reporting and, if we are no longer an emerging growth company under the Jumpstart Our Business Startups Act (the "JOBS Act"), our independent registered public accounting firm to issue a report on the effectiveness of internal control over financial reporting with our Annual Report on Form 10-K. The internal control assessment required by Section 404 of Sarbanes-Oxley may divert internal resources

and we may experience higher operating expenses, higher independent auditor and consulting fees during the implementation of these changes. During the course of this documentation and testing, we may identify deficiencies that we are unable to remediate before the reporting date. Any material weaknesses or any failure to implement required new or improved controls or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations or result in material misstatements in our consolidated financial statements. If our management or our independent registered public accounting firm were to conclude in their reports that our internal control over financial reporting was not effective, investors could lose confidence in our reported financial information, and the trading price of our Class A common stock could drop significantly. Failure to comply with Section 404 of Sarbanes-Oxley could potentially subject us to sanctions or investigations by the SEC, FINRA or other regulatory authorities, as well as increasing the risk of liability arising from litigation based on securities law.

***We intend to pay regular dividends to our stockholders, but our ability to do so may be limited by our holding company structure, contractual restrictions and regulatory requirements.***

We intend to pay cash dividends on a quarterly basis. See Item 5, “Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.” However, we are a holding company, with our principal asset being our direct and indirect equity interests in Virtu Financial, and we will have no independent means of generating revenue. Accordingly, as the sole managing member of Virtu Financial, we intend to cause, and will rely on, Virtu Financial to make distributions to its equityholders, including the Founder Post-IPO Member, the Employee Trust, Virtu Employee Holdco and us, to fund our dividends. When Virtu Financial makes such distributions, the other equityholders of Virtu Financial will be entitled to receive equivalent distributions pro rata based on their economic interests in Virtu Financial. In order for Virtu Financial to make distributions, it may need to receive distributions from its subsidiaries. Certain of these subsidiaries are or may in the future be subject to regulatory capital requirements that limit the size or frequency of distributions. See “Item 1A. Risk Factors — Risks Related to Our Business — Failure to comply with applicable regulatory capital requirements could subject us to sanctions imposed by the SEC, FINRA and other SROs or regulatory bodies.” If Virtu Financial is unable to cause these subsidiaries to make distributions, we may not receive adequate distributions from Virtu Financial in order to fund our dividends.

Our board of directors will periodically review the cash generated from our business and the capital expenditures required to finance our global growth plans and determine whether to modify the amount of regular dividends and/or declare periodic special dividends to our stockholders. Our board of directors will take into account general economic and business conditions, including our financial condition, results of operations and cash flows, capital requirements, contractual restrictions, including restrictions contained in our Fourth Amended and Restated Credit Agreement, business prospects and other factors that our board of directors considers relevant. There can be no assurance that our board of directors will not reduce the amount of regular cash dividends or cause us to cease paying dividends altogether. In addition, our Fourth Amended and Restated Credit Agreement and the indenture governing our Notes limits the amount of distributions our subsidiaries, including Virtu Financial, can make to us and the purposes for which distributions could be made. Accordingly, we may not be able to pay dividends even if our board of directors would otherwise deem it appropriate. See “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources.”

***Provisions in our charter documents and certain rules imposed by regulatory authorities may delay or prevent our acquisition by a third party.***

Our amended and restated certificate of incorporation and by-laws contain several provisions that may make it more difficult or expensive for a third party to acquire control of us without the approval of our board of directors. These provisions, which may delay, prevent or deter a merger, acquisition, tender offer, proxy contest or other transaction that stockholders may consider favorable, include the following, some of which may only become effective when the Founder Post-IPO Member or any of its affiliates or permitted transferees no longer beneficially own shares representing 25% of our issued and outstanding common stock (the “Triggering Event”):

- the 10 vote per share feature of our Class B common stock and Class D common stock;
- the division of our board of directors into three classes and the election of each class for three-year terms;

- the sole ability of the board of directors to fill a vacancy created by the expansion of the board of directors;
- advance notice requirements for stockholder proposals and director nominations;
- after the Triggering Event, provisions limiting stockholders ability to call special meetings of stockholders, to require special meetings of stockholders to be called and to take action by written consent;
- after the Triggering Event, in certain cases, the approval of holders of at least 75% of the shares entitled to vote generally on the making, alteration, amendment or repeal of our certificate of incorporation or by-laws will be required to adopt, amend or repeal our by-laws, or amend or repeal certain provisions of our certificate of incorporation;
- after the Triggering Event, the required approval of holders of at least 75% of the shares entitled to vote at an election of the directors to remove directors, which removal may only be for cause; and
- the ability of our board of directors to designate the terms of and issue new series of preferred stock without stockholder approval, which could be used, among other things, to institute a rights plan that would have the effect of significantly diluting the stock ownership of a potential hostile acquirer, likely preventing acquisitions that have not been approved by our board of directors.

These provisions of our amended and restated certificate of incorporation and by-laws could discourage potential takeover attempts and reduce the price that investors might be willing to pay for shares of our Class A common stock in the future, which could reduce the market price of our Class A common stock.

In addition, a third party attempting to acquire us or a substantial position in our Class A common stock may be delayed or ultimately prevented from doing so by change in ownership or control regulations to which certain of our regulated subsidiaries are subject. FINRA's NASD Rule 1017 generally provides that FINRA approval must be obtained in connection with any transaction resulting in a single person or entity owning, directly or indirectly, 25% or more of a member firm's equity and would include a change in control of a parent company. Similarly, Virtu Financial Ireland Limited is subject to change in control regulations promulgated by the Central Bank of Ireland. We may also be subject to similar restrictions in other jurisdictions in which we operate. These regulations could discourage potential takeover attempts and reduce the price that investors might be willing to pay for shares of our Class A common stock in the future, which could reduce the market price of our Class A common stock.

***Our stock price may be volatile.***

The market price of our Class A common stock is subject to significant fluctuations in response to, among other factors, variations in our operating results and market conditions specific to our business. Furthermore, in recent years the stock market has experienced significant price and volume fluctuations. This volatility has had a significant impact on the market price of securities issued by many companies, including companies in our industry. The changes frequently appear to occur without regard to the operating performance of the affected companies. As such, the price of our Class A common stock could fluctuate based upon factors that have little or nothing to do with us, and these fluctuations could materially reduce the price of our Class A common stock and materially affect the value of your investment.

***We will incur increased costs as a result of being a public company.***

We completed the IPO in April 2015, and therefore we have a limited history operating as a public company. As a public company, we incur significant levels of legal, accounting and other expenses that we did not incur as a privately-owned company. Sarbanes-Oxley and related rules of the SEC, together with the listing requirements of NASDAQ, impose significant requirements relating to disclosure controls and procedures and internal control over financial reporting. We have incurred increased costs as a result of compliance with these public company requirements, which require additional resources and make some activities more time consuming than they have been in the past when we were privately owned. We may experience higher than anticipated operating expenses as well as higher independent auditor and consulting fees during the implementation of these changes and thereafter and we may need to hire additional qualified personnel in order to continue to satisfy these public company requirements. We are required to expend considerable time and resources complying with public company regulations. In addition, these laws and regulations may

make it more difficult or costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. In addition, these laws and regulations could make it more difficult for us to attract and retain qualified persons to serve on our board of directors or as executive officers and may divert management's attention. Furthermore, if we are unable to satisfy our obligations as a public company, we could be subject to delisting of our Class A common stock, fines, sanctions and other regulatory action.

***Our reliance on exemptions from certain disclosure requirements under the JOBS Act may deter trading in our Class A common stock.***

We qualify as an "emerging growth company" under the JOBS Act. As a result, we are permitted to, and have relied and intend to continue to rely, on exemptions from certain disclosure requirements. For so long as we are an emerging growth company, we will not be required to:

- provide an auditor attestation and report with respect to management's assessment of the effectiveness of our internal controls over financial reporting pursuant to section 404(b) of the Sarbanes-Oxley Act;
- comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (i.e., an auditor discussion and analysis); and
- submit certain executive compensation matters to shareholder advisory votes, such as "say-on-pay" and "say-on-frequency," and disclose certain executive compensation related items such as the correlation between executive compensation and performance and comparisons of the Chief Executive Officer's compensation to median employee compensation.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. In other words, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected not to take advantage of the benefits of this extended transition period.

We will remain an "emerging growth company" for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our total annual gross revenues exceed \$1.07 billion, (ii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter or (iii) the date on which we have issued more than \$1.07 billion in non-convertible debt during the preceding three-year period.

Until such time, however, we cannot predict if investors will find our Class A common stock less attractive because we may rely on these exemptions. If some investors find our Class A common stock less attractive, there may be a less active trading market for our Class A common stock and our stock price may be more volatile.

***If securities or industry analysts cease to publish research or publish inaccurate or unfavorable research about us or our business, or publish projections for our business that exceed our actual results, our stock price and trading volume could decline.***

The trading market for our Class A common stock may be affected by the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who covers us downgrades our Class A common stock or publishes inaccurate or unfavorable research about our business, our stock price could decline. In addition, the analysts' projections may have little or no relationship to the results we actually achieve and could cause our stock price to decline if we fail to meet their projections. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, our stock price or trading volume could decline.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

Not applicable.

**ITEM 2. PROPERTIES**

Our headquarters are located in leased office space at 300 Vesey Street, New York, NY 10282. We also lease space for our offices in U.S., Europe, and Asia. We consider the current arrangements to be adequate for our present needs.

**ITEM 3. LEGAL PROCEEDINGS**

The information required by this item is set forth in the “Litigation” section in Note 13 “Commitments, Contingencies and Guarantees” to the Company’s Consolidated Financial Statements included in Part II Item 8 herein.

**ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable.



**PART II****ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES****Market Prices**

The following table shows the high and low sale price and dividends paid per share for the periods indicated for the Company’s common stock, as reported by NASDAQ.

	Year Ended December 31, 2016		
	Sale Price		Dividend per Share
	High	Low	of common stock
First Quarter	\$ 23.90	\$ 19.76	\$ 0.24
Second Quarter	\$ 22.16	\$ 17.19	\$ 0.24
Third Quarter	\$ 18.00	\$ 14.97	\$ 0.24
Fourth Quarter	\$ 16.20	\$ 12.55	\$ 0.24

	Year Ended December 31, 2017		
	Sale Price		Dividend per Share
	High	Low	of common stock
First Quarter	\$ 19.07	\$ 15.78	\$ 0.24
Second Quarter	\$ 18.30	\$ 14.60	\$ 0.24
Third Quarter	\$ 18.15	\$ 14.60	\$ 0.24
Fourth Quarter	\$ 18.50	\$ 13.10	\$ 0.24

**Holdings**

Based on information made available to us by the transfer agent, as of March 13, 2018, there are fifty-five stockholders of record of our Class A common stock, one of which was Cede & Co., a nominee for The Depository Trust Company. All of our Class A common stock held by brokerage firms, banks and other financial institutions as nominees for beneficial owners is considered to be held of record by Cede & Co., who is considered to be one stockholder of record. A substantially greater number of holders of our Class A common stock are “street name” or beneficial holders, whose shares of Class A common stock are held of record by banks, brokers and other financial institutions. Because such shares of Class A common stock are held on behalf of stockholders, and not by the stockholders directly, and because a stockholder can have multiple positions with different brokerage firms, banks and other financial institutions, we are unable to determine the total number of stockholders we have.

**Dividend and Capital Return Policy**

Our board of directors has adopted a policy of returning excess cash to our stockholders. Subject to the sole discretion of our board of directors and the considerations discussed below, we intend to pay dividends that will annually equal, in the aggregate, at least 70% of our net income.

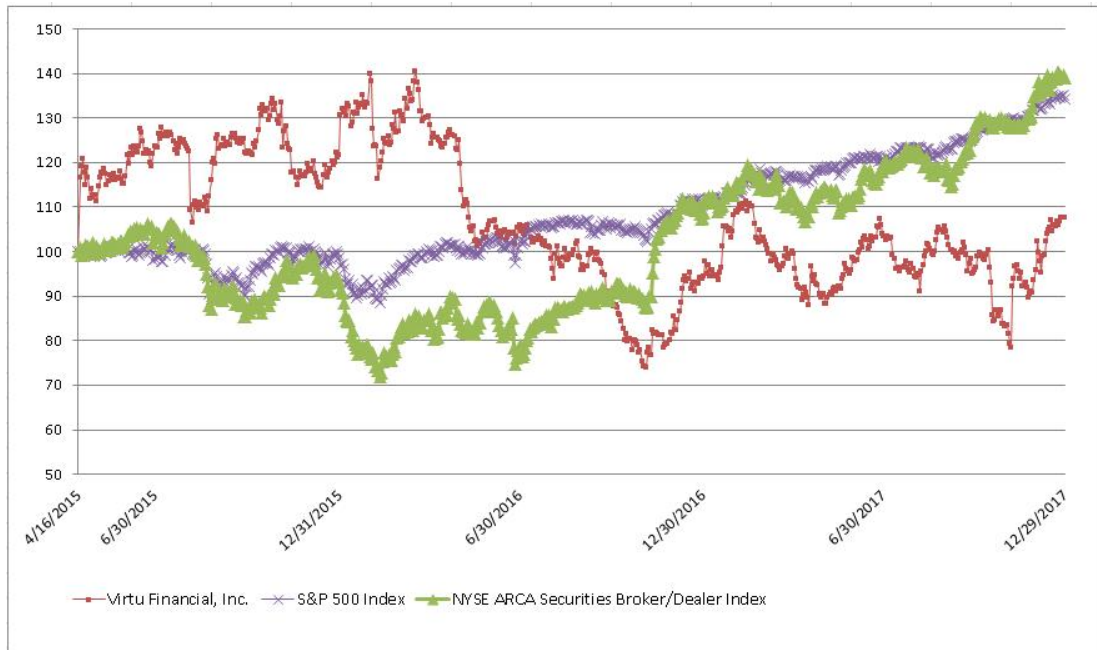
The Company paid cash dividends during the years ended December 31, 2017 and 2016 as represented in the previous table. The Company intends to continue paying regular quarterly dividends to our Class A and Class B common stockholders and to holders of Restricted Stock Units, however, the payment of dividends will be subject to general economic and business conditions, including the Company’s financial condition, results of operations and cash flows, capital requirements, contractual restrictions, including restrictions contained in our Fourth Amended and Restated Credit Agreement, regulatory restrictions, business prospects and other factors that the Company’s board of directors considers relevant. The terms of the Fourth Amended and Restated Credit Agreement and the indenture governing our Notes contain a number of covenants, including a restriction on our and our restricted subsidiaries’ ability

to pay dividends on, or make distributions in respect of, our equity interests. See “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operation – Liquidity and Capital Resources – Long-Term Borrowings”.

**Stock Performance**

*The following performance graph and related information shall not be deemed “soliciting material” or to be “filed” with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933, as amended, or the Exchange Act except to the extent we specifically incorporate it by reference into such filing. Our stock price performance shown in the graph below is not indicative of future stock price performance.*

The stock performance graph below compares the performance of an investment in our Class A common stock, from April 16, 2015, the date of the IPO, through December 31, 2017, with the S&P 500 Index and the NYSE ARCA Securities Broker/Dealer Index. The graph assumes \$100 was invested in our Class A common stock, the S&P 500 Index and the NYSE ARCA Securities Broker/Dealer Index. It assumes that dividends were reinvested on the date of payment without payment of any commissions or consideration of income taxes.



Index	Period Ending						
	4/16/2015	6/30/2015	12/31/2015	6/30/2016	12/31/2016	6/30/2017	12/31/2017
Virtu Financial Inc.	100.00	123.58	121.75	105.88	93.82	103.82	107.65
S&P 500	100.00	98.37	98.52	102.30	110.30	120.60	134.38
NYSE ARCA Securities Broker/Dealer	100.00	103.10	93.33	78.82	107.58	118.12	139.00

## Unregistered Sale of Securities

On July 20, 2017, the Company completed the all-cash acquisition of KCG Holdings, Inc. In connection with the Acquisition, the Company issued 8,012,821 shares of the Company's Class A stock to an affiliate of Temasek for an aggregate purchase price of approximately \$125.0 million, and 40,064,103 shares of the Company's Class A stock to NIH for an aggregate purchase price of approximately \$618.7 million, in each case in accordance with terms of an investment agreement in a private placement exempt from the registration requirements of the Securities Act of 1933, as amended, pursuant to Section 4(a)(2) of the Securities Act of 1933, as amended (collectively, the "July 2017 Private Placement"). As a result of the completion of the IPO, the Reorganization Transactions, the Secondary Offerings, the July 2017 Private Placement, and certain other permitted exchanges by current and former employees of Virtu Financial common units for shares of the Company's Class A common stock, the Company holds an approximately 48.3% interest in Virtu Financial at December 31, 2017.

Pursuant to the exchange agreement (the "Exchange Agreement") entered into on April 15, 2015 by and among the Company, Virtu Financial and holders of non-voting common interest units in Virtu Financial (the "Virtu Financial Units"), Virtu Financial Units (along with the corresponding shares of our Class C common stock or Class D common stock, as applicable) may be exchanged at any time for shares of our Class A common stock or Class B common stock, as applicable, on a one-for-one basis, subject to customary conversion rate adjustments for stock splits, stock dividends and reclassifications. Pursuant to the Exchange Agreement, on November 13, 2017, certain current and former employees elected to exchange 209,448 Virtu Financial Units (along with the corresponding shares of our Class C common stock) held on their behalf on a one-for-one basis for shares of our Class A common stock. The shares of our Class A common stock were issued in reliance on the registration exemption contained in Section 4(a)(2) of the Securities Act, on the basis that the transaction did not involve a public offering. No underwriters were involved in the transaction.

## Equity Compensation Plan Information

The following table provides information about shares of common stock available for future awards under all of the Company's equity compensation plans as of December 31, 2017:

	Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by security holders	2015 Management Incentive Plan	8,591,047	\$ 18.89	5,949,864
Equity compensation plans not approved by security holders	None	—	—	—
Total		8,591,047	\$ 18.89	5,949,864

## ITEM 6. SELECTED FINANCIAL DATA

### SELECTED CONSOLIDATED FINANCIAL DATA

The following table sets forth selected historical consolidated financial data for the periods beginning on and after January 1, 2013. We were formed on October 16, 2013 and, prior to the consummation of the Reorganization Transactions and the IPO, did not conduct any activities other than those incident to our formation and the IPO. Our consolidated financial statements reflect, for all the periods prior to April 16, 2015 (the period prior to completion of the Reorganization Transactions), the operations of Virtu Financial and its consolidated subsidiaries, and for all periods on or after April 16, 2015, the operations of the Company and its consolidated subsidiaries (including Virtu Financial). On July 20, 2017 we acquired KCG, which is accounted for under the acquisition method of accounting. Under the acquisition method of accounting, the assets and liabilities of KCG, as of July 20, 2017, were recorded at their respective fair values and added to the carrying value of our existing assets and liabilities. Our reported financial condition, results

of operations and cash flows for the periods following the Acquisition reflect KCG's and our balances and reflect the impact of purchase accounting adjustments. As we are the accounting acquirer, the financial results for 2017 comprise our results for the entire applicable period and the results of KCG from the Closing Date through December 31, 2017. All periods prior to the Closing Date comprise solely our results. The consolidated statements of comprehensive income data for the years ended December 31, 2017, 2016 and 2015 and the consolidated statements of financial condition data as of December 31, 2017 and 2016 have been derived from our consolidated financial statements included elsewhere in this Form 10-K.

The following selected historical financial and other data should be read in conjunction with “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our respective consolidated financial statements and related notes thereto included elsewhere in this Form 10-K.

(In thousands, except share and per share data)	Years Ended December 31,				
	2017	2016	2015	2014	2013
<b>Consolidated Statements of Comprehensive Income Data:</b>					
<b>Revenues:</b>					
Trading income, net	\$ 766,027	\$ 665,465	\$ 757,455	\$ 685,150	\$ 623,733
Interest and dividends income	50,407	26,419	28,136	27,923	31,090
Commissions, net and technology services(1)	116,503	10,352	10,622	9,980	9,682
Other, net(2)	95,045	36	—	—	—
Total revenues	<u>1,027,982</u>	<u>702,272</u>	<u>796,213</u>	<u>723,053</u>	<u>664,505</u>
<b>Operating Expenses:</b>					
Brokerage, exchange and clearance fees, net	256,926	221,214	232,469	230,965	195,146
Communication and data processing	131,506	71,001	68,647	68,847	64,689
Employee compensation and payroll taxes	177,489	85,295	88,026	84,531	78,353
Payments for order flow(3)	27,727	—	—	—	—
Interest and dividends expense	91,993	56,557	52,423	47,083	45,196
Operations and administrative	65,137	23,039	25,991	21,923	27,215
Depreciation and amortization	47,327	29,703	33,629	30,441	23,922
Amortization of purchased intangibles and acquired capitalized software	15,447	211	211	211	1,011
Acquisition related retention bonus	—	—	—	2,639	6,705
Debt issue cost related to debt refinancing(4)	10,460	5,579	—	—	10,022
Initial public offering fees and expenses(5)	—	—	—	8,961	—
Transaction advisory fees and expenses(6)	25,270	—	—	3,000	—
Reserve for legal matters(7)	657	—	5,440	—	—
Charges related to share based compensation at IPO(8)	772	1,755	44,194	—	—
Financing interest expense on long-term borrowings	64,107	28,327	29,254	30,894	24,646
Total operating expenses	<u>914,818</u>	<u>522,681</u>	<u>580,284</u>	<u>529,495</u>	<u>476,905</u>
Income before income taxes	113,164	179,591	215,929	193,558	187,600
Provision for income taxes(9)	94,266	21,251	18,439	3,501	5,397
Net income	\$ 18,898	\$ 158,340	197,490	\$ 190,057	\$ 182,203
Noncontrolling interest	(15,959)	(125,360)	(176,603)	—	—
Net income available for common stockholders	<u>\$ 2,939</u>	<u>\$ 32,980</u>	<u>20,887</u>	—	—
<b>Earnings per share</b>					
Basic	\$ 0.03	\$ 0.83	\$ 0.60	\$ 0.59	\$ 0.59
Diluted	\$ 0.03	\$ 0.83	\$ 0.59	\$ 0.59	\$ 0.59
<b>Weighted average common shares outstanding</b>					
Basic	62,579,147	38,539,091	34,964,312	34,964,312	34,964,312
Diluted	62,579,147	38,539,091	35,339,585	34,964,312	34,964,312
Net income	\$ 18,898	\$ 158,340	\$ 197,490	\$ 190,057	\$ 182,203
<b>Other comprehensive income</b>					
Foreign exchange translation adjustment	9,117	(1,165)	(4,255)	(5,032)	1,382
Comprehensive income	28,015	157,175	193,235	\$ 185,025	\$ 183,585
Less: Comprehensive income attributable to noncontrolling interest	(21,833)	(124,546)	(172,249)	—	—
Comprehensive income attributable to common stockholders	<u>\$ 6,182</u>	<u>\$ 32,629</u>	<u>20,986</u>	—	—

As of December 31,

Consolidated Statements of Financial Condition Data:	As of December 31,				
	2017	2016	2015	2014	2013
Cash and cash equivalents	\$ 532,887	\$ 181,415	\$ 163,235	\$ 75,864	\$ 66,010
Total assets	7,320,006	3,692,390	3,391,930	3,319,458	3,963,570
Senior secured credit facility	1,388,548	564,957	493,589	495,724	500,827
Total liabilities	6,168,428	3,157,978	2,834,060	2,812,760	3,510,282
Class A-1 redeemable interest(10)	—	—	—	294,433	250,000
Total Virtu Financial Inc. stockholders' equity	830,569	145,673	130,708	212,265	203,288
Noncontrolling interest	321,009	388,739	427,162	—	—
Total equity	1,151,578	534,412	557,870	506,698	453,288

- (1) In connection with the Acquisition of KCG, we recognized significant revenue increase in commissions, net and technology services for the year ended December 31, 2017. Commissions and fees are primarily affected by changes in our equity, fixed income and futures transaction volumes with institutional clients, client relationships; changes in commission rates; client experience on the various platforms; level of volume based fees from providing liquidity to other trading venues; and the level of soft dollar and commission recapture activity.
- (2) As a result of the 2017 Tax Cuts and Jobs Act (“2017 Tax Act”), we recognized a gain of \$86.6 million on the reduction of tax receivable agreement obligation during the year ended December 31, 2017. See Note 5, “Tax Receivable Agreements” in Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K.
- (3) Payments for order flow are a result of the Acquisition of KGC, and primarily represent payments to broker dealer clients, in the normal course of business, for directing their order flow to us.
- (4) Virtu Financial entered into a \$320.0 million senior secured credit facility in 2011, and it went through multiple rounds of refinancing during the years ended December 31, 2013 and 2016. In 2017, in connection with the Acquisition of KCG, the existing senior secured credit facility was terminated, and Virtu Financial entered into the Fourth Amended and Restated Credit Agreement of \$1,150.0 million, and issued senior secured second lien notes of \$500.0 million. During the refinancing and termination of the existing credit facility, a portion of certain financing costs that were scheduled to be amortized over the term of the loan, including original issue discount and underwriting and legal fees, were accelerated and recognized at the closing of the transactions.
- (5) Initial public offering fees and expenses reflect costs directly attributable to our initial public offering process, which was postponed in April 2014. We accounted for such costs in accordance with ASC 340-10, *Other Assets and Deferred Costs*. ASC 340 states that costs directly attributable to a successfully completed offering of equity securities may be deferred and charged against the gross proceeds of the offering as a reduction of additional paid-in capital, but for an offering postponed for a period greater than 90 days, the offering costs must be charged as an expense in the period the offering process was postponed.
- (6) Transaction advisory fees reflect professional fees incurred by us in connection with the Temasek Transaction and Acquisition of KCG, which were consummated on December 31, 2014 and July 20, 2017, respectively.
- (7) In December 2015, the enforcement committee of the AMF fined the Company’s European subsidiary in the amount of €5.0 million (approximately \$5.4 million) based on its allegations that the subsidiary of Madison Tyler Holdings, LLC engaged in price manipulation and violations of the AMF General Regulation and Euronext Market Rules. In accordance with the foregoing, we accrued an estimated loss in relation to the fine imposed by the AMF. In May 2017, the fine was reduced to €3.0 million (approximately \$3.5 million), subject to an incremental charge of €0.3 million (approximately \$0.4 million).

- (8) Represents non-cash compensation expenses in respect of the outstanding time vested Class B interests of Virtu Financial and East MIP Class B interests recognized at the consummation of the IPO and through the year ended December 31, 2015, net of \$9.2 million and \$8.5 million in capitalization and amortization, respectively, of the costs attributable to employees incurred in development of software for internal use. We continued to capitalize and amortize the costs related to development on the software for internal use for the years ended December 31, 2017 and 2016.
- (9) As a result of the 2017 Tax Act, the U.S. statutory corporate tax rate has been lowered from 35% to 21% and certain deductions have been eliminated. We have reasonably estimated the effect of the 2017 Tax Act, and recorded a provisional deferred tax expense for the impact of the 2017 Tax Act of approximately \$90.6 million. See Note 13, "Income Taxes" in Part II Item 8 "Financial Statements and Supplementary Data" of this Form 10-K.
- (10) The Class A-1 interests of Virtu Financial were convertible by the holders at any time into an equivalent number of Class A-2 capital interests of Virtu Financial and, in a sale or other specified capital transaction, holders were entitled to receive distributions up to specified preference amounts before holders of Class A-2 capital interests of Virtu Financial were entitled to receive distributions. In connection with the Reorganization Transactions, all of the existing equity interests in Virtu Financial were reclassified into Virtu Financial Units. See Note 15, "Capital Structure" within our consolidated financial statements.



## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*The following management's discussion and analysis the years ended December 31, 2017, 2016, and 2015 and should be read in conjunction with the audited consolidated financial statements for the years ended December 31, 2017, 2016 and 2015. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Unless otherwise stated, all amounts are presented in thousands of dollars.*

### Forward-Looking Statements

This annual report on Form 10-K contains forward-looking statements. You should not place undue reliance on forward-looking statements because they are subject to numerous uncertainties and factors relating to our operations and business environment, all of which are difficult to predict and many of which are beyond our control. Forward-looking statements include information concerning our possible or assumed future results of operations, including descriptions of our business strategy. These forward-looking statements can be identified by the use of forward-looking terminology, including the terms "may," "will," "should," "believe," "expect," "anticipate," "intend," "plan," "estimate," "project" or, in each case, their negative, or other variations or comparable terminology and expressions. These statements are based on assumptions that we have made in light of our experience in the industry as well as our perceptions of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances. As you read and consider this annual report on Form 10-K, you should understand that these statements are not guarantees of performance or results and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate, may differ materially from those made in or suggested by the forward-looking statements contained in this annual report on Form 10-K. By their nature, forward-looking statements involve known and unknown risks and uncertainties, including those described under the heading "Risk Factors" in this Annual Report, because they relate to events and depend on circumstances that may or may not occur in the future. Although we believe that the forward-looking statements contained in this annual report on Form 10-K are based on reasonable assumptions, you should be aware that many factors, including those described under the heading "Risk Factors" in this annual report on Form 10-K, could affect our actual financial results or results of operations and cash flows, and could cause actual results to differ materially from those in such forward-looking statements, including but not limited to:

- reduced levels of overall trading activity;
- dependence upon trading counterparties and clearing houses performing their obligations to us;
- failures of our customized trading platform;
- risks inherent to the electronic market making business and trading generally;
- increased competition in market making activities and execution services;
- dependence on continued access to sources of liquidity;
- risks associated with self-clearing and other operational elements of our business;
- compliance with laws and regulations, including those specific to our industry;
- obligation to comply with applicable regulatory capital requirements;
- litigation or other legal and regulatory-based liabilities;
- proposed legislation that would impose taxes on certain financial transactions in the European Union, the U.S. and other jurisdictions;
- obligation to comply with laws and regulations applicable to our international operations;
- enhanced media and regulatory scrutiny and its impact upon public perception of us or of companies in our industry;
- need to maintain and continue developing proprietary technologies;

- failure to maintain system security or otherwise maintain confidential and proprietary information;
- the effect of the Acquisition of KCG on existing business relationships, operating results, and ongoing business operations generally;
- the significant costs and significant indebtedness that we incurred in connection with the Acquisition of KCG, and the integration of KCG into our business;
- the risk that we may encounter significant difficulties or delays in integrating the two businesses and the anticipated benefits, costs savings and synergies or capital release may not be achieved;
- the assumption of potential liabilities relating to KCG's business;
- capacity constraints, system failures, and delays;
- dependence on third party infrastructure or systems;
- use of open source software;
- failure to protect or enforce our intellectual property rights in our proprietary technology;
- risks associated with international operations and expansion, including failed acquisitions or dispositions;
- the effects of and changes in economic conditions (such as volatility in the financial markets, inflation, monetary conditions and foreign currency and exchange rate fluctuations, foreign currency controls and/or government mandated pricing controls, as well as in trade, monetary, fiscal and tax policies in international markets) and political conditions (such as military actions and terrorist activities);
- risks associated with potential growth and associated corporate actions;
- inability to, or delay, in accessing the capital markets to sell shares or raise additional capital;
- loss of key executives and failure to recruit and retain qualified personnel; and
- risks associated with losing access to a significant exchange or other trading venue.

Our forward-looking statements made herein are made only as of the date of this report. We expressly disclaim any intent, obligation or undertaking to update or revise any forward-looking statements made herein to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained in this annual report on Form 10-K.

#### **Basis of Preparation**

Our audited consolidated financial statements for the year ended December 31, 2017 reflect our operations and those of our consolidated subsidiaries. As discussed in Note 1 "Organization and Basis of Presentation" and in Note 3 "Acquisition of KCG Holdings Inc." of Part II Item 8 "Financial Statements and Supplementary Data" of this Form 10-K, we are accounting for the Acquisition of KCG under the acquisition method of accounting. Under the acquisition method of accounting, the assets and liabilities of KCG, as of the Closing Date, were recorded at their respective fair values and added to the carrying value of our existing assets and liabilities. Our reported financial condition, results of operations and cash flows for the periods following the Acquisition reflect KCG's and our balances and reflect the impact of purchase accounting adjustments, including revised amortization and depreciation expense for acquired assets. As we are the accounting acquirer, the financial results for the year ended December 31, 2017 comprise our results for the entire applicable period and the results of KCG from the Closing Date through December 31, 2017. All periods prior to the Closing Date comprise solely our results.

## Overview

We are a leading financial services firm that leverages cutting edge technology to deliver liquidity to the global markets and innovative, transparent trading solutions to our clients. We believe that our broad diversification, in combination with our proprietary technology platform and low-cost structure, enables us to facilitate risk transfer between global capital markets participants by supplying competitive liquidity and execution services while at the same time earning attractive margins and returns.

Technology and operational efficiency are at the core of our business, and our focus on market making technology is a key element of our success. We have developed a proprietary, multi-asset, multi-currency technology platform that is highly reliable, scalable and modular, and we integrate directly with exchanges and other liquidity centers. Our market data, order routing, transaction processing, risk management and market surveillance technology modules manage our market making activities in an efficient manner and enable us to scale our market making activities globally and across additional securities and other financial instruments and asset classes without significant incremental costs or third party licensing or processing fees.

We believe that technology-enabled market makers like Virtu serve an important role in maintaining and improving the overall health and efficiency of the global capital markets by continuously posting bids and offers for financial instruments and thereby providing market participants a transparent and efficient means to transfer risk. All market participants benefit from the increased liquidity, lower overall trading costs and execution certainty that Virtu provides.

As described in “Acquisition of KCG” below, on the Closing Date, we completed our acquisition of KCG. KCG was a leading independent securities firm offering clients a range of services designed to address trading needs across asset classes, product types and geographies. KCG combined advanced technology with specialized client service across market making, agency execution and trading venues and also engaged in principal trading via exchange-based electronic market making. KCG offered multiple access points to trade global equities, options, futures, fixed income, currencies and commodities available via voice or electronically.

Prior to the Acquisition of KCG, Virtu operated as a single reportable business segment. As a result of the Acquisition of KCG, beginning in the third quarter of 2017, Virtu has three operating segments: Market Making, Execution Services, and Corporate. Our management allocates resources, assesses performance and manages our business according to these segments:

- Market Making,
- Execution Services, and
- Corporate

We believe that the most relevant asset class distinctions and venues for the markets we serve include the following:

<u>Asset Classes</u>	<u>Selected Venues in Which We Make Markets</u>
Americas Equities	BATS, BM&F Bovespa, CHX, CME, MexDer, NASDAQ, NYSE, NYSE Arca, NYSE American, TSX, major private liquidity pools
Rest of World Equities	Amsterdam, Aquis, ASX, BATS Europe, Bolsa de Madrid, Borsa Italiana, Brussels, EUREX, Euronext -Paris, ICE Futures Europe, Johannesburg Stock Exchange, Lisbon, LSE, OSE, SBI Japannext, SGX, SIX Swiss Exchange, TOCOM, TSE
Global FICC, Options, and Other	BOX, BrokerTec, CME, Currenex, EBS, eSpeed, Hotspot, ICE, ICE Futures Europe, LMAX, NASDAQ Energy Exchange, NYSE Arca Options, PHLX, Reuters/Fxall, SGX, TOCOM

### **Market Making**

We provide competitive and deep liquidity that helps to create more efficient markets around the world. We stand ready, at any time, to buy or sell a broad range of securities, and we generate revenue by buying and selling large volumes of securities and other financial instruments and earning small bid/ask spreads. Our market structure expertise, broad diversification, and execution technology enables us to provide competitive bids and offers in over 25,000 securities, at over 235 venues, in 36 countries worldwide.

We believe the overall level of volumes and realized volatility in the various markets we serve have the greatest impact on our businesses. Increases in market volatility can cause bid/ask spreads to widen as market participants are more willing to pay market makers like us to transact immediately and as a result market makers capture rate per notional amount transacted will increase.

### **Execution Services**

We offer agency execution services and trading venues that provide transparent trading in global equities, ETFs, futures and fixed income to institutions, banks and broker dealers. We generally earn commissions as an agent between principals for transactions. Agency based, execution-only trading in the segment is done primarily through a variety of access points including: (a) algorithmic trading and order routing; (b) institutional sales traders who offer portfolio trading and single stock sales trading which provides execution expertise for program, block and riskless principal trades in global equities and ETFs; and (c) matching of client orders in Virtu BondPoint (our fixed income ECN) and in Virtu MatchIt (our ATS for U.S. equities). We also earn technology services revenues by providing our proprietary technology and infrastructure to select third parties for a service fee.

### **Corporate**

Our Corporate segment contains investments principally in strategic financial services-oriented opportunities and maintains corporate overhead expenses and all other income and expenses that are not attributable to our other segments.

### **Acquisition of KCG**

On the Closing Date, pursuant to the terms of the Agreement and Plan of Merger, dated as of April 20, 2017 (the “Merger Agreement”), by and among the Company, Orchestra Merger Sub, Inc., a Delaware corporation and an indirect wholly-owned subsidiary of the Company (“Merger Sub”), and KCG, Merger Sub merged with and into KCG (the “Merger”), with KCG surviving the Merger as a wholly owned subsidiary of the Company.

In connection with the financing of the Acquisition, on the Closing Date, the Company issued to (i) Aranda Investments Pte. Ltd. (“Aranda”), an affiliate of Temasek, 6,346,155 shares of the Company’s Class A Common Stock for an aggregate purchase price of approximately \$99.0 million and (ii) North Island Holdings I, LP (“NIH”) 39,725,979 shares of the Company Class A Common Stock for an aggregate purchase price of approximately \$613.5 million. On August 10, 2017, the Company issued additional 1,666,666 shares and 338,124 shares of the Company Class A Common Stock to Aranda and NIH respectively, for an aggregate additional purchase price of approximately \$26.0 million and \$5.2 million, respectively.

Also in connection with the financing of the Acquisition, on June 16, 2017, Orchestra Borrower LLC, a wholly owned subsidiary of Virtu Financial (the “Escrow Issuer”) and Orchestra Co-Issuer, Inc. (the “Co-Issuer”) completed the offering of \$500 million aggregate principal amount of 6.750% Senior Secured Second Lien Notes due 2022 (the “Notes”). On July 20, 2017, VFH assumed all of the obligations of the Escrow Issuer under the indenture and the Notes.

On June 30, 2017, Virtu Financial and VFH Parent LLC (“VFH”) entered into a fourth amended and restated credit agreement (the “Fourth Amended and Restated Credit Agreement”) for \$1.15 billion first lien secured term loans with the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, sole lead arranger and bookrunner, which amended and restated in its entirety VFH’s existing Credit Agreement.

On July 21, 2017, the outstanding 6.875% Senior Secured Notes due 2020 issued by KCG were redeemed at a redemption price equal to 103.438% of the principal amount, plus accrued and unpaid interest, pursuant to the indenture, dated as of March 13, 2015 (as amended, restated, supplemented or otherwise modified), by and among KCG, the subsidiary guarantors party thereto and The Bank of New York Mellon, as trustee and collateral agent.

### **Amended and Restated 2015 Management Incentive Plan**

The Company’s board of directors and stockholders adopted the 2015 Management Incentive Plan, which became effective upon consummation of the IPO. The 2015 Management Incentive Plan was amended and restated in 2017 (the “Amended and Restated 2015 Management Incentive Plan”), provides for the grant of stock options, restricted stock units, and other awards based on an aggregate of 16,000,000 shares of Class A common stock, subject to additional sublimits, including limits on the total option grant to any one participant in a single year and the total performance award to any one participant in a single year.

In connection with the IPO, non-qualified stock options to purchase 9,228,000 shares were granted at the IPO per share price, each of which vests in equal annual installments over a period of four years from grant date and expires not later than 10 years from the date of grant. Subsequent to the IPO and during the year ended December 31, 2017, options to purchase 994,000 shares in the aggregate were forfeited. The fair value of the stock option grants were determined through the application of the Black-Scholes-Merton model and will be recognized on a straight line basis over the vesting period. In connection with and subsequent to the IPO, 1,076,681 shares of immediately vested Class A common stock and 1,579,438 restricted stock units were granted, which vest over a period of up to 4 years and are settled in shares of Class A common stock. The fair value of the Class A common stock and restricted stock units was determined based on the volume weighted average price for the three days preceding the grant, and with respect to the restricted stock units, a projected annual forfeiture rate, and will be recognized on a straight line basis over the vesting period.

## Components of Our Results of Operations

The following table sets forth: (i) Total revenue, (ii) Total operating expenses and (iii) Income before income taxes and noncontrolling interest of our segments and on a consolidated basis (in thousands):

(in thousands)	Years Ended December 31,		
	2017	2016	2015
<b>Market Making</b>			
Total revenue	\$ 836,707	\$ 691,884	\$ 785,591
Total operating expenses	762,074	515,739	574,148
Income before income taxes and noncontrolling interest	74,633	176,145	211,443
<b>Execution Services</b>			
Total revenue	99,135	10,352	10,622
Total operating expenses	111,654	5,949	6,136
Income before income taxes and noncontrolling interest	(12,519)	4,403	4,486
<b>Corporate</b>			
Total revenue	92,140	36	-
Total operating expenses	41,090	993	-
Income (loss) before income taxes and noncontrolling interest	51,050	(957)	-
<b>Consolidated</b>			
Total revenue	1,027,982	702,272	796,213
Total operating expenses	914,818	522,681	580,284
Income before income taxes and noncontrolling interest	\$ 113,164	\$ 179,591	\$ 215,929

(in thousands, except share and per share data)	Years Ended December 31,		
	2017	2016	2015
<b>Revenues:</b>			
Trading income, net	\$ 766,027	\$ 665,465	\$ 757,455
Interest and dividends income	50,407	26,419	28,136
Commissions, net and technology services	116,503	10,352	10,622
Other, net	95,045	36	—
Total revenue	1,027,982	702,272	796,213
<b>Operating Expenses:</b>			
Brokerage, exchange and clearance fees, net	256,926	221,214	232,469
Communication and data processing	131,506	71,001	68,647
Employee compensation and payroll taxes	177,489	85,295	88,026
Payments for order flow	27,727	—	—
Interest and dividends expense	91,993	56,557	52,423
Operations and administrative	65,137	23,039	25,991
Depreciation and amortization	47,327	29,703	33,629
Amortization of purchased intangibles and acquired capitalized software	15,447	211	211
Debt issue cost related to debt refinancing	10,460	5,579	—
Transaction advisory fees and expenses	25,270	—	—
Reserve for legal matters	657	—	5,440
Charges related to share based compensation at IPO	772	1,755	44,194
Financing interest expense on long-term borrowings	64,107	28,327	29,254
Total operating expenses	914,818	522,681	580,284
Income before income taxes and noncontrolling interest	113,164	179,591	215,929
Provision for income taxes	94,266	21,251	18,439
Net income	\$ 18,898	\$ 158,340	\$ 197,490

## **Total Revenues**

The majority of our revenue is generated through market making activities and is recorded as trading income, net. In addition, we generate revenues from interest and dividends income as well as the technology services revenue generated by using our proprietary technology to provide technology infrastructure and agency execution services to select third parties. Following the Acquisition of KCG, we also earn commissions and commission equivalents from executing trades on behalf of institutional clients.

**Trading Income, Net.** Trading income, net, represents revenue earned from bid/ask spreads. Trading income is generated in the normal course of our market making activities and is typically proportional to the level of trading activity, or volumes, in the asset classes we serve. Our trading income is highly diversified by asset class and geography and is comprised of small amounts earned on millions of trades on various exchanges, primarily in the following three categories: Americas Equities, Rest of World Equities, and Global FICC, options and other. Our trading income, net, results from gains and losses associated with economically neutral trading strategies, which are designed to capture small bid ask spreads and often involve making markets in a derivative versus a correlated instrument that is not a derivative. These transactions often result in a gain or loss on the derivative and a corresponding loss or gain on the non-derivative. Trading income, net, accounted for 75%, 95% and 95% of our total revenues for the years ended December 31, 2017, 2016, and 2015, respectively.

**Interest and Dividends Income.** Our market making activities require us to hold securities on a regular basis, and we generate revenues in the form of interest and dividends income from these securities. Interest is earned on securities borrowed from other market participants pursuant to collateralized financing arrangements and on cash held by brokers. Dividends income arises from holding market making positions over dates on which dividends are paid to shareholders of record.

**Commissions, Net and Technology Services.** Technology services revenues include technology licensing fees and agency commission fees. Technology licensing fees are charged for the licensing of our proprietary technology and the provision of related services, including hosting, management and support. These fees include an up-front component and a recurring fee for the relevant terms, which may include both fixed and variable components. Revenue is recognized ratably for these services over the contractual term of the agreement. We began providing technology licensing services to a third party in 2013 pursuant to a three-year arrangement, which was renewed for one year on the same terms except for the up-front component in January 2016. In July 2016, we entered into a separate three-year arrangement with another third party to provide technology services.

Agency commission fees are charged for agency trades executed by us on behalf of third party broker-dealers, institutions and other financial institutions. We began providing agency execution services in April 2016, and revenue is recognized on a trade date basis based on the trade volume executed. Revenues on transactions for which we charge explicit commissions or commission equivalents, which include the majority of our institutional client orders, are included within commissions, net and technology services. Commissions and fees are primarily affected by changes in our equity, fixed income and futures transaction volumes with institutional clients; client relationships; changes in commission rates; client experience on the various platforms; level of volume based fees from providing liquidity to other trading venues; and the level of our soft dollar and commission recapture activity.

**Other, Net.** In July 2016, we made a minority investment in SBI Japannext Co., Ltd. (“SBI”), a proprietary trading system based in Tokyo, for \$38.8 million which was substantially paid in Japanese Yen. In connection with the investment, we issued bonds to certain affiliates of SBI and used the proceeds of ¥3.5 billion to partially finance the transaction. Revenues or losses are recognized due to the changes in fair value of the investment or fluctuations in Japanese Yen conversion rates within other, net.

As discussed in Note 6 “Tax Receivable Agreements” of Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K, as a result of the decrease in the U.S. corporate income tax rate to 21% (see “Provision for Income Taxes” below), we recognized \$86.6 million gain on the reduction of our tax receivable agreement obligation. As discussed in Note 2. “Summary of Significant Accounting Policies” of Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K.



We also have interests in two telecommunications joint ventures (“JV”). We record our pro-rata share of each JV’s earnings or losses within other, net while fees related to the use of communication services provided by the JVs are recorded within communications and data processing.

### **Operating Expenses**

**Brokerage, Exchange and Clearance Fees, Net.** Brokerage, exchange and clearance fees are our most significant expenses, which include the direct expenses of executing and clearing transactions that we consummate in the course of our market making activities. Brokerage, exchange and clearance fees primarily consist of fees charged by the third parties for executing, processing and settling trades. These fees generally increase and decrease in direct correlation with the level of trading activity, or volumes, in the markets we serve. Execution fees are paid primarily to exchanges and venues where we trade. Clearance fees are paid to clearing houses and clearing agents. Rebates based on volume discounts, credits or payments received from exchanges or other market places are netted against brokerage, exchange and clearance fees.

**Payments for Order Flow.** Payments for order flow are a result of the Acquisition of KCG, and they primarily represent payments to broker dealer clients, in the normal course of business, for directing their order flow to us primarily in U.S. equities. Payments for order flow will fluctuate as we modify our rates and as our percentage of clients whose policy is not to accept payments for order flow varies. Payments for order flow also fluctuate based on U.S. equity share and option volumes, our profitability and the mix of market orders, limit orders, and customer mix.

**Communication and Data Processing.** Communication and data processing represent primarily fixed expenses for leased equipment, equipment co-location, network lines and connectivity for our trading centers and co-location facilities. More specifically, communications expense consists primarily of the cost of voice and data telecommunication lines supporting our business, including connectivity to data centers and exchanges, markets and liquidity pools around the world, and data processing expense consists primarily of market data fees that we pay to third parties to receive price quotes and related information.

**Employee Compensation and Payroll Taxes.** Employee compensation and payroll taxes include employee salaries, cash and non-cash incentive compensation, employee benefits, payroll taxes, severance and other employee related costs. Non-cash compensation includes, prior to the Reorganization Transactions, the share based-incentive compensation paid to employees in the form of Class A-2 profits interests in Employee Holdco, which formerly held corresponding Class A-2 profits interests in Virtu Financial. Additionally, after the Reorganization Transactions, it includes non-cash compensation expenses with respect to the stock options and restricted stock units granted in connection with and subsequent to the IPO pursuant to the 2015 Management Incentive Plan. We have capitalized and therefore excluded employee compensation and benefits related to software development of \$15.7 million, \$11.1 million, and \$10.1 million for the years ended December 31, 2017, 2016, and 2015, respectively.

**Interest and Dividends Expense.** We incur interest expense from loaning certain equity securities in the general course of our market making activities pursuant to collateralized lending transactions. Typically, dividend expense is incurred when a dividend is paid on securities sold short.

**Operations and Administrative.** Operations and administrative expense represents occupancy, recruiting, travel and related expense, professional fees and other expenses.

**Depreciation and Amortization.** Depreciation and amortization expense results from the depreciation of fixed assets, such as computing and communications hardware, as well as amortization of leasehold improvements and capitalized in-house software development. We depreciate our computer hardware and related software, office hardware and furniture and fixtures on a straight line basis over a period of 3 to 7 years based on the estimated useful life of the underlying asset, and we amortize our capitalized software development costs on a straight line basis over a period of 1.5 to 2.5 years, which represents the estimated useful lives of the underlying software. We amortize leasehold improvements on a straight line basis over the lesser of the life of the improvement or the term of the lease.

**Amortization of Purchased Intangibles and Acquired Capitalized Software.** Amortization of purchased intangibles and acquired capitalized software represents the amortization of \$1.9 million, \$2.0 million and \$175.0 million

of assets acquired in connection with the acquisitions of certain assets from Nyenburgh Holding B.V., Teza and KCG, respectively. These assets are amortized over their useful lives, ranging from 1 to 17 years, except for certain assets which were categorized as indefinite useful life.

**Debt Issue Costs Related to Debt Refinancing.** As a result of the refinancing or early termination of our debt, we accelerate the capitalized debt issue costs and the discount on debt that would otherwise be amortized or accreted over the life of the loan.

**Transaction Advisory Fees and Expenses.** Transaction advisory fees and expenses primarily reflect professional fees incurred by us in connection with the Acquisition of KCG.

**Reserve for Legal Matters.** Reserve for legal matters represents the potential legal settlements arising from on-going legal matters that might be material for our results of operations and cash flows for any particular reporting period.

**Charges Related to Share Based Compensation at IPO.** At the consummation of the IPO and through the year ended December 31, 2017, we recognized non-cash compensation expenses in respect of the outstanding time vested Class B and East MIP Class B interests, net of capitalization and amortization of costs attributable to employees incurred in development of software for internal use, as discussed in Note 16 (“Share-based compensation”) of Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K.

**Financing Interest Expense on Long-Term Borrowings.** Financing interest expense reflects interest accrued on outstanding indebtedness, under our long-term borrowing arrangements.

### **Provision for Income Taxes**

Prior to the consummation of the Reorganization Transactions and the IPO, our business was historically operated through a limited liability company that is treated as a partnership for U.S. federal income tax purposes, and as such most of our income was not subject to U.S. federal and certain state income taxes. Our income tax expense for historical periods reflects taxes payable by certain of our non-U.S. subsidiaries. Subsequent to consummation of the Reorganization Transactions and the IPO, we are subject to U.S. federal, state and local income tax at the rate applicable to corporations less the rate attributable to the noncontrolling interest in Virtu Financial.

Our effective tax rate is subject to significant variation due to several factors, including variability in our pre-tax and taxable income and loss and the mix of jurisdictions to which they relate, changes in how we do business, acquisitions (including the acquisition of KCG) and investments, audit-related developments, tax law developments (including changes in statutes, regulations, case law, and administrative practices), and relative changes of expenses or losses for which tax benefits are not recognized. Additionally, our effective tax rate can be more or less volatile based on the amount of pre-tax income or loss. For example, the impact of discrete items and non-deductible expenses on our effective tax rate is greater when our pre-tax income is lower.

Public Law No. 115-97, commonly referred to as the Tax Cuts and Jobs Act (“2017 Tax Act”) was signed into law on December 22, 2017. The 2017 Tax Act significantly revises the U.S. corporate income tax by, among other things, lowering the statutory corporate tax rate from 35% to 21%, and eliminating certain deductions. We have not completed our determination of the accounting implications of the 2017 Tax Act on our tax accruals. However, we have reasonably estimated the effects of the 2017 Tax Act and recorded provisional amounts in our financial statements as of December 31, 2017. We recorded a provisional deferred tax expense for the impact of the 2017 Tax Act of approximately \$91.0 million, which is primarily composed of the remeasurement of federal net deferred tax assets as a result of the permanent reduction in the U.S. statutory corporate tax rate to 21% from 35%. As we complete our analysis of the 2017 Tax Act, collect and prepare necessary data, and interpret any additional guidance issued by the U.S. Treasury Department, the IRS, and other standard-setting bodies, we may make adjustments to the provisional amounts. Those adjustments may materially impact our provision for income taxes in the period in which the adjustments are made.

We regularly assess whether it is more likely than not that we will realize our deferred tax assets in each taxing jurisdiction in which we operate. In performing this assessment with respect to each jurisdiction, we review all available

evidence, including actual and expected future earnings, capital gains, and investment in such jurisdiction, the carry-forward periods available to us for tax reporting purposes, and other relevant factors.

See Note 13 “Income Taxes” of Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K for additional information.

### **Non-GAAP Financial Measures and Other Items**

To supplement our consolidated financial statements presented in accordance with generally accepted accounting principles (“GAAP”), we use the following non-GAAP financial measures of financial performance:

- “Adjusted Net Trading Income”, which is the amount of revenue we generate from our market making activities, or trading income, net, plus commissions, net and technology services, plus interest and dividends income and expense, net, less direct costs associated with those revenues, including brokerage, exchange and clearance fees, net, and payments for order flow. Management believes that this measurement is useful for comparing general operating performance from period to period. Although we use Adjusted Net Trading Income as a financial measure to assess the performance of our business, the use of Adjusted Net Trading Income is limited because it does not include certain material costs that are necessary to operate our business. Our presentation of Adjusted Net Trading Income should not be construed as an indication that our future results will be unaffected by revenues or expenses that are not directly associated with our market making activities.
- “EBITDA”, which measures our operating performance by adjusting net income to exclude financing interest expense on long-term borrowings, debt issue cost related to debt refinancing, depreciation and amortization, amortization of purchased intangibles and acquired capitalized software, and income tax expense, and “Adjusted EBITDA”, which measures our operating performance by further adjusting EBITDA to exclude severance, reserve for legal matters, transaction advisory fees and expenses, termination of office leases, acquisition related retention bonus, trading related settlement income, other, net, share based compensation, charges related to share based compensation at IPO, 2015 Management Incentive Plan, and charges related to share based compensation at IPO.
- “Normalized Adjusted Net Income”, “Normalized Adjusted Net Income before income taxes”, “Normalized provision for income taxes”, and “Normalized Adjusted EPS”, which we calculate by adjusting Net Income to exclude certain items including IPO-related adjustments and other non-cash items, assuming that all vested and unvested Virtu Financial Units have been exchanged for Class A common stock, and applying a corporate tax rate of 35.5% to 37%.

Adjusted Net Trading Income, EBITDA, Adjusted EBITDA, Normalized Adjusted Net Income, Normalized Adjusted Net Income before income taxes, Normalized provision for income taxes and Normalized Adjusted EPS are non-GAAP financial measures used by management in evaluating operating performance and in making strategic decisions. Additional information provided regarding the breakdown of Total ANTI by category is also a non-GAAP financial measure but is not used by the Company in evaluating operating performance and in making strategic decisions. In addition, these non-GAAP financial measures or similar non-GAAP financial measures are used by research analysts, investment bankers and lenders to assess our operating performance. Management believes that the presentation of Adjusted Net Trading Income, EBITDA, Adjusted EBITDA, Normalized Adjusted Net Income, Normalized Adjusted Net Income before income taxes, Normalized provision for income taxes and Normalized Adjusted EPS provide useful information to investors regarding our results of operations and cash flows because they assist both investors and management in analyzing and benchmarking the performance and value of our business. Adjusted Net Trading Income, EBITDA, Adjusted EBITDA, Normalized Adjusted Net Income, Normalized Adjusted Net Income before income taxes, Normalized provision for income taxes and Normalized Adjusted EPS provide indicators of general economic performance that are not affected by fluctuations in certain costs or other items. Accordingly, management believes that these measurements are useful for comparing general operating performance from period to period. Furthermore, our Fourth Amended and Restated Credit Agreement contains covenants and other tests based on metrics similar to Adjusted EBITDA. Other companies may define Adjusted Net Trading Income, Adjusted EBITDA, Normalized Adjusted Net Income, Normalized Adjusted Net Income before income taxes, Normalized provision for income taxes and Normalized

Adjusted EPS differently, and as a result our measures of Adjusted Net Trading Income, Adjusted EBITDA, Normalized Adjusted Net Income, Normalized Adjusted Net Income before income taxes, Normalized provision for income taxes and Normalized Adjusted EPS may not be directly comparable to those of other companies. Although we use these non-GAAP measures as financial measures to assess the performance of our business, such use is limited because they do not include certain material costs necessary to operate our business.

Adjusted Net Trading Income, EBITDA, Adjusted EBITDA, Normalized Adjusted Net Income, Normalized Adjusted Net Income before income taxes, Normalized provision for income taxes and Normalized Adjusted EPS should be considered in addition to, and not as a substitute for, Net Income in accordance with U.S. GAAP as a measure of performance. Our presentation of Adjusted Net Trading Income, EBITDA, Adjusted EBITDA, Normalized Adjusted Net Income, Normalized Adjusted Net Income before income taxes, Normalized provision for income taxes and Normalized Adjusted EPS should not be construed as an indication that our future results will be unaffected by unusual or nonrecurring items. Adjusted Net Trading Income, Normalized Adjusted Net Income, Normalized Adjusted Net Income before income taxes, Normalized provision for income taxes and Normalized Adjusted EPS and our EBITDA-based measures have limitations as analytical tools, and you should not consider them in isolation or as substitutes for analysis of our results as reported under U.S. GAAP. Some of these limitations are:

- they do not reflect every cash expenditure, future requirements for capital expenditures or contractual commitments;
- our EBITDA-based measures do not reflect the significant interest expense or the cash requirements necessary to service interest or principal payment on our debt;
- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized will often have to be replaced or require improvements in the future, and our EBITDA-based measures do not reflect any cash requirement for such replacements or improvements;
- they are not adjusted for all non-cash income or expense items that are reflected in our statements of cash flows;
- they do not reflect the impact of earnings or charges resulting from matters we consider not to be indicative of our ongoing operations; and
- they do not reflect limitations on our costs related to transferring earnings from our subsidiaries to us.

Because of these limitations, Adjusted Net Trading Income, EBITDA, Adjusted EBITDA and Normalized Adjusted Net Income are not intended as alternatives to Net Income as indicators of our operating performance and should not be considered as measures of discretionary cash available to us to invest in the growth of our business or as measures of cash that will be available to us to meet our obligations. We compensate for these limitations by using Adjusted Net Trading Income, EBITDA, Adjusted EBITDA and Normalized Adjusted Net Income along with other comparative tools, together with U.S. GAAP measurements, to assist in the evaluation of operating performance. These U.S. GAAP measurements include operating Net Income, cash flows from operations and cash flow data. See below a reconciliation of each non-GAAP financial measure to the most directly comparable GAAP measure.

The following tables reconcile Consolidated Statements of Comprehensive Income to arrive at EBITDA, Adjusted EBITDA, Adjusted Net Trading Income, and selected Operating Margins.

	For the Year Ended December 31,		
	2017	2016	2015
<b>Reconciliation of Trading income, net to Adjusted Net Trading Income</b>			
Trading income, net	\$ 766,027	\$ 665,465	\$ 757,455
Interest and dividends income	50,407	26,419	28,136
Commissions, net and technology services	116,503	10,352	10,622
Brokerage, exchange and clearance fees, net	(256,926)	(221,214)	(232,469)
Payments for order flow	(27,727)	—	—
Interest and dividends expense	(91,993)	(56,557)	(52,423)
<b>Adjusted Net Trading Income</b>	<b>\$ 556,291</b>	<b>\$ 424,465</b>	<b>\$ 511,321</b>
<b>Reconciliation of Net Income to EBITDA and Adjusted EBITDA</b>			
Net Income	\$ 18,898	\$ 158,340	\$ 197,490
Financing interest expense on long-term borrowings	64,107	28,327	29,254
Debt issue cost related to debt refinancing	10,460	5,579	—
Depreciation and amortization	47,327	29,703	33,629
Amortization of purchased intangibles and acquired capitalized software	15,447	211	211
Provision for Income Taxes	94,266	21,251	18,439
<b>EBITDA</b>	<b>\$ 250,505</b>	<b>\$ 243,411</b>	<b>\$ 279,023</b>
Severance	14,911	1,252	1,065
Reserve for legal matters	657	—	5,440
Transaction advisory fees and expenses	25,270	994	—
Termination of office leases	3,671	(319)	2,729
Acquisition related retention bonus	23,050	—	—
Trading related settlement income	(628)	(2,975)	—
Other, net	(95,045)	(36)	—
Equipment write-off	1,216	428	—
Share based compensation	21,825	18,222	15,202
Charges related to share based compensation at IPO, 2015 Management Incentive Plan	5,225	5,606	4,710
Charges related to share based compensation awards at IPO	740	1,755	44,194
<b>Adjusted EBITDA</b>	<b>\$ 251,397</b>	<b>\$ 268,338</b>	<b>\$ 352,363</b>
<b>Selected Operating Margins</b>			
Net Income Margin (1)	3.4 %	37.3 %	38.6 %
EBITDA Margin (2)	45.0 %	57.3 %	54.6 %
Adjusted EBITDA Margin (3)	45.2 %	63.2 %	68.9 %

- (1) Calculated by dividing net income by Adjusted Net Trading Income.
- (2) Calculated by dividing EBITDA by Adjusted Net Trading Income.
- (3) Calculated by dividing Adjusted EBITDA by Adjusted Net Trading Income.

The following tables reconcile Net Income to arrive at Normalized Adjusted Net Income before income taxes, Normalized provision for income taxes, Normalized Adjusted Net Income and Normalized Adjusted EPS.

	2017	2016	2015
<b>(in thousands, except share and per share data)</b>			
<b>Reconciliation of Net Income to Normalized Adjusted Net Income</b>			
Net income	\$ 18,898	\$ 158,340	\$ 197,490
Provision for income taxes	94,266	21,251	18,439
Income before income taxes	113,164	179,591	215,929
Amortization of purchased intangibles and acquired capitalized software	15,447	211	211
Financing interest expense related to KCG transaction	4,626	—	—
Debt issue cost related to debt refinancing	10,460	5,579	—
Severance	14,911	1,252	1,064
Reserve for legal matters	657	—	5,440
Transaction advisory fees and expenses	25,270	994	—
Termination of office leases	3,671	(319)	2,729
Equipment write-off	2,849	428	1,719
Acquisition related retention bonus	23,050	—	—
Trading related settlement income	—	(628)	—
Other, net	(95,045)	(36)	—
Share based compensation	21,825	18,222	15,202
Charges related to share based compensation at IPO, 2015 Management Incentive Plan	5,225	5,606	4,710
Charges related to share based compensation awards at IPO	740	1,755	44,194
Normalized Adjusted Net Income before income taxes	146,222	210,308	291,198
Normalized provision for income taxes (1)	54,102	74,659	103,375
Normalized Adjusted Net Income	\$ 92,120	\$ 135,649	\$ 187,823
Weighted Average Adjusted shares outstanding (2)	161,464,923	139,685,124	138,772,354
Normalized Adjusted EPS	\$ 0.57	\$ 0.97	\$ 1.35

- (1) Reflects U.S. federal, state, and local income tax rate applicable to corporations of approximately 35.5% to 37%.
- (2) Assumes that (1) holders of all vested and unvested Virtu Financial Units (together with corresponding shares of Class C common stock), have exercised their right to exchange such Virtu Financial Units for shares of Class A common stock on a one-for-one basis, (2) holders of all Virtu Financial Units (together with corresponding shares of Class D common stock), have exercised their right to exchange such Virtu Financial Units for shares of Class B common stock on a one-for-one basis, and subsequently exercised their right to convert the shares of Class B common stock into shares of Class A common stock on a one-for-one basis. Includes additional shares from dilutive impact of options and restricted stock units outstanding under the 2015 Management Incentive Plan during the years ended December 31, 2017, 2016 and 2015.

The following table shows our Trading Income, Net, average daily Trading Income, Net, Adjusted Net Trading Income, average daily Adjusted Net Trading Income and percentage of Adjusted Net Trading Income by asset class for the years ended December 31, 2017, 2016, and 2015.

<b>(in thousands, except percentages)</b>	<b>2017</b>			<b>2016</b>			<b>2015</b>		
	<b>Total</b>	<b>Average Daily</b>	<b>%</b>	<b>Total</b>	<b>Average Daily</b>	<b>%</b>	<b>Total</b>	<b>Average Daily</b>	<b>%</b>
<b>Adjusted Net Trading Income by Category:</b>									
<b>Market Making:</b>									
Americas Equities	\$ 275,714	\$ 1,098	49.6 %	\$ 124,246	\$ 493	29.2 %	\$ 135,662	\$ 538	26.5
ROW Equities	92,232	367	16.6 %	94,436	375	22.2 %	103,478	410	20.2
Global FICC, Options and Other	127,749	509	23.0 %	195,036	775	46.0 %	255,129	1,013	49.9
Unallocated (1)	(6,243)	(25)	(1.2)%	395	2	0.2 %	6,430	26	0.9
Total market making	\$ 489,452	\$ 1,949	88	\$ 414,113	\$ 1,645	97.6	\$ 500,699	\$ 1,987	97.5
<b>Execution Services</b>	67,345	268	12.1 %	10,352	41	2.4 %	10,622	42.15	2.5
<b>Corporate</b>	(506)	(2)	(0.1)%	-	-	-	-	-	-
<b>Adjusted Net Trading Income</b>	<b>\$ 556,291</b>	<b>\$ 2,215</b>	<b>100.0 %</b>	<b>\$ 424,465</b>	<b>\$ 1,686</b>	<b>100.0 %</b>	<b>\$ 511,321</b>	<b>\$ 2,029</b>	<b>100.0</b>

- (1) Under our methodology for recording “trading income, net” in our consolidated statements of comprehensive income from Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K, we recognize revenues based on the exit price of assets and

liabilities in accordance with applicable U.S. GAAP rules, and when we calculate Adjusted Net Trading Income for corresponding reporting periods, we start with trading income, net, so calculated. By contrast, when we calculate Adjusted Net Trading Income by category, we do so on a daily basis, and as a result prices used in recognizing revenues may differ. Because we provide liquidity on a global basis, across asset classes and time zones, the timing of any particular Adjusted Net Trading Income calculation may defer or accelerate the amount in a particular category from one day to another, and, at the end of a reporting period, from one reporting period to another. The purpose of the Unallocated category is to ensure that Adjusted Net Trading Income by category sums to total Adjusted Net Trading Income, which can be reconciled to Trading Income, Net, calculated in accordance with GAAP. We do not allocate any resulting differences based on the timing of revenue recognition.

## Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

### Total Revenues

Our total revenues increased \$325.7 million, or 46.4%, to \$1,028.0 million for the year ended December 31, 2017, compared to \$702.3 million for the year ended December 31, 2016. This increase was primarily attributable to an increase in trading income, net, of \$100.5 million, \$101.1 million increase in commissions, net and technology services, \$24.0 million increase in interest and dividend income, and \$95.0 million increase in other, net. These increases were primarily attributable to the Acquisition of KCG, as well as the gain on the reduction of our tax receivable agreement obligation as a result of the 2017 Tax Act during the year ended December 31, 2017.

The following table shows the total revenues by operating segment for the years ended December 31, 2017 and 2016.

(in thousands, except for percentage)	2017	2016	% Change
<b>Market Making</b>			
Trading income, net	\$ 769,556	\$ 665,465	15.6%
Interest and dividends income	51,822	26,419	96.2%
Commissions, net and technology services	13,689	-	NM
Other, net	1,640	-	NM
Total revenues from Market Making	<u>\$ 836,707</u>	<u>\$ 691,884</u>	<u>20.9%</u>
<b>Execution Services</b>			
Trading income, net	\$ (5,394)	\$ -	NM
Interest and dividends income	619	-	NM
Commissions, net and technology services	102,814	10,352	893.2%
Other, net	1,096	-	NM
Total revenues from Execution Services	<u>\$ 99,135</u>	<u>\$ 10,352</u>	<u>857.6%</u>
<b>Corporate</b>			
Trading income, net	\$ 1,865	\$ -	NM
Interest and dividends income	(2,034)	-	NM
Commissions, net and technology services	-	-	NM
Other, net	92,309	36	NM
Total revenues from Corporate	<u>\$ 92,140</u>	<u>\$ 36</u>	<u>NM</u>
<b>Consolidated</b>			
Trading income, net	\$ 766,027	\$ 665,465	15.1%
Interest and dividends income	50,407	26,419	90.8%
Commissions, net and technology services	116,503	10,352	1025.4%
Other, net	95,045	36	NM
Total revenues	<u>\$ 1,027,982</u>	<u>\$ 702,272</u>	<u>46.4%</u>

**Trading Income, Net.** Trading income, net is primarily earned by our Market Making segment. Trading income, net increased \$100.5 million, or 15.1%, to \$766.0 million for the year ended December 31, 2017, compared to \$665.5 million for the year ended December 31, 2016. The increase was primarily attributable to the Acquisition of KCG. Rather than analyzing trading income, net, in isolation, we generally evaluate it in the broader context of our Adjusted Net Trading Income, together with interest and dividends income, interest and dividends expense and brokerage, exchange and clearance fees, net, each of which are described below.



**Interest and Dividends Income.** Interest and dividends income is primarily earned by our Market Making segment. Interest and dividends income increased \$24.0 million, or 90.9%, to \$50.4 million for the year ended December 31, 2017, compared to \$26.4 million for the year ended December 31, 2016. This increase was primarily attributable to the Acquisition of KCG. As indicated above, rather than analyzing interest and dividends income in isolation, we generally evaluate it in the broader context of our Adjusted Net Trading Income.

**Commissions, Net and Technology Services.** Commissions, net and technology services revenues are primarily earned by our Execution Services segment. Technology services revenue increased \$106.1 million, or 1,020.2%, to \$116.5 million for the year ended December 31, 2017, compared to \$10.4 million for the year ended December 31, 2016. The increase was primarily due to the Acquisition of KCG, as well as agency fee revenues arising from new customers we on-boarded.

**Other, Net.** Other, net revenues are primarily earned by our Corporate segment. Other, net increased \$95.0 million for the year ended December 31, 2017, compared to \$36 thousand for the year ended December 31, 2016. The increase was primarily due to the gain on reduction of our tax receivable agreement obligation as a result of the 2017 Tax Act.

As discussed in Note 6. "Tax Receivable Agreements" of Part II Item 8 "Financial Statements and Supplementary Data" of this Form 10-K, and Provision for Income Taxes above we recognized a \$86.6 million gain on the reduction of our tax receivable agreement obligation which is recorded in Other, net for the year ended December 31, 2017.

The increase in other, net was also attributable to the \$3.3 million gain recognized from fair value adjustment in our minority interest in SBI Japannext for the year ended December 31, 2017.

### **Adjusted Net Trading Income**

Adjusted Net Trading Income increased \$131.8 million, or 31.0%, to \$556.3 million for the year ended December 31, 2017, compared to \$424.5 million for the year ended December 31, 2016. This increase was primarily attributable to the Acquisition of KCG, which resulted in a significant increase in Americas Equities of \$151.5 million, or 122%, from the Market Making segment, and a significant increase of \$56.9 million, or 569%, from Execution Services for the year ended December 31, 2017. The overall increase was partially offset by a decrease of \$2.2 million, or 2%, to \$92.2 million in ROW equities and a decrease of \$67.3 million, or 35%, to \$127.7 million in Global FICC, Options and Other categories in the Market Making segment. The number of trading days for the year ended December 31, 2017 and 2016 were both 252.

### **Operating Expenses**

Our operating expenses increased \$392.1 million, or 75.0%, to \$914.8 million for the year ended December 31, 2017, compared to \$522.7 million for the year ended December 31, 2016. The increase in operating expenses was primarily attributable to the Acquisition of KCG, which caused increases in all expense areas except for charges related to share based compensation at IPO. There was an increase in brokerage, exchange, and clearance fees, net of \$30.7 million, communication of data processing of \$60.5 million, employee compensation and payroll taxes of \$92.2 million, interest and dividends expense of \$35.4 million, operations and administrative expense of \$42.1 million, depreciation and amortization expense of \$17.6 million, amortization of purchased intangible and acquired capital software of \$15.2 million, debt issue cost related to debt refinancing of \$4.9 million, transaction advisory fees and expenses of \$25.3 million, reserve for legal matters of \$0.7 million, and in financing interest expense on our long-term borrowings of \$35.8 million. Additionally we incurred \$27.7 million in payments for order flow, which was a new expense for the year ended December 31, 2017.

**Brokerage, Exchange and Clearance Fees, Net.** Brokerage exchange and clearance fees, net, increased \$35.7 million, or 16.1%, to \$256.9 million for the year ended December 31, 2017, compared to \$221.2 million for the year ended December 31, 2016. This increase was primarily attributable to the increases in market volume traded in Americas Equities instruments in which we make markets as a result of the Acquisition of KCG. As indicated above, rather than

analyzing brokerage, exchange and clearance fees, net, in isolation, we generally evaluate it in the broader context of our Adjusted Net Trading Income.

**Communication and Data Processing.** Communication and data processing expense increased \$60.5 million, or 85.2%, to \$131.5 million for the year ended December 31, 2017, compared to \$71.0 million for the year ended December 31, 2016. This increase was primarily due to the Acquisition of KCG, which brought on additional connections, co-location connectivity, market data and other subscriptions to us. The increase was partially offset by the reductions in connectivity connections as a result of an on-going effort to consolidate various communication and data processing subscriptions.

**Employee Compensation and Payroll Taxes.** Employee compensation and payroll taxes increased \$92.2 million, or 108.1%, to \$177.5 million for the year ended December 31, 2017, compared to \$85.3 million for the year ended December 31, 2016. The increase in compensation levels was primarily attributable to the \$23.0 million in Acquisition related retention bonus and the increase in headcount as a result of the Acquisition of KCG. Incentive compensation is recorded at management's discretion and is generally accrued in connection with the overall level of profitability.

**Payments for order flow.** Payments for order flow were \$27.7 million for the year ended December 31, 2017, and were attributable to the Acquisition of KCG. Payments for order flow primarily represent payments to broker-dealer clients, in the normal course of business, for directing to us their order flow primarily in U.S. equities. Payments for order flow also fluctuate based on U.S. equity share and option volumes, our profitability and the mix of market orders, limit orders, and customer mix.

**Interest and Dividends Expense.** Interest and dividends expense increased \$35.4 million, or 62.5%, to \$92.0 million for the year ended December 31, 2017, compared to \$56.6 million for the year ended December 31, 2016. This increase was primarily attributable to higher interest expense incurred on cash collateral received as part of securities lending transactions resulting from the Acquisition of KCG. As indicated above, rather than analyzing interest and dividends expense in isolation, we generally evaluate it in the broader context of our Adjusted Net Trading Income.

**Operations and Administrative.** Operations and administrative expense increased \$42.1 million, or 183.0%, to \$65.1 million for the year ended December 31, 2017, compared to \$23.0 million for the year ended December 31, 2016. This increase was primarily attributable to the increases in legal and other professional fees resulting from the Acquisition of KCG. The increase was partially offset by the cancellation of various legal and professional expenses as a result of an on-going effort to consolidate professional services.

**Depreciation and Amortization.** Depreciation and amortization increased \$17.6 million, or 59.3%, to \$47.3 million for the year ended December 31, 2017, compared to \$29.7 million for the year ended December 31, 2016. This increase was primarily attributable to depreciation and amortization of additional assets resulting from the Acquisition of KCG and an increase in capital expenditures on telecommunication, networking and other assets.

**Amortization of Purchased Intangibles and Acquired Capitalized Software.** Amortization of purchased intangibles and acquired capitalized software increased \$15.2 million, to \$15.4 million for the year ended December 31, 2017, compared to \$0.2 million for the year ended December 31, 2016. The increase was primarily due to additional intangible assets recognized as part of purchase price accounting for the Teza acquisition and the Acquisition of KCG for \$2.0 million and \$175.0 million, respectively, as of December 31, 2017. We recognized an aggregated of \$15.2 million in amortization expenses related to the Teza acquisition and the Acquisition of KCG for the year ended December 31, 2017.

**Debt issue cost related to Debt refinancing.** Debt issue costs related to debt refinancing increased \$4.9 million, or 87.5%, to \$10.5 million for the year ended December 31, 2017, compared to \$5.6 million for the year ended December 31, 2016. The increase was primarily attributable to the recognition of an approximately \$5.5 million in acceleration of the debt issue costs associated with the \$250 million voluntary prepayment made towards our senior secured first lien term loan, as discussed in Note 10 "Borrowings" of Part II Item 8 "Financial Statements and Supplementary Data" of this Form 10-K.

**Transaction Advisory Fees and Expenses.** Transaction advisory fees and expense was \$25.3 million for the year ended December 31, 2017. We had no such expense for the year ended December 31, 2016. This expense primarily represents the non-recurring legal and professional fees incurred in connection with the Acquisition of KCG.

**Reserve for Legal Matters.** Reserve for legal matters increased \$0.7 million for the year ended December 31, 2017. We had no such expenses for the year ended December 31, 2016. The increase was primarily due to accruals for other legal reserves as a result of the Acquisition of KCG.

**Charges related to share based compensation at IPO.** Charges related to share based compensation at IPO decreased \$1.0 million, or 55.6%, to \$0.8 million for the year ended December 31, 2017, compared to \$1.8 million for the year ended December 31, 2016. The decrease was primarily attributable to the fact that certain Class B and East MIP Class B interests became fully vested, and as well as to the increase in forfeitures for the year ended December 31, 2017, comparing to the year ended December 31, 2016.

**Financing Interest Expense on Long-Term Borrowings.** Financing interest expense on long-term borrowings increased \$35.8 million, or 126.5%, to \$64.1 million, compared to \$28.3 million for the year ended December 31, 2016. This increase was primarily attributable to the increase in outstanding principal as a result from the refinancing of the senior secured first lien term loan and the offering of the Notes, as discussed in Note 10 “Borrowings” of Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K.

### **Provision for Income Taxes**

Following the consummation of the Reorganization Transactions, we incur corporate tax at the U.S. federal income tax rate on our taxable income, as adjusted for noncontrolling interest in Virtu Financial. Our income tax expense reflects such U.S. federal income tax as well as taxes payable by certain of our non-U.S. subsidiaries. Our provision for income taxes increased \$73.0 million, to \$94.3 million for the year ended December 31, 2017, compared to \$21.3 million for the year ended December 31, 2016. The increase was primarily attributable to impact of the 2017 Tax Act on our net deferred tax assets, which decreased in value as a result of the lower U.S. corporate income tax rate effective January 1, 2018. This increase was offset in part by the effect of lower income before income taxes in 2017 compared to 2016, and the tax impact of the 2017 Tax Act on our tax receivable agreement obligations. See Note 13 “Income Taxes” of Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K Item for additional information.

On February 8, 2017, the Company issued an earnings release announcing its unaudited financial results for the quarter and year ended December 31, 2017, and furnished a copy of the release as Exhibit 99.1 to the Company’s current report on Form 8-K filed on the same date. The consolidated statements of comprehensive income for the year ended December 31, 2017 in this Annual Report on Form 10-K revised the amount reported as “Net income available for common stockholders” and “Basic and Diluted Earnings per share” of \$17.3 million and \$0.26, respectively, to \$2.9 million and \$0.03, respectively (See Item 8, “Financial Statements and Supplementary Data”). The reason for the revision is a change in the Company’s estimated provision for income tax due to the decrease in deferred tax assets as a result of the 2017 Tax Act that was passed on December 22, 2017.

## **Year Ended December 31, 2016 Compared to Year Ended December 31, 2015**

### **Total Revenues**

Our total revenues decreased \$93.9 million, or 11.8%, to \$702.3 million for the year ended December 31, 2016, compared to \$796.2 million for the year ended December 31, 2015. This decrease was primarily attributable to a decrease in trading income, net, of \$92.0 million, and a decrease in interest and dividend income of \$1.7 million.

The following table shows the total revenues by operating segment for the years ended December 31, 2016 and 2015.

(in thousands, except for percentage)	2016	2015	% Change
<b>Market Making</b>			
Trading income, net	\$ 665,465	\$ 757,455	-12.1%
Interest and dividends income	26,419	28,136	-6.1%
Commissions, net and technology services	-	-	NM
Other, net	-	-	NM
Total revenues from Market Making	<u>\$ 691,884</u>	<u>\$ 785,591</u>	<u>-11.9%</u>
<b>Execution Services</b>			
Trading income, net	\$ -	\$ -	NM
Interest and dividends income	-	-	NM
Commissions, net and technology services	10,352	10,622	-2.5%
Other, net	-	-	NM
Total revenues from Execution Services	<u>\$ 10,352</u>	<u>\$ 10,622</u>	<u>-2.5%</u>
<b>Corporate</b>			
Trading income, net	\$ -	\$ -	NM
Interest and dividends income	-	-	NM
Commissions, net and technology services	-	-	NM
Other, net	36	-	NM
Total revenues from Corporate	<u>\$ 36</u>	<u>\$ -</u>	<u>NM</u>
<b>Consolidated</b>			
Trading income, net	\$ 665,465	\$ 757,455	-12.1%
Interest and dividends income	26,419	28,136	-6.1%
Commissions, net and technology services	10,352	10,622	-2.5%
Other, net	36	-	NM
Total revenues	<u>\$ 702,272</u>	<u>\$ 796,213</u>	<u>-11.8%</u>

**Trading Income, Net.** Trading income, net, decreased \$92.0 million, or 12.1%, to \$665.5 million for the year ended December 31, 2016, compared to \$757.5 million for the year ended December 31, 2015. The decrease was primarily attributable to the less favorable conditions in the Americas Equities, Global Currencies, Global Commodities and EMEA Equities categories as a result of overall lower market volume and volatility within those categories during the year ended December 31, 2016. Rather than analyzing trading income, net, in isolation, we generally evaluate it in the broader context of our Adjusted Net Trading Income, together with interest and dividends income, interest and dividends expense and brokerage, exchange and clearance fees, net, each of which are described below.

**Interest and Dividends Income.** Interest and dividends income decreased \$1.7 million, or 6.0%, to \$26.4 million for the year ended December 31, 2016, compared to \$28.1 million for the year ended December 31, 2015. This decrease was primarily attributable to lower interest income earned on cash collateral posted as part of securities borrowed transactions. As indicated above, rather than analyzing interest and dividends income in isolation, we generally evaluate it in the broader context of our Adjusted Net Trading Income.

**Commissions, Net and Technology Services.** Commissions, net and technology services revenues include technology licensing fees and agency commission fees. Technology licensing fees typically include an initial component earned at the inception of a new contract and a recurring fee that may include both a fixed and variable component, and are recognized ratably over the term of the contract and therefore do not change significantly period over period unless there are new counterparties. Agency commission fees are positively correlated to the volume of the trades executed by our broker dealer subsidiary. Commissions, net and technology services revenue decreased \$0.2 million, or 1.9%, to \$10.4 million for the year ended December 31, 2016, compared to \$10.6 million for the year ended December 31, 2015. The slight decrease in the commissions, net and technology services revenue was mainly due to the upfront fee on one of the arrangements that was fully recognized over the initial three-year term by the second quarter of 2016. The decrease was partially offset by the new technology services contract executed with a new counterparty related to US Treasuries Dealer to Dealer market making on electronic trading venues in July 2016, as well as the agency commission fees generated from agency execution services started in April 2016.

**Other, net.** Other, net was incurred as a result of the foreign currency revaluations on the Japanese Yen based minority investment and the SBI Bonds, which were \$(3.1) million and \$3.2 million, respectively, for the year ended December 31, 2016. There were no such revenues (losses) for the year ended December 31, 2015.

### Adjusted Net Trading Income

Adjusted Net Trading Income decreased \$86.8 million, or 17.0%, to \$424.5 million for the year ended December 31, 2016, compared to \$511.3 million for the year ended December 31, 2015. This decrease compared to the prior period reflects decreases in Adjusted Net Trading Income from Americas Equities trading of \$11.4 million, \$14.1 million from EMEA equities \$11.4 million from global commodities, \$44.8 million from global currencies, and options, fixed income and other securities of \$3.9 million. These decreases in Adjusted Net Trading Income were partially offset by an increase in Adjusted Net Trading Income from trading, \$5.0 million from APAC equities compared to the prior period. Adjusted Net Trading Income per day decreased \$0.3 million, or 17.3%, to \$1.65 million for the year ended December 31, 2016, compared to \$2.0 million for the year ended December 31, 2015. The number of trading days for the year ended December 31, 2016 and 2015 were both 252.

### Operating Expenses

Our operating expenses decreased \$57.6 million, or 9.9%, to \$522.7 million for the year ended December 31, 2016, compared to \$580.3 million for the year ended December 31, 2015. This decrease was primarily due to decreases in brokerage, exchange, and clearance fees of \$11.3 million, employee compensation and payroll taxes of \$2.7 million, operations and administrative expense of \$3.0 million, depreciation and amortization expense of \$3.9 million, reserve for legal matters of \$5.4 million, and charges related to share based compensation at IPO of \$42.4 million, and \$1.0 million decrease in financing interest expense on our long-term borrowings. These decreases in operating expenses were partially offset by increases in communication and data processing expense of \$2.4 million, interest and dividends expense of \$4.2 million, and increase in debt issue cost related to refinancing of \$5.6 million. There was no change for the year ended December 31, 2016 compared to the year ended December 31, 2015 for amortization of purchased intangible and acquired capitalized software.

**Brokerage, Exchange and Clearance Fees, Net.** Brokerage exchange and clearance fees, net, decreased \$11.3 million, or 4.9%, to \$221.2 million for the year ended December 31, 2016, compared to \$232.5 million for the year ended December 31, 2015. This decrease was primarily attributable to the decreases in market volume and volatility traded in Americas Equities and EMEA Equities instruments in which we make markets. As indicated above, rather than analyzing brokerage, exchange and clearance fees, net, in isolation, we generally evaluate it in the broader context of our Adjusted Net Trading Income.

**Communication and Data Processing.** Communication and data processing expense increased \$2.4 million, or 3.5%, to \$71.0 million for the year ended December 31, 2016, compared to \$68.6 million for the year ended December 31, 2015. This increase was primarily due to commencement of new connectivity connections, as well as increases in market data fees. The increase was partially offset by reductions in discontinued connectivity connections.

**Employee Compensation and Payroll Taxes.** Employee compensation and payroll taxes decreased \$2.7 million, or 3.1%, to \$85.3 million for the year ended December 31, 2016, compared to \$88.0 million for the year ended December 31, 2015. The decrease in compensation levels was attributable to the decrease in incentive compensation accrual during the year ended December 31, 2016. Incentive compensation is recorded at management's discretion and is generally accrued in connection with the overall level of profitability.

**Interest and Dividends Expense.** Interest and dividends expense increased \$4.2 million, or 8.0%, to \$56.6 million for the year ended December 31, 2016, compared to \$52.4 million for the year ended December 31, 2015. This increase was primarily attributable to higher interest expense incurred on cash collateral received as part of securities lending transactions. As indicated above, rather than analyzing interest and dividends expense in isolation, we generally evaluate it in the broader context of our Adjusted Net Trading Income.

**Operations and Administrative.** Operations and administrative expense decreased \$3.0 million, or 11.5%, to \$23.0 million for the year ended December 31, 2016, compared to \$26.0 million for the year ended December 31, 2015. This decrease was primarily due to an accelerated expense recognition of approximately \$2.7 million from future lease payments of one of our office locations that was abandoned during the year ended December 31, 2015. We had no such expense during year ended December 31, 2016.

**Depreciation and Amortization.** Depreciation and amortization decreased \$3.9 million, or 11.6%, to \$29.7 million for the year ended December 31, 2016, compared to \$33.6 million for the year ended December 31, 2015. This decrease was primarily attributable to the decrease in capital expenditures on telecommunication, networking and other assets.

**Amortization of Purchased Intangibles and Acquired Capitalized Software.** Amortization of purchased intangibles and acquired capitalized software did not change, from \$0.2 million for the year ended December 31, 2016, compared to \$0.2 million for the year ended December 31, 2015.

**Debt issue cost related to Debt refinancing.** Expense from debt issue costs related to debt refinancing was \$5.6 million for the year ended December 31, 2016. These costs reflect nonrecurring expense incurred as a result of refinancing of our senior secured credit facility under long-term borrowings in October 2016. We had no such expense in the year ended December 31, 2015.

**Reserve for Legal Matters.** In December 2015, the enforcement committee of the AMF fined our European subsidiary in the amount of €5.0 million (approximately \$5.4 million) based on its allegations that the subsidiary of MTH engaged in price manipulation and violations of the AMF General Regulation and Euronext Market Rules. In accordance with the foregoing, though we are currently pursuing our rights of appeal, we have accrued an estimated loss of €5.0 million (approximately \$5.4 million) in relation to the fine imposed by the AMF. We had no such expense for the year ended December 31, 2016.

**Charges related to share based compensation at IPO.** At the consummation of the IPO in April 2015, we began recognizing non-cash compensation expenses in respect to vesting of Class B and East MIP Class B interests. For the year ended December 31, 2015, we recognized compensation expenses of the approximately \$44.2 million, which includes a one-time charge upon IPO with respect to the outstanding time vested Class B and East MIP Class B interests, net of \$9.2 million and \$8.5 million in capitalization and amortization of capitalized costs attributable to employees incurred in development of software for internal use, respectively. For the year ended December 31, 2016, the expense was \$1.1 million, which reflects monthly charges on the periodic vesting of awards over a specified service period, net of approximately \$0.1 million and \$0.7 million of capitalization and amortization, respectively. For the year ended December 31, 2015, the expense was \$3.5 million, which reflects monthly charges on the periodic vesting of awards over a specified service period, net of approximately \$1.1 million and \$1.7 million of capitalization and amortization, respectively.

**Financing Interest Expense on Long-Term Borrowings.** Financing interest expense on long-term borrowings decreased \$1.0 million, or 3.4%, to \$28.3 million, compared to \$29.3 million for the year ended December 31, 2015. This decrease was due to the 0.50% incremental spread reduction after the amendment of our existing senior secured credit facility upon the consummation of the IPO on April 21, 2015, which was partially offset by the increase in financing interest expense due to the increase in the amount of the senior secured credit facility, as discussed in Note 8 to the notes of the consolidated financial statements.

#### **Provision for Income Taxes**

Following the consummation of the Reorganization Transactions, we incur corporate tax at the U.S. federal income tax rate on our taxable income, as adjusted for noncontrolling interest in Virtu Financial. Our income tax expense reflects such U.S. federal income tax as well as taxes payable by certain of our non-U.S. subsidiaries. Provision for income taxes increased \$2.9 million, to \$21.3 million for the year ended December 31, 2016, compared to \$18.4 million for the year ended December 31, 2015. The increase was primarily attributable to the consummation of Reorganization Transactions.

Prior to the Reorganization Transactions, as a limited liability company treated as a partnership for U.S. federal income tax purposes, most of our income has not been subject to corporate tax, but instead our members have been taxed on their proportionate share of our net income.

## **Liquidity and Capital Resources**

### ***General***

As of December 31, 2017, we had \$532.9 million in cash and cash equivalents. These balances are maintained primarily to support operating activities and for capital expenditures and for short-term access to liquidity, and other general corporate purposes. As of December 31, 2017, we had borrowings under our short-term credit facilities of approximately \$205.7 million, borrowing under broker dealer facilities of \$32.0 million, and long-term debt outstanding in an aggregate principal amount of approximately \$1431.1 million. As of December 31, 2017, our regulatory capital requirements for domestic U.S. subsidiaries were \$7.1 million, in aggregate.

The majority of our assets consist of exchange-listed marketable securities, which are marked-to-market daily, and collateralized receivables from broker-dealers and clearing organizations arising from proprietary securities transactions. Collateralized receivables consist primarily of securities borrowed, receivables from clearing houses for settlement of securities transactions and, to a lesser extent, securities purchased under agreements to resell. We actively manage our liquidity, and we maintain significant borrowing facilities through the securities lending markets and with banks and prime brokers. We have continually received the benefit of uncommitted margin financing from our prime brokers globally. These margin facilities are secured by securities in accounts held at the prime broker. For purposes of providing additional liquidity, we maintain an uncommitted credit facility with two of our wholly owned broker-dealer subsidiaries. Additionally, we also maintain a revolving credit facility with three of our wholly owned broker-dealer subsidiaries, as discussed in Note 10 “Borrowing” of Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K herein.

Based on our current level of operations, we believe our cash flows from operations, available cash and cash equivalents, and available borrowings under our broker-dealer credit facilities will be adequate to meet our future liquidity needs for more than the next twelve months. We anticipate that our primary upcoming cash and liquidity needs will be increased margin requirements from increased trading activities in markets where we currently provide liquidity and in new markets into which we expand. We manage and monitor our margin and liquidity needs on a real-time basis and can adjust our requirements both intra-day and inter-day, as required.

We expect our principal sources of future liquidity to come from cash flows provided by operating activities and financing activities. Certain of our cash balances are insured by the Federal Deposit Insurance Corporation, generally up to \$250,000 per account but without a cap under certain conditions. From time to time these cash balances may exceed insured limits, but we select financial institutions deemed highly creditworthy to minimize risk. We consider highly liquid investments with original maturities of less than three months when acquired to be cash equivalents.

### ***Tax Receivable Agreements***

Generally, we are required under the tax receivable agreements entered into in connection with our IPO to make payments to certain direct or indirect equityholders of Virtu Financial that are generally equal to 85% of the applicable cash tax savings, if any, that we actually realize as a result of favorable tax attributes that will be available to us as a result of the Reorganization Transactions, exchanges of membership interests for Class A common stock or Class B common stock and payments made under the tax receivable agreements. We will retain the remaining 15% of these cash tax savings. We expect that future payments to certain direct or indirect equityholders of Virtu Financial described in Note 16 “Tax Receivable Agreements” to the consolidated financial statements included herein are expected to aggregate to approximately \$147.0 million, ranging from approximately \$0.3 million to \$12.8 million per year over the next 15 years. Such payments will occur only after we have filed our U.S. federal and state income tax returns and realized the cash tax savings from the favorable tax attributes. The first payment was due September 15, 2016, and we made our first payment of \$7.0 million in February 2017. Future payments under the tax receivable agreements in respect of subsequent exchanges would be in addition to these amounts. We currently expect to fund these payments from the cash flow from operations generated by our subsidiaries as well as from excess tax distributions that we receive from our subsidiaries.



Under the tax receivable agreements, as a result of certain types of transactions and other factors, including a transaction resulting in a change of control, we may also be required to make payments to certain direct or indirect equityholders of Virtu Financial in amounts equal to the present value of future payments we are obligated to make under the tax receivable agreements. If the payments under the tax receivable agreements are accelerated, we may be required to raise additional debt or equity to fund such payments. To the extent that we are unable to make payments under the tax receivable agreements for any reason (including because our Fourth Amended and Restated Credit Agreement or the indenture governing our Notes restricts the ability of our subsidiaries to make distributions to us) such payments will be deferred and will accrue interest until paid.

### ***Regulatory Capital Requirements***

Certain of our principal operating subsidiaries are subject to separate regulation and capital requirements in the United States and other jurisdictions. Virtu Financial BD LLC, Virtu Financial Capital Markets LLC and Virtu Americas LLC, which become our subsidiary following the Acquisition of KCG, are registered U.S. broker-dealers, and their primary regulators include the SEC, the Chicago Stock Exchange and FINRA. Virtu Financial Ireland Limited is a registered investment firm under the Market in Financial Instruments Directive, and its primary regulator is the Central Bank of Ireland.

The SEC and FINRA impose rules that require notification when regulatory capital falls below certain pre-defined criteria. These rules also dictate the ratio of debt-to-equity in the regulatory capital composition of a broker-dealer and constrain the ability of a broker-dealer to expand its business under certain circumstances. If a firm fails to maintain the required regulatory capital, it may be subject to suspension or revocation of registration by the applicable regulatory agency, and suspension or expulsion by these regulators could ultimately lead to the firm's liquidation. Additionally, certain applicable rules impose requirements that may have the effect of prohibiting a broker-dealer from distributing or withdrawing capital and requiring prior notice to and/or approval from the SEC, the Chicago Stock Exchange and FINRA for certain capital withdrawals. Virtu Financial Capital Markets LLC is also subject to rules set forth by NYSE MKT (formerly NYSE Amex) and is required to maintain a certain level of capital in connection with the operation of its DMM business. Virtu Financial Ireland Limited is regulated by the Central Bank of Ireland as an Investment Firm and in accordance with European Union law is required to maintain a minimum amount of regulatory capital based upon its positions, financial conditions, and other factors. In addition to periodic requirements to report its regulatory capital and submit other regulatory reports, Virtu Financial Ireland Limited is required to obtain consent prior to receiving capital contributions or making capital distributions from its regulatory capital. Failure to comply with its regulatory capital requirements could result in regulatory sanction or revocation of its regulatory license. KCG Europe Limited, as an FCA-regulated investment firm is also subject to similar prudential capital requirements.

See Note 18 "Regulatory Requirement" of Part II Item 8 "Financial Statements and Supplementary Data" of this Form 10-K for a discussion of regulatory capital requirements of our regulated subsidiaries.



### **Long-Term Borrowings**

We maintain various broker-dealer facilities and short-term credit facilities as part of our daily trading operations. See Note 10 “Borrowings” of Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K for details on the Company’s various credit facilities. As of December 31, 2017, the outstanding principal balance on our broker-dealer facilities was \$32.0 million, and the outstanding aggregate short-term credit facilities with various prime brokers was approximately \$205.7 million, which was netted within receivables from broker dealers and clearing organizations on the “Consolidated Statement of Financial Condition” of Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K..

### **Fourth Amended and Restated Credit Agreement**

In connection with the Acquisition of KCG, we entered into the Fourth Amended and Restated Credit Agreement, which amended and restated in its entirety the existing Credit Agreement. The Fourth Amended and Restated Credit Agreement, provided for a \$540.0 million first lien secured term loan, drawn in its entirety on June 30, 2017, and continued VFH’s existing \$100.0 million first lien senior secured revolving credit facility. Also on June 30, 2017, the Escrow Issuer entered into the Escrow Credit Agreement with the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, which provided for a \$610.0 million term loan, the proceeds of which were deposited into escrow pending the closing of the Acquisition.

Upon the closing of the Acquisition, the proceeds of the Escrow Term Loan were released to fund in part the Acquisition consideration, the obligations of the Escrow Issuer in respect of the Escrow Term Loan were automatically assumed by VFH Parent, the Escrow Term Loan was deemed to be outstanding under the Fourth Amended and Restated Credit Agreement and the Escrow Credit Agreement and related credit documents automatically terminated and were superseded by the provisions of the Fourth Amended and Restated Credit Agreement. In addition, the first lien senior secured revolving credit facility under the Fourth Amended and Restated Credit Agreement terminated.

Under the Fourth Amended and Restated Credit Agreement, the \$1,150.0 million aggregate principal amount of first lien senior secured term loans, including the Escrow Term Loan, will mature on December 30, 2021 and will require scheduled annual amortization payments on each of the first four anniversaries of the closing of the Acquisition in an amount equal to the sum of 7.5% of the original aggregate principal amount of the term loan issued under the Fourth Amended and Restated Credit Agreement and 7.5% of the aggregate principal amount of the Escrow Term Loan outstanding on the closing date of the Acquisition.

All obligations under the Term Loan Facility are unconditionally guaranteed by Virtu Financial and the Company’s existing direct and indirect wholly-owned domestic restricted subsidiaries (including, KCG and its wholly-owned domestic restricted subsidiaries), subject to certain exceptions, including exceptions for our broker dealer subsidiaries and certain immaterial subsidiaries. The Term Loan Facility and related guarantees are secured by first-priority perfected liens, subject to certain exceptions, on substantially all of VFH’s and the guarantors’ existing and future assets, including substantially all material personal property and a pledge of the capital stock of VFH, the guarantors (other than Virtu Financial) and the direct domestic subsidiaries of VFH and the guarantors and 100% of the non-voting capital stock and up to 65.0% of the voting capital stock of foreign subsidiaries that are directly owned by VFH or any of the guarantors.

Amounts outstanding under the Fourth Amended and Restated Credit Agreement bear interest as follows:

- in the case of the term loans, at VFH’s option, at either (a) the greatest of (i) the prime rate in effect, (ii) the NYFRB rate plus 0.50%, (iii) an adjusted LIBOR rate for a Eurodollar borrowing with an interest period of one month plus 1.00%, and (iv) 2.00% plus, in each case, 2.75% per annum; or (b) the greater of (i) an adjusted LIBOR rate for the interest period in effect and (ii) 1.00% plus, in each case, 3.75% per annum; and
- in the case of revolving loans, at VFH’s option, at either (a) the greatest of (i) the prime rate in effect, (ii) the NYFRB rate plus 0.50%, (iii) an adjusted LIBOR rate for a Eurodollar borrowing with an interest period of one month plus 1.00%, and (iv) 1.00% plus, in each case, 2.00% per annum; or (b) the greater of (i) an adjusted LIBOR rate for the interest period in effect and (ii) zero plus, in each case, 3.00% per annum.

Under the Fourth Amended and Restated Credit Agreement, we must comply on a quarterly basis with:

- a maximum total net leverage ratio of 5.00 to 1.0 with a step-down to (i) 4.25 to 1.0 from and after the fiscal quarter ending March 31, 2019, (ii) 3.50 to 1.0 from and after the fiscal quarter ending March 31, 2020 and (iii) 3.25 to 1.0 from the fiscal quarter ending March 31, 2021 and thereafter; and
- a minimum interest coverage ratio of 2.75 to 1.0, stepping up to 3.00 to 1.0 from and after the fiscal quarter ending March 31, 2019.

The Fourth Amended and Restated Credit Agreement contains certain customary affirmative covenants. The negative covenants in the Fourth Amended and Restated Credit Agreement include, among other things, limitations on our ability to do the following, subject to certain exceptions: (i) incur additional debt; (ii) create liens on certain assets; (iii) make certain loans or investments (including acquisitions); (iv) pay dividends on or make distributions in respect of our capital stock or make other restricted junior payments; (v) consolidate, merge, sell or otherwise dispose of all or substantially all of our assets; (vi) sell or otherwise dispose of assets, including equity interests in our subsidiaries; (vii) enter into certain transactions with our affiliates; (viii) enter into swaps, forwards and similar agreements; (ix) enter into sale-leaseback transactions; (x) restrict liens and subsidiary dividends; (xi) change our fiscal year; and (xii) modify the terms of certain debt agreements.

The Fourth Amended and Restated Credit Agreement contains certain customary events of default, including relating to a change of control. If an event of default occurs and is continuing, the lenders under the Fourth Amended and Restated Credit Agreement will be entitled to take various actions, including the acceleration of amounts outstanding under the Fourth Amended and Restated Credit Agreement and all actions permitted to be taken by a secured creditor in respect of the collateral securing the obligations under the Fourth Amended and Restated Credit Agreement.

A portion of certain financing costs incurred in connection with the original credit facility that were scheduled to be amortized over the term of the loan, including original issue discount and underwriting and legal fees, were accelerated at the closing of the refinancing.

We were in compliance with all applicable covenants under the Fourth Amended and Restated Credit Agreement as of December 31, 2017.

As of March 13, 2018, we have made total prepayments in the amount of \$526.0 million under the Fourth Amended and Restated Credit Agreement.

#### ***Senior Secured Second Lien Notes***

On June 16, 2017, the Escrow Issuer and the Co-Issuer completed the offering of \$500 million aggregate principal amount of 6.750% Senior Secured Second Lien Notes due 2022 (the “Notes”). The Notes were issued under an Indenture, dated as of June 16, 2017 (the “Indenture”), among the Escrow Issuer, the Co-Issuer and U.S. Bank National Association, as the trustee and collateral agent. The Notes mature on June 15, 2022. Interest on the Notes accrues at 6.750% per annum, payable every six months through maturity on each June 15 and December 15, beginning on December 15, 2017.

On July 20, 2017, VFH assumed all of the obligations of the Escrow Issuer under the Indenture and the Notes. The Notes are guaranteed by Virtu Financial and each of Virtu Financial’s wholly-owned domestic restricted subsidiaries that guarantee the Fourth Amended and Restated Credit Agreement, including KCG and certain of its subsidiaries and the Escrow Issuer. We refer to VFH and the Co-Issuer together as, the “Issuers.”

The Notes and the related guarantees are secured by second-priority perfected liens on substantially all of the Issuers’ and guarantors’ existing and future assets, subject to certain exceptions, including all material personal property, a pledge of the capital stock of the Issuers, the guarantors (other than Virtu Financial) and the direct subsidiaries of the Issuers and the guarantors and 100% of the non-voting capital stock and up to 65.0% of the voting capital stock of any now-owned or later-acquired foreign subsidiaries that are directly owned by the Issuers or any of the guarantors, which assets will also secure obligations under the Fourth Amended and Restated Credit Agreement on a first-priority basis.

The Indenture imposes certain limitations on our ability to (i) incur or guarantee additional indebtedness or issue preferred stock; (ii) pay dividends, make certain investments and make repayments on indebtedness that is subordinated in right of payment to the Notes and make other “restricted payments”; (iii) create liens on their assets to secure debt; (iv) enter into transactions with affiliates; (v) merge, consolidate or amalgamate with another company; (vi) transfer and sell assets; and (vii) permit restrictions on the payment of dividends by Virtu Financial’s subsidiaries. The Indenture also contains customary events of default, including, among others, payment defaults related to the failure to pay principal or interest on Notes, covenant defaults, final maturity default or cross-acceleration with respect to material indebtedness and certain bankruptcy events.

Prior to June 15, 2019, we may redeem some or all of the Notes at a redemption price equal to 100% of the principal amount plus accrued and unpaid interest, if any, to (but not including) the date of redemption, plus an applicable “make whole” premium (calculated based upon the yield of certain U.S. treasury securities plus 0.50%).

Prior to June 15, 2019, we may redeem up to 35% of the aggregate principal amount of the Notes at a redemption price equal to 106.750% of the principal amount thereof, plus accrued and unpaid interest, if any, to (but not including) the date of redemption with the net cash proceeds from certain equity offerings.

On or after June 15, 2019, we may redeem some or all of the Notes, at the following redemption prices (expressed as percentages of principal amount), plus accrued and unpaid interest to (but not including) the date of redemption, if redeemed during the 12-month period beginning on June 15 of the years indicated below:

<b>Period</b>	<b>Percentage</b>
2019	103.375%
2020	101.688%
2021 and thereafter	100.000%

Upon the occurrence of specified change of control events as defined in the indenture governing the Notes, we must offer to repurchase the Notes at 101% of the principal amount, plus accrued and unpaid interest, if any, to (but excluding) the purchase date.

We were in compliance with all applicable covenants under the indenture governing our Notes as of December 31, 2017.

### **Cash Flows**

Our main sources of liquidity are cash flow from the operations of our subsidiaries, our broker-dealer credit facilities (as described above), margin financing provided by our prime brokers and cash on hand.

The table below summarizes our primary sources and uses of cash for the years ended December 31, 2017, 2016 and 2015.

<b>(in thousands)</b>	<b>Years Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Net cash provided by (used in):			
Operating activities	\$ 290,574	\$ 239,599	\$ 260,280
Investing activities	(838,016)	(59,017)	(24,299)
Financing activities	889,797	(161,237)	(144,355)
Effect of exchange rate changes on cash and cash equivalents	9,117	(1,165)	(4,255)
Net increase in cash, cash equivalents, and restricted cash	<u>\$ 351,472</u>	<u>\$ 18,180</u>	<u>\$ 87,371</u>

### Operating Activities

Net cash provided by operating activities was \$290.6 million for the year ended December 31, 2017, compared to \$239.6 million for the year ended December 31, 2016. The increase of \$51.0 million in net cash provided by operating activities was primarily attributable to the Acquisition of KCG, which significantly increased our trading capital.

Net cash provided by operating activities was \$239.6 million for the year ended December 31, 2016, compared to \$260.3 million for the year ended December 31, 2015. The decrease of \$20.7 million in net cash provided by operating activities was primarily attributable to \$39.2 million decrease in net income due to decreases in volume and volatility.

### Investing Activities

Net cash used in investing activities was \$838.0 million for the year ended December 31, 2017, compared to \$59.0 million for the year ended December 31, 2016. The increase of \$779.0 million was primarily attributable to the net cash used for the Acquisition of KCG, see Note 3 “Acquisition of KCG Holdings, Inc.” of Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K.

Net cash used in investing activities was \$59.0 million for the year ended December 31, 2016, compared to \$24.3 million for the year ended December 31, 2015. The increase of \$34.7 million was primarily attributable to the minority interest investment in SBI, a Proprietary Trading System based in Tokyo, for approximately \$38.8 million.

### Financing Activities

Net cash provided by financing activities was \$889.8 million for the year ended December 31, 2017 and net cash used in financing activities of \$161.2 million for the year ended December 31, 2016. The increase of \$1,051.0 million was primarily attributable to the \$735 million cash provided from issuance of common stock as part of the Acquisition of KCG, as well as the refinancing of the first lien senior secured credit facility of \$1,150 million and the issuance of senior secured second lien notes of \$500.0 million during the year ended December 31, 2017. The increase in Net cash provided by financing activities was partially offset by the \$250.0 million voluntary prepayment on our Term Loan Facility, and the repayment of certain indebtedness of KCG for \$481.0 million.

Net cash used in financing activities was \$161.2 million for the year ended December 31, 2016 and \$144.4 million for the year ended December 31, 2015. The increase of \$16.8 million was primarily attributable to the \$50.2 million net cash provided as a result of the completion of the IPO and the Reorganization Transactions during the year ended December 31, 2015, and we had no such events during the year ended December 31, 2016. The increase was partially offset by a decrease of \$28.0 million in distributions and dividends during the year ended December 31, 2016.

### Contractual Obligations

The following table reflects our contractual obligations as of December 31, 2017. Amounts we pay in future periods may vary from those reflected in the table.

(in thousands)	Payments due by periods				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Long-term debt obligations(1)	1,431,059	—	31,059	1,400,000	—
Capital leases	43,530	18,829	24,701	—	—
Operating leases	260,084	33,331	59,950	39,080	127,723
Total contractual obligations	\$ 1,734,673	\$ 52,160	\$ 115,710	\$ 1,439,080	\$ 127,723

(1) Consists of principal payments under the note, Term Loan Facility and the SBI bonds. Does not include interest payments, commitment fees or utilization fees.

The contractual obligation table above excludes contractual amounts owed under the tax receivable agreement as the ultimate amount and timing of the amounts due are not presently known. As of December 31, 2017, a total of \$147.0 million has been recorded in amount due pursuant to tax receivable agreement in the consolidated financial

statements representing management's best estimate of the amounts currently expected to be owed under the tax receivable agreement, as savings are realized as a result of favorable tax attributes.

### **Off-Balance Sheet Arrangements**

We do not invest in any off-balance sheet vehicles that provide liquidity, capital resources, market or credit risk support, or engage in any activities that expose us to any liability that is not reflected in our consolidated financial statements except for those described under "Contractual Obligations" above.

### **Inflation**

We believe inflation has not had a material effect on our financial condition, results of operations, or cash flows for years ended December 31, 2017, 2016 and 2015.

### **Critical Accounting Policies and Estimates**

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements, as well as the reported amounts of revenue and expenses during the applicable reporting period. Critical accounting policies are those that are the most important portrayal of our financial condition, results of operations and cash flows, and that require our most difficult, subjective and complex judgments as a result of the need to make estimates about the effect of matters that are inherently uncertain. While our significant accounting policies are described in more detail in the notes to our consolidated financial statements, our most critical accounting policies are discussed below. In applying such policies, we must use some amounts that are based upon our informed judgments and best estimates. Estimates, by their nature, are based upon judgments and available information. The estimates that we make are based upon historical factors, current circumstances and the experience and judgment of management. We evaluate our assumptions and estimates on an ongoing basis. Our actual results may differ from these estimates under different assumptions or conditions.

### **Valuation of Financial Instruments**

Due to the nature of our operations, substantially all of our financial instrument assets, comprised of financial instruments owned, securities purchased under agreements to resell, and receivables from brokers, dealers and clearing organizations are carried at fair value based on published market prices and are marked to market daily, or are assets which are short-term in nature and are reflected at amounts approximating fair value. Similarly, all of our financial instrument liabilities that arise from financial instruments sold but not yet purchased, securities sold under agreements to repurchase, securities loaned, and payables to brokers, dealers and clearing organizations are short-term in nature and are reported at quoted market prices or at amounts approximating fair value.

Fair value is defined as the price that would be received to sell an asset or would be paid to transfer a liability (i.e., the exit price) in an orderly transaction between market participants at the measurement date. Financial instruments measured and reported at fair value are classified and disclosed in one of the following categories based on inputs:

Level 1 — Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2 — Quoted prices in markets that are not active and financial instruments for which all significant inputs are observable, either directly or indirectly; or

Level 3 — Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable

The fair values for substantially all of our financial instruments owned and financial instruments sold but not yet purchased are based on observable prices and inputs and are classified in levels 1 and 2 of the fair value hierarchy. Instruments categorized within level 3 of the fair value hierarchy are those which require one or more significant inputs

that are not observable. Estimating the fair value of level 3 financial instruments requires judgments to be made. See Note 11 “Financial Assets and Liabilities” of the Part II Item 8 “Financial Statements and Supplemental Data” on the Form 10-K for further information about fair value measurements.

### **Revenue Recognition**

#### *Trading Income, Net*

Trading income, net, consists of trading gains and losses that are recorded on a trade date basis and reported on a net basis. Trading income, net, is comprised of changes in fair value of financial instruments owned and financial instruments sold, not yet purchased assets and liabilities (i.e., unrealized gains and losses) and realized gains and losses on equities, fixed income securities, currencies and commodities.

#### *Interest and Dividends Income/Interest and Dividends Expense*

Interest income and interest expense are accrued in accordance with contractual rates. Interest income consists of income earned on collateralized financing arrangements and on cash held by brokers. Interest expense includes interest expense from collateralized transactions, margin and related short-term lending facilities. Dividends are recorded on the ex-dividend date, and interest is recognized on an accrual basis.

#### *Commissions, net and Technology Services*

Commissions, net, which primarily comprise commissions and commission equivalents earned on institutional client orders, are recorded on a trade date basis. Under a commission management program, we allow institutional clients to allocate a portion of their gross commissions to pay for research and other services provided by third parties. As we act as an agent in these transactions, we record such expenses on a net basis within Commissions and technology services in the consolidated statements of comprehensive income.

Technology services revenues consist of fees paid by third parties for licensing of our proprietary risk management and trading infrastructure technology and provision of associated management and hosting services. These fees include both upfront and annual recurring fees. Income from existing arrangements for technology services is recorded as a services contract in accordance with SEC Topic 13 (Staff Accounting Bulletin No. 104), SEC Topic 13.A.3 (f), with revenue being recognized once persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectability is probable.

### **Share-Based Compensation**

We account for share-based compensation transactions with employees under the provisions of ASC 718, Compensation: Stock Compensation. Share-based compensation transactions with employees are measured based on the fair value of equity instruments issued.

The fair value of awards issued for compensation prior to the Reorganization Transactions and the IPO was determined by management, with the assistance of an independent third party valuation firm, using a projected annual forfeiture rate, where applicable, on the date of grant.

Share-based awards issued for compensation in connection with or subsequent to the Reorganization Transactions and the IPO pursuant to our 2015 Management Incentive Plan (the “2015 Management Incentive Plan”) were in the form of stock options, Class A common stock and restricted stock units. The fair value of the stock option grants is determined through the application of the Black-Scholes-Merton model. The fair value of the Class A common stock and restricted stock units is determined based on the volume weighted average price for the three days preceding the grant, and with respect to the restricted stock units, a projected annual forfeiture rate. The fair value of share-based awards granted to employees is expensed based on the vesting conditions and is recognized on a straight line basis over the vesting period. We record as treasury stock shares repurchased from employees for the purpose of settling tax liabilities incurred upon the issuance of common stock, the vesting of restricted stock units or the exercise of stock options.

### ***Income Taxes and Tax Receivable Agreement Obligations***

We conduct our business globally through a number of separate legal entities. Consequently, our effective tax rate is dependent upon the geographic distribution of our earnings or losses and the tax laws and regulations of each legal jurisdiction in which we operate.

Certain of our wholly owned subsidiaries are subject to income taxes in foreign jurisdictions. The provision for income tax is comprised of current tax and deferred tax. Current tax represents the tax on current year tax returns, using tax rates enacted at the balance sheet date. A deferred tax asset is recognized only to the extent that it is probable that future taxable income will be available against which the asset can be utilized.

We are currently subject to audit in various jurisdictions, and these jurisdictions may assess additional income tax liabilities against us. Developments in an audit, litigation, or the relevant laws, regulations, administrative practices, principles, and interpretations could have a material effect on our operating results or cash flows in the period or periods for which that development occurs, as well as for prior and subsequent periods. We recognize the tax benefit from an uncertain tax position, in accordance with ASC 740, Income Taxes only if it is more likely than not that the tax position will be sustained on examination by the applicable taxing authority, including resolution of the appeals or litigation processes, based on the technical merits of the position. The tax benefits recognized in the consolidated financial statements from such a position are measured based on the largest benefit for each such position that has a greater than fifty percent likelihood of being realized upon ultimate resolution. Many factors are considered when evaluating and estimating the tax positions and tax benefits. Such estimates involve interpretations of regulations, rulings, case law, etc. and are inherently complex. Our estimates may require periodic adjustments and may not accurately anticipate actual outcomes as resolution of income tax treatments in individual jurisdictions typically would not be known for several years after completion of any fiscal year.

The 2017 Tax Act significantly changes how the U.S. taxes corporations. The 2017 Tax Act requires significant judgments to be made in interpretation of its provisions and significant estimates in calculations, and the preparation and analysis of information not previously relevant or regularly produced. The U.S. Treasury Department, the IRS, and other standard-setting bodies could interpret or issue guidance on how provisions of the 2017 Tax Act will be applied or otherwise administered that is different from our interpretation. As we complete our analysis of the 2017 Tax Act, collect and prepare necessary data, and interpret any additional guidance, we may make adjustments to provisional amounts that we have recorded that may materially impact our provision for income taxes in the period in which the adjustments are made.

Our tax receivable agreement obligations are closely tied to our U.S. income tax returns, and may be affected by the aforementioned factors that impact our provision for income taxes and actual tax returns, including the impact of the 2017 Tax Act.

### ***Goodwill and Intangible Assets***

Goodwill represents the excess of the purchase price over the underlying net tangible and intangible assets of our acquisitions. Goodwill is not amortized but is tested for impairment on an annual basis and between annual tests whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Goodwill is tested at the reporting unit level, which is defined as an operating segment or one level below the operating segment.

The goodwill impairment test is a two-step process. The first step is used to identify potential impairment and compares the fair value of a reporting unit with its carrying amount, including goodwill. If the carrying amount of a reporting unit exceeds its fair value, the second step of the goodwill impairment test must be performed. The second step is used to measure the amount of impairment loss, if any, and compares the implied fair value of reporting unit goodwill with the carrying amount of that goodwill. If the carrying amount of reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss must be recognized in an amount equal to that excess.

We test goodwill for impairment on an annual basis on July 1 and on an interim basis when certain events or circumstances exist. In the impairment test as of July 1, 2017, the primary valuation method used to estimate the fair value of the our reporting unit was the market capitalization approach based on the market price of its Class A common

stock, which the management believes to be an appropriate indicator of its fair value. Following the Acquisition, the impairment testing is performed for each segment unit.

We amortize finite-lived intangible assets over their estimated useful lives. We test finite-lived intangible assets for impairment annually or when impairment indicators are present, and if impaired, they are written down to fair value.

#### **Recent Accounting Pronouncements**

For a discussion of recently issued accounting developments and their impact or potential impact on our consolidated financial statements, see Note 2 “Summary of Significant Accounting Policies” of Part II Item 8 “Financial Statements and Supplementary Data” of this Form 10-K.



## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to various market risks in the ordinary course of business. The risks primarily relate to changes in the value of financial instruments due to factors such as market prices, interest rates, and currency rates.

Our on exchange market making activities are not dependent on the direction of any particular market and are designed to minimize capital at risk at any given time by limiting the notional size of our positions. Our on exchange market making strategies involve continuously quoting two-sided markets in various financial instruments with the intention of profiting by capturing the spread between the bid and offer price. If another market participant executes against the strategy's bid or offer by crossing the spread, the strategy will instantaneously attempt to lock in a return by either exiting the position or hedging in one or more different correlated instruments that represent economically equivalent value to the primary instrument. Such primary or hedging instruments include but are not limited to securities and derivatives such as: common shares, exchange traded products, American Depositary Receipts ("ADRs"), options, bonds, futures, spot currencies and commodities. Substantially all of the financial instruments we trade are liquid and can be liquidated within a short time frame at low costs.

The market making activities, where we interact with customers, involve taking on position risks. The risks at any point in time are limited by the notional size of positions as well as other factors. The overall portfolio risks are quantified using internal risk models and monitored by the CRO, the independent risk group and senior management.

We use various proprietary risk management tools in managing our market risk on a continuous basis (including intraday). In order to minimize the likelihood of unintended activities by our market making strategies, if our risk management system detects a trading strategy generating revenues outside of our preset limits, it will freeze, or "lockdown", that strategy and alert risk management personnel and management.

### Interest Rate Risk, Derivative Instruments

In the normal course of business, we utilize derivative financial instruments in connection with our proprietary trading activities. We do not designate our derivative financial instruments as hedging instruments under Financial Accounting Standards Board's ("FASB") Accounting Standards Codification (ASC) 815 Derivatives and Hedging, other than derivatives used to reduce the impact of fluctuations in foreign exchange rates on its net investment in certain non-U.S. operations as discussed in Note 12 "Derivative Instruments" of Part II Item 8 "Financial Statements and Supplementary Data" of this Form 10-K. Instead, we carry our derivative instruments at fair value with gains and losses included in trading income, net, in the accompanying consolidated statements of comprehensive income (loss). Fair value of derivatives that are freely tradable and listed on a national exchange is determined at their last sale price as of the last business day of the period. Since gains and losses are included in earnings, we have elected not to separately disclose gains and losses on derivative instruments, but instead to disclose gains and losses within trading revenue for both derivative and non-derivative instruments.

*Futures Contracts.* As part of our proprietary market making trading strategies, we use futures contracts to gain exposure to changes in values of various indices, commodities, interest rates or foreign currencies. A futures contract represents a commitment for the future purchase or sale of an asset at a specified price on a specified date. Upon entering into a futures contract, we are required to pledge to the broker an amount of cash, U.S. government securities or other assets equal to a certain percentage of the contract amount. Subsequent payments, known as variation margin, are made or received by us each day, depending on the daily fluctuations in the fair values of the underlying securities. We recognize a gain or loss equal to the daily variation margin.

*Due from Broker Dealers and Clearing Organizations.* Management periodically evaluates our counterparty credit exposures to various brokers and clearing organizations with a view to limiting potential losses resulting from counterparty insolvency.

### Foreign Currency Risk

As a result of our international market making activities and accumulated earnings in our foreign subsidiaries, our income and net worth are subject to fluctuation in foreign exchange rates. While we generate revenues in several currencies, a majority of our operating expenses are denominated in U.S. dollars. Therefore, depreciation in these other currencies against the U.S. dollar would negatively impact revenue upon translation to the U.S. dollar. The impact of any translation of our foreign denominated earnings to the U.S. dollar is mitigated, however, through the impact of daily hedging practices that are employed by the company.

Assets and liabilities of subsidiaries with non-U.S. dollar functional currencies are translated into U.S. dollars at period-end exchange rates. Income, expense and cash flow items are translated at average exchange rates prevailing during the period. The resulting currency translation adjustments are recorded as foreign exchange translation adjustment in our consolidated statements of comprehensive income (loss) and changes in equity. Our primary currency translation exposures historically relate to net investments in subsidiaries having functional currencies denominated in the Euro.

### **Market Risk**

Our on exchange market making activities are not dependent on the direction of any particular market and are designed to minimize capital at risk at any given time by limiting the notional size of our positions. Our on exchange market making strategies involve continuously quoting two-sided markets in various financial instruments with the intention of profiting by capturing the spread between the bid and offer price. If another market participant executes against the strategy's bid or offer by crossing the spread, the strategy will instantaneously attempt to lock in a return by either exiting the position or hedging in one or more different correlated instruments that represent economically equivalent value to the primary instrument. Such primary or hedging instruments include but are not limited to securities and derivatives such as: common shares, exchange traded products, American Depositary Receipts ("ADRs"), options, bonds, futures, spot currencies and commodities. Substantially all of the financial instruments we trade are liquid and can be liquidated within a short time frame at low costs.

The market making activities, where we interact with customers, involve taking on position risks. The risks at any point in time are limited by the notional size of positions as well as other factors. The overall portfolio risks are quantified using internal risk models and monitored by the CRO, the independent risk group and senior management.

For working capital purposes, we invest in money market funds and maintain interest and non-interest bearing balances at banks and in our trading accounts with clearing brokers, which are classified as Cash and cash equivalents and Receivable from brokers, dealers and clearing organizations, respectively, on the consolidated statements of financial condition. These financial instruments do not have maturity dates; the balances are short term, which helps to mitigate our market risks. We also invest our working capital in short-term U.S. government securities, which are included in Financial instruments owned on the consolidated statements of financial condition. Our cash and cash equivalents held in foreign currencies are subject to the exposure of foreign currency fluctuations. These balances are monitored daily and are hedged or reduced when appropriate and therefore not material to our overall cash position.

We use various proprietary risk management tools in managing our market risk on a continuous basis (including intraday). In order to minimize the likelihood of unintended activities by our market making strategies, if our risk management system detects a trading strategy generating revenues outside of our preset limits, it will freeze, or "lockdown", that strategy and alert risk management personnel and management.

In the normal course of business, we maintain inventories of exchange-listed and other equity securities, and to a lesser extent, fixed income securities and listed equity options. The fair value of these financial instruments at December 31, 2017 and December 31, 2016 was \$2.7 billion and \$1.8 billion, respectively, in long positions and \$2.4 billion and \$1.4 billion, respectively, in short positions. We also enter into futures contracts, which are recorded on our consolidated statements of financial condition within Receivable from brokers, dealers and clearing organizations or Payable to brokers, dealers and clearing organizations as applicable.

We calculate daily the potential losses that might arise from a series of different stress events. These include both single factor and multi factor shocks to asset prices based off both historical events and hypothetical scenarios. The

stress calculations include a full recalculation of any option positions, non-linear positions and leverage. Senior management and the independent risk function carefully monitor the highest stress scenarios to ensure that the Company is not unduly exposed to any extreme events.

The potential change in fair value is estimated to be a gain of \$6.5 million using a hypothetical 10% increase in equity prices as of December 31, 2017, and an estimated loss of \$9.5 million using a hypothetical 10% decrease in equity prices at December 31, 2017. These estimates take into account the offsetting effect of such hypothetical price movements on the fair value of short positions against long positions, the effect on the fair value of options, futures, nonlinear positions and leverage as well as assumed correlations with non-equity asset classes, such as fixed income, commodities and foreign exchange. The Company relies on internally developed systems in order to model and calculate stress risks to a variety of different scenarios.

The purchase and sale of futures contracts requires margin deposits with a Futures Commission Merchant (“FCM”). The Commodity Exchange Act requires an FCM to segregate all customer transactions and assets from the FCM’s proprietary activities. A customer’s cash and other equity deposited with an FCM are considered commingled with all other customer funds subject to the FCM’s segregation requirements. In the event of an FCM’s insolvency, recovery may be limited to the Company’s pro rata share of segregated customer funds available. It is possible that the recovery amount could be less than the total cash and other equity deposited.

### **Financial Instruments with Off Balance Sheet Risk**

We enter into various transactions involving derivatives and other off-balance sheet financial instruments. These financial instruments include futures, forward contracts, and exchange-traded options. These derivative financial instruments are used to conduct trading activities and manage market risks and are, therefore, subject to varying degrees of market and credit risk. Derivative transactions are entered into for trading purposes or to economically hedge other positions or transactions.

Futures and forward contracts provide for delayed delivery of the underlying instrument. In situations where we write listed options, we receive a premium in exchange for giving the buyer the right to buy or sell the security at a future date at a contracted price. The contractual or notional amounts related to these financial instruments reflect the volume and activity and do not necessarily reflect the amounts at risk. Futures contracts are executed on an exchange, and cash settlement is made on a daily basis for market movements, typically with a central clearing house as the counterparty. Accordingly, futures contracts generally do not have credit risk. The credit risk for forward contracts, options, and swaps is limited to the unrealized market valuation gains recorded in the statements of financial condition. Market risk is substantially dependent upon the value of the underlying financial instruments and is affected by market forces, such as volatility and changes in interest and foreign exchange rates.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

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## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Virtu Financial, Inc.:

### **Opinion on the Financial Statements**

We have audited the accompanying consolidated statements of financial condition of Virtu Financial, Inc. and Subsidiaries (the "Company") as of December 31, 2017 and 2016, and the related consolidated statements of comprehensive income, changes in equity, and cash flows for each of the three years in the period ended December 31, 2017 and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

### **Basis for Opinion**

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP

New York, NY  
March 13, 2018

We have served as the Company's auditor since 2011.

**Virtu Financial, Inc. and Subsidiaries**  
**Consolidated Statements of Financial Condition**

(in thousands, except share and interest data)	As of December 31,	
	2017	2016
<b>Assets</b>		
Cash and cash equivalents	\$ 532,887	\$ 181,415
Securities borrowed	1,471,172	220,005
Receivables from broker dealers and clearing organizations	972,018	448,728
Trading assets, at fair value:		
Financial instruments owned	2,117,579	1,683,999
Financial instruments owned and pledged	595,043	143,883
Property, equipment and capitalized software (net of accumulated depreciation of \$375,656 and \$113,184 as of December 31, 2017 and 2016, respectively)	137,018	29,660
Goodwill	844,883	715,379
Intangibles (net of accumulated amortization of \$123,408 and \$110,908 as of December 31, 2017 and December 31, 2016, respectively)	111,224	992
Deferred tax assets	125,760	193,859
Assets of business held for sale	55,070	—
Other assets (\$98,364 and \$36,480, at fair value, as of December 31, 2017 and 2016, respectively)	357,352	74,470
Total assets	\$ 7,320,006	\$ 3,692,390
<b>Liabilities and equity</b>		
<b>Liabilities</b>		
Short-term borrowings	\$ 27,883	\$ 25,000
Securities loaned	754,687	222,203
Securities sold under agreements to repurchase	390,642	—
Payables to broker dealers and clearing organizations	716,205	695,978
Trading liabilities, at fair value:		
Financial instruments sold, not yet purchased	2,384,598	1,349,155
Tax receivable agreement obligations	147,040	231,404
Accounts payable and accrued expenses and other liabilities	358,825	69,281
Long-term borrowings	1,388,548	564,957
Total liabilities	\$ 6,168,428	\$ 3,157,978
<b>Virtu Financial Inc. Stockholders' equity</b>		
Class A common stock (par value \$0.00001), Authorized — 1,000,000,000 and 1,000,000,000 shares, Issued — 90,415,532 and 40,436,580 shares, Outstanding — 89,798,609 and 39,983,514 shares at December 31, 2017 and 2016, respectively	1	—
Class B common stock (par value \$0.00001), Authorized — 175,000,000 and 175,000,000 shares, Issued and Outstanding — 0 and 0 shares at December 31, 2017 and 2016, respectively	—	—
Class C common stock (par value \$0.00001), Authorized — 90,000,000 and 90,000,000 shares, Issued — 17,880,239 and 19,810,707 shares, Outstanding — 17,880,239 and 19,810,707, at December 31, 2017 and 2016, respectively	—	—
Class D common stock (par value \$0.00001), Authorized — 175,000,000 and 175,000,000 shares, Issued and Outstanding — 79,610,490 and 79,610,490 shares at December 31, 2017 and 2016, respectively	1	1
Treasury stock, at cost, 616,923 and 453,066 shares at December 31, 2017 and 2016, respectively	(11,041)	(8,358)
Additional paid-in capital	900,746	155,536
Accumulated deficit	(62,129)	(1,254)
Accumulated other comprehensive income (loss)	2,991	(252)
Total Virtu Financial Inc. stockholders' equity	\$ 830,569	\$ 145,673
Noncontrolling interest	321,009	388,739
Total equity	\$ 1,151,578	\$ 534,412
Total liabilities and equity	\$ 7,320,006	\$ 3,692,390

See accompanying notes to the consolidated financial statements.

**Virtu Financial, Inc. and Subsidiaries**  
**Consolidated Statements of Comprehensive Income**

(in thousands, except share and per share data)	For the Years Ended December 31,		
	2017	2016	2015
<b>Revenues:</b>			
Trading income, net	\$ 766,027	\$ 665,465	\$ 757,455
Interest and dividends income	50,407	26,419	28,136
Commissions, net and technology services	116,503	10,352	10,622
Other, net	95,045	36	—
Total revenue	<u>1,027,982</u>	<u>702,272</u>	<u>796,213</u>
<b>Operating Expenses:</b>			
Brokerage, exchange and clearance fees, net	256,926	221,214	232,469
Communication and data processing	131,506	71,001	68,647
Employee compensation and payroll taxes	177,489	85,295	88,026
Payments for order flow	27,727	—	—
Interest and dividends expense	91,993	56,557	52,423
Operations and administrative	65,137	23,039	25,991
Depreciation and amortization	47,327	29,703	33,629
Amortization of purchased intangibles and acquired capitalized software	15,447	211	211
Debt issue cost related to debt refinancing	10,460	5,579	—
Transaction advisory fees and expenses	25,270	—	—
Reserve for legal matters	657	—	5,440
Charges related to share based compensation at IPO	772	1,755	44,194
Financing interest expense on long-term borrowings	64,107	28,327	29,254
Total operating expenses	<u>914,818</u>	<u>522,681</u>	<u>580,284</u>
Income before income taxes and noncontrolling interest	113,164	179,591	215,929
Provision for income taxes	94,266	21,251	18,439
Net income	<u>18,898</u>	<u>158,340</u>	<u>197,490</u>
Noncontrolling interest	(15,959)	(125,360)	(176,603)
Net income available for common stockholders	<u>\$ 2,939</u>	<u>\$ 32,980</u>	<u>20,887</u>
<b>Earnings per share</b>			
Basic	\$ 0.03	0.83	0.60
Diluted	\$ 0.03	0.83	0.59
<b>Weighted average common shares outstanding</b>			
Basic	62,579,147	38,539,091	34,964,312
Diluted	62,579,147	38,539,091	35,339,585
Net income	\$ 18,898	\$ 158,340	\$ 197,490
<b>Other comprehensive income</b>			
Foreign exchange translation adjustment, net of taxes	9,117	(1,165)	(4,255)
Comprehensive income	<u>28,015</u>	<u>157,175</u>	<u>\$ 193,235</u>
Less: Comprehensive income attributable to noncontrolling interest	(21,833)	(124,546)	(172,249)
Comprehensive income attributable to common stockholders	<u>\$ 6,182</u>	<u>\$ 32,629</u>	<u>20,986</u>

See accompanying notes to the consolidated financial statements.

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Virtu Financial, Inc. and Subsidiaries  
Consolidated Statements of Changes in Equity  
Additional

(in thousands, except share and interest data)	Class A Common Stock		Class C Common Stock		Class D Common Stock		Treasury Stock		Paid-in Capital	Class A-1		Class A-2		Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Income (Loss)	Total Virtu Financial Inc. Stockholders' Equity	Non-Controlling Interest	Total Equity
	Shares	Amounts	Shares	Amounts	Shares	Amounts	Shares	Amounts	Amounts	Interests	Amounts	Interests	Amounts					
Balance at December 31, 2014	—	\$ —	—	\$ —	—	\$ —	—	\$ —	\$ —	1,964,826	\$ 19,648	99,855,666	\$ 287,705	\$ (91,383)	\$ (3,705)	\$ 212,265	\$ —	\$ 212,265
Share based compensation through April 15, 2015	—	—	—	—	—	—	—	—	—	—	—	6,418	438	—	—	438	—	438
Repurchase of Class A-2 interests	—	—	—	—	—	—	—	—	—	—	—	(13,495)	(97)	—	—	(97)	—	(97)
Distribution to members through April 15, 2015	—	—	—	—	—	—	—	—	—	—	—	—	—	(130,000)	—	(130,000)	—	(130,000)
Comprehensive income through April 15, 2015:																		
Net income	—	—	—	—	—	—	—	—	—	—	—	—	—	83,147	—	83,147	—	83,147
Foreign exchange translation adjustment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(4,633)	(4,633)	—	(4,633)
Reorganization of equity structure	18,763,664	—	36,746,041	—	79,610,490	—	1	—	63,261	(1,964,826)	(19,648)	(99,848,589)	(288,046)	138,236	8,338	(97,858)	392,291	294,433
Balance post-reorganization	18,763,664	—	36,746,041	—	79,610,490	—	1	—	63,261	—	—	—	—	—	—	63,262	392,291	455,553
Issuance of Common Stock, net of offering costs	19,012,112	—	—	—	—	—	—	—	327,366	—	—	—	—	—	—	327,366	—	327,366
Repurchase of Virtu Financial Units and Corresponding number of Class A and C Common Stock	(3,470,724)	—	(12,214,224)	—	—	—	—	—	(277,153)	—	—	—	—	—	—	(277,153)	—	(277,153)
Share based compensation vested upon the IPO	—	—	—	—	—	—	—	—	44,908	—	—	—	—	—	—	44,908	—	44,908
Adjustments for changes in proportionate ownership in Virtu Financial	—	—	—	—	—	—	—	—	(22,513)	—	—	—	—	—	—	(22,513)	22,513	—
Issuance of tax receivable agreements	—	—	—	—	—	—	—	—	(23,041)	—	—	—	—	—	—	(23,041)	—	(23,041)
Share based compensation after April 15, 2015	576,693	—	—	—	—	—	—	—	19,278	—	—	—	—	—	—	19,278	—	19,278
Repurchase of Class C common stock	—	—	(57,106)	—	—	—	—	—	(1,368)	—	—	—	—	—	—	(1,368)	—	(1,368)
Treasury stock purchases	—	—	—	—	—	—	—	(169,649)	(3,819)	—	—	—	—	—	—	(3,819)	—	(3,819)
Comprehensive income, after April 15, 2015:																		
Net income	—	—	—	—	—	—	—	—	—	—	—	—	—	20,887	—	20,887	93,456	114,343
Foreign exchange translation adjustment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	99	99	279	378
Distribution from Virtu Financial to non-controlling interest, after April 15, 2015	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(81,377)	(81,377)
Dividends to Class A shareholders	—	—	—	—	—	—	—	—	—	—	—	—	—	(17,362)	—	(17,362)	—	(17,362)
Issuance of common stock in connection with secondary offering, net of offering costs	3,498,113	—	—	—	—	—	—	—	7,782	—	—	—	—	—	—	7,782	—	7,782
Repurchase of Virtu Financial Units and corresponding number of Class C common stock in connection with secondary offering	—	—	(3,498,113)	—	—	—	—	—	(8,805)	—	—	—	—	—	—	(8,805)	—	(8,805)
Issuance of tax receivable agreements in connection with secondary offering	—	—	—	—	—	—	—	—	1,187	—	—	—	—	—	—	1,187	—	1,187
Balance at December 31, 2015	38,379,858	\$ —	20,976,598	\$ —	79,610,490	\$ 1	(169,649)	\$ (3,819)	\$ 130,902	—	\$ —	—	\$ —	\$ 3,525	\$ 99	\$ 130,708	\$ 427,162	\$ 557,870
Share based compensation	953,054	—	(58,070)	—	—	—	—	—	24,893	—	—	—	—	—	—	24,893	—	24,893
Repurchase of Class C common stock	—	—	(4,153)	—	—	—	—	—	(98)	—	—	—	—	—	—	(98)	—	(98)
Treasury stock purchases	—	—	—	—	—	—	—	(283,417)	(4,539)	—	—	—	—	32,980	—	(4,539)	—	(4,539)
Net income	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32,980	125,360	158,340
Foreign exchange translation adjustment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(351)	(351)	(814)	(1,165)
Distribution from Virtu Financial to non-controlling interest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(162,969)	(162,969)
Dividends	—	—	—	—	—	—	—	—	—	—	—	—	—	(37,759)	—	(37,759)	—	(37,759)
Issuance of common stock in connection with secondary offering, net of offering costs	1,103,668	—	—	—	—	—	—	—	16,677	—	—	—	—	—	—	16,677	—	16,677
Repurchase of Virtu Financial Units and corresponding number of Class C common stock in connection with secondary offering	—	—	(1,103,668)	—	—	—	—	—	(17,383)	—	—	—	—	—	—	(17,383)	—	(17,383)
Issuance of tax receivable agreements in connection with secondary offering	—	—	—	—	—	—	—	—	545	—	—	—	—	—	—	545	—	545
Balance at December 31, 2016	40,436,580	\$ —	19,810,707	\$ —	79,610,490	\$ 1	(453,066)	\$ (8,358)	\$ 155,536	—	\$ —	—	\$ —	\$ (1,254)	\$ (252)	\$ 145,673	\$ 388,739	\$ 534,412
Share based compensation	546,265	—	(34,019)	—	—	—	—	—	16,846	—	—	—	—	—	—	16,846	—	16,846
Repurchase of Class C common stock	—	—	(540,686)	—	—	—	—	—	(9,143)	—	—	—	—	—	—	(9,143)	—	(9,143)
Treasury stock purchases	—	—	—	—	—	—	—	(163,857)	(2,683)	—	—	—	—	—	—	(2,683)	—	(2,683)
Net income	—	—	—	—	—	—	—	—	—	—	—	—	—	2,939	—	2,939	15,959	18,898
Foreign exchange translation adjustment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,243	3,243	5,874	9,117
Distribution from Virtu Financial to non-controlling interest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(89,563)	(89,563)
Dividends	—	—	—	—	—	—	—	—	—	—	—	—	—	(63,814)	—	(63,814)	—	(63,814)
Issuance of Class A common stock	48,076,924	1	—	—	—	—	—	—	735,973	—	—	—	—	—	—	735,974	—	735,974
Issuance of common stock in connection with employee exchanges	1,355,763	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Repurchase of Virtu Financial Units and corresponding number of Class C common stock in connection with employee exchanges	—	—	(1,355,763)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of tax receivable agreements in connection with employee exchange	—	—	—	—	—	—	—	—	1,534	—	—	—	—	—	—	1,534	—	1,534
Balance at December 31, 2017	90,415,532	1	17,880,239	—	79,610,490	1	(616,923)	(11,041)	900,746	—	—	—	—	(62,129)	2,991	830,569	321,009	1,151,578





**Virtu Financial, Inc. and Subsidiaries**  
**Consolidated Statements of Cash Flows**

(in thousands)	For the Years ended December 31,		
	2017	2016	2015
<b>Cash flows from operating activities</b>			
Net Income	\$ 18,898	\$ 158,340	\$ 197,490
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	47,327	29,703	33,629
Amortization of purchased intangibles and acquired capitalized software	15,447	211	211
Debt issue cost related to debt refinancing	10,460	5,579	—
Amortization of debt issuance costs and deferred financing fees	5,822	1,690	1,755
Termination of office leases	3,671	—	1,380
Share based compensation	26,259	22,866	61,878
Reserve for legal matters	657	—	5,440
Equipment writeoff	1,216	428	559
Tax receivable agreement obligation reduction	(86,599)	—	—
Deferred taxes	102,973	13,313	3,985
Other	(4,577)	(1,070)	219
Changes in operating assets and liabilities:			
Securities borrowed	155,277	233,291	31,638
Securities purchased under agreements to resell	16,894	14,981	16,482
Receivables from broker dealers and clearing organizations	26,145	27,808	(88,884)
Trading assets, at fair value	1,210,599	(530,668)	247,094
Other Assets	44,494	772	(5,796)
Securities loaned	366,295	(302,400)	26,741
Securities sold under agreements to repurchase	(450,964)	—	(2,006)
Payables to broker dealers and clearing organizations	(516,376)	209,374	(199,599)
Trading liabilities, at fair value	(721,204)	370,065	(58,544)
Accounts payable and accrued expenses and other liabilities	17,860	(14,684)	(13,392)
Net cash provided by operating activities	290,574	239,599	260,280
<b>Cash flows from investing activities</b>			
Development of capitalized software	(14,158)	(8,404)	(8,028)
Acquisition of property and equipment	(18,932)	(11,859)	(16,271)
Investment in SBI Japannext	—	(38,754)	—
Acquisition of KCG Holdings, net of cash acquired, described in Note 3	(799,632)	—	—
Acquisition of Teza Technologies	(5,594)	—	—
Proceeds from sale of DMM business	300	—	—
Net cash used in investing activities	(838,016)	(59,017)	(24,299)
<b>Cash flows from financing activities</b>			
Distribution to members	—	—	(130,000)
Distribution from Virtu Financial to non-controlling interest	(89,563)	(162,969)	(81,377)
Dividends	(63,814)	(37,759)	(17,362)
Repurchase of Class A-2 interests	(11,143)	(2,000)	(2,097)
Repurchase of Class C common stock	—	(98)	—
Purchase of treasury stock	(2,683)	(4,539)	(3,819)
Short-term borrowings, net	7,000	(20,000)	45,000
Proceeds from long-term borrowings	1,115,036	75,753	—
Repayment of senior secured credit facility	(256,473)	(3,825)	(2,914)
Repayment of KCG Notes	(480,987)	—	—
Tax receivable agreement obligations	(7,045)	—	—
Debt issuance costs	(56,505)	(5,094)	(976)
Issuance of common stock, net of offering costs	735,974	—	327,366
Repurchase of Virtu Financial Units and corresponding number of Class A and C common stock in connection with secondary offering	—	—	(277,153)
Issuance of common stock in connection with secondary offering, net of offering costs	—	16,677	7,782
Repurchase of Virtu Financial Units and corresponding number of Class C common stock in connection with secondary offering	—	(17,383)	(8,805)
Net cash provided by (used in) financing activities	889,797	(161,237)	(144,355)
Effect of exchange rate changes on cash and cash equivalents	9,117	(1,165)	(4,255)
Net increase in cash and cash equivalents	351,472	18,180	87,371
Cash and cash equivalents beginning of period	181,415	163,235	75,864
Cash and cash equivalents, end of period	<u>\$ 532,887</u>	<u>\$ 181,415</u>	<u>\$ 163,235</u>
<b>Supplementary disclosure of cash flow information</b>			
Cash paid for interest	\$ 112,982	\$ 54,872	\$ 63,230
Cash paid for taxes	5,976	16,175	12,875
<b>Non-cash investing activities</b>			

Share based compensation to developers relating to capitalized software	1,605	2,750	11,278
See Note 3 for a description of non-cash investing activities relating to the acquisition of KCG			
<b>Non-cash financing activities</b>			
Tax receivable agreement described in Note 6	\$ 1,534	\$ 545	\$ (21,854)
Discount on issuance of senior secured credit facility	1,438	1,350	—
Secondary offerings described in Note 15	—	—	—

See accompanying notes to the consolidated financial statements.

**Virtu Financial, Inc. and Subsidiaries**

**Notes to Consolidated Financial Statements**

**(dollars in thousands, except shares and per share amounts, unless otherwise noted)**

**1. Organization and Basis of Presentation**

**Organization**

The accompanying consolidated financial statements include the accounts and operations of Virtu Financial, Inc. (“VFI” or, collectively with its wholly owned or controlled subsidiaries, the “Company”) beginning with its initial public offering (“IPO”) in April of 2015, along with the historical accounts and operations of Virtu Financial LLC (“Virtu Financial”) prior to the Company’s IPO. VFI is a Delaware corporation whose primary asset is its ownership interest in Virtu Financial, which it acquired pursuant to and subsequent to certain reorganization transactions (the “Reorganization Transactions”) consummated in connection with its IPO. As of December 31, 2017, VFI owned approximately 48.3% of the membership interests of Virtu Financial. VFI is the sole managing member of Virtu Financial and operates and controls all of the businesses and affairs of Virtu Financial and, through Virtu Financial and its subsidiaries (the “Group”), continues to conduct the business now conducted by such subsidiaries.

The Company is a leading financial firm that leverages cutting edge technology to deliver liquidity to the global markets and innovative, transparent trading solutions to its clients. The Company has broad diversification, in combination with its proprietary technology platform and low-cost structure, which enables the Company to facilitate risk transfer between global capital markets participants by supplying competitive liquidity and execution services while at the same time earning attractive margins and returns.

Virtu Financial was formed as a Delaware limited liability company on April 8, 2011 in connection with a corporate reorganization and acquisition of the outstanding equity interests of Madison Tyler Holdings, LLC (“MTH”), an electronic trading firm and market maker. In connection with the reorganization, the members of Virtu Financial’s predecessor entity, Virtu Financial Operating LLC (“VFO”), a Delaware limited liability company formed on March 19, 2008, exchanged their interests in VFO for interests in Virtu Financial and the members of MTH exchanged their interests in MTH for cash and/or interests in Virtu Financial.

On July 20, 2017 (the “Closing Date”), the Company completed the all-cash acquisition (the “Acquisition”) of KCG Holdings, Inc. (“KCG”). Pursuant to the terms of the Agreement and Plan of Merger, dated as of April 20, 2017 (the “Merger Agreement”), by and among the Company, Orchestra Merger Sub, Inc., a Delaware corporation and an indirect wholly-owned subsidiary of the Company (“Merger Sub”), and KCG Merger Sub merged with and into KCG (the “Merger”), with KCG surviving the Merger as a wholly owned subsidiary of the Company. The transaction will extend Virtu’s scaled operating model to KCG’s wholesale market making businesses and broaden the distribution of Virtu’s Execution Services to KCG’s extensive institutional client base. See Note 3 “Acquisition of KCG Holdings Inc.” for further details.

Virtu Financial’s principal subsidiaries include Virtu Financial BD LLC (“VFBD”) and Virtu Americas LLC (“VAL”), which are self-clearing U.S. broker-dealers, Virtu Financial Capital Markets LLC (“VFCM”), a U.S. broker-dealer, which self-clears its proprietary transactions and introduces the accounts of its affiliates and non-affiliated broker-dealers on an agency basis to other clearing firms that clear and settle transactions in those accounts. Virtu Financial Global Markets LLC (“VFGM”), a U.S. trading entity focused on futures and currencies, Virtu Financial Ireland Limited (“VFIL”), formed in Ireland, Virtu Financial Asia Pty Ltd (“VFAP”), formed in Australia, and Virtu Financial Singapore Pte. Ltd. (“VFSing”), formed in Singapore, each of which are trading entities focused on asset classes in their respective geographic regions.

On October 24, 2017, the Company announced it has entered into a definitive agreement to sell its fixed income trading venue, BondPoint, to Intercontinental Exchange (“ICE”). See Note 4 “Business Held for Sale” and Note 22

“Subsequent Events” for further details.

Prior to the Acquisition of KCG, the Company was managed and operated as one business, under one reportable segment. As a result of the acquisition of KCG, beginning in the third quarter of 2017 the Company has three operating segments: (i) Market Making; (ii) Execution Services; and (iii) Corporate. See Note 19 “Geographic Information and Business Segments” for a further discussion of the Company’s segments.

### **Basis of Consolidation and Form of Presentation**

These consolidated financial statements are presented in U.S. dollars and have been prepared pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (“SEC”) regarding financial reporting with respect to Form 10-K and accounting standards generally accepted in the United States of America (“U.S. GAAP”) promulgated in the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC” or the “Codification”). The consolidated financial statements of the Company include its equity interests in Virtu Financial, and its subsidiaries. The Company operates and controls all business and affairs of Virtu Financial and its operating subsidiaries indirectly through its equity interest in Virtu Financial.

Certain reclassifications have been made to the prior periods’ consolidated financial statements in order to conform to the current period presentation. Such reclassifications are immaterial to both current and all previously issued financial statements taken as a whole and have no effect on previously reported consolidated net income available to common stockholders.

The consolidated financial statements include the accounts of the Company and its majority and wholly owned subsidiaries. As sole managing member of Virtu Financial, the Company exerts control over the Group’s operations. The Company consolidates Virtu Financial and its subsidiaries’ financial statements and records the interests in Virtu Financial that the Company does not own as noncontrolling interests. All intercompany accounts and transactions have been eliminated in consolidation.

As discussed in Note 3 “Acquisition of KCG Holdings Inc.”, the Company is accounting for the acquisition of KCG under the acquisition method of accounting. Under the acquisition method of accounting, the assets and liabilities of KCG, as of July 20, 2017, were recorded at their respective fair values and added to the carrying value of the Company’s existing assets and liabilities. The reported financial condition, results of operations and cash flows of the Company for the periods following the Acquisition reflect KCG’s and the Company’s balances and reflect the impact of purchase accounting adjustments. As the Company is the accounting acquirer, the financial results for the year ended December 31, 2017 comprise the results of the Company for the entire applicable period and the results of KCG from Closing Date through December 31, 2017. All periods prior to the Closing Date comprise solely the results of the Company.

## **2. Summary of Significant Accounting Policies**

### **Use of Estimates**

The Company’s consolidated financial statements are prepared in conformity with U.S. GAAP, which require management to make estimates and assumptions regarding measurements including the fair value of trading assets and liabilities, goodwill and intangibles, compensation accruals, capitalized software, income tax, and other matters that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Accordingly, actual results could differ materially from those estimates.

### **Earnings Per Share**

Earnings per share (“EPS”) is calculated on both a basic and diluted basis. Basic EPS excludes dilution and is calculated by dividing income available to common stockholders by the weighted-average number of common shares

outstanding for the period. Diluted EPS is calculated by dividing the net income available for common stockholders by the diluted weighted average shares outstanding for that period. Diluted EPS includes the determinants of the basic EPS and, in addition, reflects the dilutive effect of shares of common stock estimated to be distributed in the future under the Company's share based compensation plans.

The Company grants restricted stock units ("RSUs"), which entitle recipients to receive nonforfeitable dividends during the vesting period on a basis equivalent to the dividends paid to holders of common stock. As a result, the unvested RSUs meet the definition of a participating security requiring the application of the two-class method. Under the two-class method, earnings available to common shareholders, including both distributed and undistributed earnings, are allocated to each class of common stock and participating securities according to dividends declared and participating rights in undistributed earnings, which may cause diluted EPS to be more dilutive than the calculation using the treasury stock method.

### **Cash and Cash Equivalents**

Cash and cash equivalents include money market accounts, which are payable on demand, and short-term investments with an original maturity of less than 90 days.

The Company maintains cash in bank deposit accounts that, at times, may exceed federally insured limits. The Company manages this risk by selecting financial institutions deemed highly creditworthy to minimize the risk.

### **Securities Borrowed and Securities Loaned**

The Company conducts securities borrowing and lending activities with external counterparties. In connection with these transactions, the Company receives or posts collateral, which comprises by cash and/or securities. In accordance with substantially all of its stock borrow agreements, the Company is permitted to sell or repledge the securities received. Securities borrowed or loaned are recorded based on the amount of cash collateral advanced or received. The initial cash collateral advanced or received generally approximates or is greater than 102% of the fair value of the underlying securities borrowed or loaned. The Company monitors the fair value of securities borrowed and loaned, and delivers or obtains additional collateral as appropriate. Receivables and payables with the same counterparty are not offset in the consolidated statements of financial condition. Interest received or paid by the Company for these transactions is recorded gross on an accrual basis under interest and dividends income or interest and dividends expense in the consolidated statements of comprehensive income.

### **Securities Purchased Under Agreements to Resell and Securities Sold Under Agreements to Repurchase**

In a repurchase agreement, securities sold under agreements to repurchase are treated as collateralized financing transactions and are recorded at contract value, plus accrued interest, which approximates fair value. It is the Company's policy that its custodian takes possession of the underlying collateral securities with a fair value approximately equal to the principal amount of the repurchase transaction, including accrued interest. For reverse repurchase agreements, the Company typically requires delivery of collateral with a fair value approximately equal to the carrying value of the relevant assets in the consolidated statements of financial condition. To ensure that the fair value of the underlying collateral remains sufficient, the collateral is valued daily with additional collateral obtained or excess collateral returned, as permitted under contractual provisions. The Company does not net securities purchased under agreements to resell transactions with securities sold under agreements to repurchase transactions entered into with the same counterparty.

The Company has also entered into bilateral and tri-party term and overnight repurchase and other collateralized financing agreements which bear interest at negotiated rates. The Company receives cash and makes delivery of financial instruments to a custodian who monitors the market value of these instruments on a daily basis. The market value of the instruments delivered must be equal to or in excess of the principal amount loaned under the repurchase agreements plus the agreed upon margin requirement. The custodian may request additional collateral, if appropriate. Interest received or paid by the Company for these transactions is recorded gross on an accrual basis under interest and dividends income or interest and dividends expense in the consolidated statements of comprehensive income.

## **Receivables from/Payables to Broker-dealers and Clearing Organizations**

Amounts receivable from broker-dealers and clearing organizations may be restricted to the extent that they serve as deposits for securities sold, not yet purchased. At December 31, 2017 and 2016, receivables from and payables to broker-dealers and clearing organizations primarily represented amounts due for unsettled trades, open equity in futures transactions, securities failed to deliver or failed to receive, deposits with clearing organizations or exchanges and balances due from or due to prime brokers in relation to the Company's trading. The Company presents its balances, including outstanding principal balances on all credit facilities, on a net by counterparty basis within receivables from and payable to broker-dealers and clearing organizations when the criteria for offsetting are met.

In the normal course of business, a significant portion of the Company's securities transactions, money balances, and security positions are transacted with several third-party brokers. The Company is subject to credit risk to the extent any broker with whom it conducts business is unable to fulfill contractual obligations on its behalf. The Company monitors the financial condition of such brokers and to minimize the risk of any losses from these counterparties.

## **Financial Instruments Owned Including Those Pledged as Collateral and Financial Instruments Sold, Not Yet Purchased**

Financial instruments owned and Financial instruments sold, not yet purchased relate to market making and trading activities, and include listed and other equity securities, listed equity options and fixed income securities.

The Company records financial instruments owned, including those pledged as collateral, and financial instruments sold, not yet purchased at fair value. Gains and losses arising from financial instrument transactions are recorded net on a trade-date basis in trading income, net, in the consolidated statements of comprehensive income.

## **Fair Value Measurements**

Fair value is defined as the price that would be received to sell an asset or would be paid to transfer a liability (i.e., the exit price) in an orderly transaction between market participants at the measurement date. Fair value measurements are not adjusted for transaction costs. The recognition of "block discounts" for large holdings of unrestricted financial instruments where quoted prices are readily and regularly available in an active market is prohibited. The Company categorizes its financial instruments into a three level hierarchy which prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy level assigned to each financial instrument is based on the assessment of the transparency and reliability of the inputs used in the valuation of such financial instruments at the measurement date based on the lowest level of input that is significant to the fair value measurement. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurement) and the lowest priority to unobservable inputs (level 3 measurements).

Financial instruments measured and reported at fair value are classified and disclosed in one of the following categories based on inputs:

Level 1 — Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2 — Quoted prices in markets that are not active and financial instruments for which all significant inputs are observable, either directly or indirectly; or

Level 3 — Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

Transfers in or out of levels are recognized based on the beginning fair value of the period in which they occurred.

### **Fair Value Option**

The fair value option election allows entities to make an irrevocable election of fair value as the initial and subsequent measurement attribute for certain eligible financial assets and liabilities. Unrealized gains and losses on items for which the fair value option has been elected are recorded in other, net in the consolidated statements of comprehensive income. The decision to elect the fair value option is determined on an instrument by instrument basis must be applied to an entire instrument and is irrevocable once elected.

### **Derivative Instruments**

Derivative instruments are used for trading purposes, including economic hedges of trading instruments, which are carried at fair value include futures, forward contracts, and options. Gains or losses on these derivative instruments are recognized currently within trading income, net in the consolidated statement of comprehensive income. Fair values for exchange-traded derivatives, principally futures, are based on quoted market prices. Fair values for over-the-counter derivative instruments, principally forward contracts, are based on the values of the underlying financial instruments within the contract. The underlying instruments are currencies, which are actively traded. The Company presents its derivatives balances on a net-by-counterparty basis when the criteria for offsetting are met.

### **Property, Equipment and Occupancy**

Property and equipment are carried at cost, less accumulated depreciation, except for the assets acquired in connection with the acquisitions of MTH and KCG which were recorded at fair value on the respective date of acquisitions. Depreciation is provided using the straight-line method over estimated useful lives of the underlying assets. Routine maintenance, repairs and replacement costs are expensed as incurred and improvements that appreciably extend the useful life of the assets are capitalized. When property and equipment are sold or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is recognized in income. Property and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the related carrying amount may not be recoverable. Furniture, fixtures, and equipment are depreciated over three to seven years. Leasehold improvements are amortized over the lesser of the life of the improvement or the term of the lease.

The Company recognizes rent expense under operating leases with fixed rent escalations, lease incentives and free rent periods on a straight-line basis over the lease term beginning on the date the Company takes possession of or controls the use of the space, including during free rent periods.

### **Lease Loss Accrual**

The Company's policy is to identify excess real estate capacity and where applicable, accrue for related future costs, net of projected sub-lease income upon the date the Company ceases to use the excess real estate, which is recorded under operating and administrative in the consolidated statements of comprehensive income. Such accrual is adjusted to the extent the actual terms of sub-leased property differ from the previous assumptions used in the calculation of the accrual.

### **Capitalized Software**

The Company capitalizes costs of materials, consultants, and payroll and payroll related costs for employees incurred in developing internal-use software. Costs incurred during the preliminary project and post-implementation stages are charged to expense.

Management's judgment is required in determining the point at which various projects enter the stages at which costs may be capitalized, in assessing the ongoing value of the capitalized costs, and in determining the estimated useful lives over which the costs are amortized.

Capitalized software development costs and related accumulated amortization are included in property,



equipment and capitalized software in the accompanying consolidated statements of financial condition and are amortized over a period of 1.5 to 2.5 years, which represents the estimated useful lives of the underlying software.

### **Goodwill**

Goodwill represents the excess of the purchase price over the underlying net tangible and intangible assets of the Company's acquisitions. Goodwill is not amortized but is tested for impairment on an annual basis and between annual tests whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Goodwill is tested at the reporting unit level, which is defined as an operating segment or one level below the operating segment.

The Company tests goodwill for impairment on an annual basis on July 1 and on an interim basis when certain events or circumstances exist. In the impairment test as of July 1, 2017, the primary valuation method used to estimate the fair value of the Company's reporting unit was the market capitalization approach based on the market price of its Class A common stock, which the Company's management believes to be an appropriate indicator of its fair value. Following the Acquisition, our impairment testing is performed for each reporting unit.

### **Intangible Assets**

The Company amortizes finite-lived intangible assets over their estimated useful lives. Finite-lived intangible assets are tested for impairment annually or when impairment indicators are present, and if impaired, they are written down to fair value.

### **Exchange Memberships and Stock**

Exchange memberships are recorded at cost or, if any other than temporary impairment in value has occurred, at a value that reflects management's estimate of fair value. Exchange memberships acquired in connection with the Acquisition were recorded at their fair value on the date of acquisition. Exchange stock includes shares that entitle the Company to certain trading privileges. The Company's exchange memberships and stock are included in intangibles in the consolidated statements of financial condition.

### **Trading Income, net**

Trading income is comprised of changes in the fair value of trading assets and liabilities (i.e., unrealized gains and losses) and realized gains and losses on trading assets and liabilities. Trading gains and losses on financial instruments owned and financial instruments sold, not yet purchased are recorded on the trade date and reported on a net basis in the consolidated statements of comprehensive income.

### **Commissions, net and Technology Services**

Commissions, net, which primarily comprise commissions and commission equivalents earned on institutional client orders, are recorded on a trade date basis. Under a commission management program, the Company allows institutional clients to allocate a portion of their gross commissions to pay for research and other services provided by third parties. As the Company acts as an agent in these transactions, it records such expenses on a net basis within Commissions and technology services in the consolidated statements of comprehensive income.

Technology services revenues consist of technology licensing fees and agency commission fees. Technology licensing fees are earned from third parties for licensing of the Company's proprietary risk management and trading infrastructure technology and the provision of associated management and hosting services. These fees include both upfront and annual recurring fees. Revenue from technology services is recognized once persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable and collectability is probable. Revenue is recognized ratably over the contractual service period.

### **Interest and Dividends Income/Interest and Dividends Expense**

Interest income and interest expense are accrued in accordance with contractual rates. Interest income consists of interest earned on collateralized financing arrangements and on cash held by brokers. Interest expense includes interest expense from collateralized transactions, margin and related lines of credit. Dividends on financial instruments owned including those pledged as collateral and financial instruments sold, not yet purchased are recorded on the ex-dividend date and interest is recognized on an accrual basis.

### **Brokerage, Exchange and Clearance Fees, Net**

Brokerage, exchange and clearance fees, net, comprise the costs of executing and clearing trades and are recorded on a trade date basis. Rebates consist of volume discounts, credits or payments received from exchanges or other market places related to the placement and/or removal of liquidity from the order flow in the marketplace. Rebates are recorded on an accrual basis and included net within brokerage, exchange and clearance fees in the accompanying consolidated statements of comprehensive income.

### **Payments for Order Flow**

Payments for order flow represent payments to broker-dealer clients, in the normal course of business, for directing their order flow in U.S. equities to the Company. Payments for order flow are recorded on a trade-date basis in the consolidated statements of comprehensive income.

### **Income Taxes**

Subsequent to consummation of the Reorganization Transactions and the IPO, the Company is subject to U.S. federal, state and local income taxes on its taxable income. The Company's subsidiaries are subject to income taxes in the respective jurisdictions (including foreign jurisdictions) in which they operate. Prior to the consummation of the Reorganization Transactions and the IPO, no provision for United States federal, state and local income tax was required, as Virtu Financial is a limited liability company and is treated as a pass-through entity for United States federal, state, and local income tax purposes.

The provision for income tax is comprised of current tax and deferred tax. Current tax represents the tax on current year tax returns, using tax rates enacted at the balance sheet date. The deferred tax assets are recognized in full and then reduced by a valuation allowance if it is more likely than not that some or all of the deferred tax assets will not be recognized.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the applicable taxing authority, including resolution of the appeals or litigation processes, based on the technical merits of the position. The tax benefits recognized in the consolidated financial statements from such a position are measured based on the largest benefit for each such position that has a greater than fifty percent likelihood of being realized upon ultimate resolution. Many factors are considered when evaluating and estimating the tax positions and tax benefits. Such estimates involve interpretations of regulations, rulings, case law, etc. and are inherently complex. The Company's estimates may require periodic adjustments and may not accurately anticipate actual outcomes as resolution of income tax treatments in individual jurisdictions typically would not be known for several years after completion of any fiscal year.

The 2017 Tax Act significantly changes how the U.S. taxes corporations. The 2017 Tax Act requires significant judgments to be made in interpretation of its provisions and significant estimates in calculations, and the preparation and analysis of information not previously relevant or regularly produced. The U.S. Treasury Department, the IRS, and other standard-setting bodies could interpret or issue guidance on how provisions of the 2017 Tax Act will be applied or otherwise administered that is different from our interpretation. As we complete our analysis of the 2017 Tax Act, collect and prepare necessary data, and interpret any additional guidance, we may make adjustments to provisional amounts that we have recorded that may materially impact our provision for income taxes in the period in which the adjustments are

made.

### **Comprehensive Income and Foreign Currency Translation**

Comprehensive income consists of two components: net income and other comprehensive income (“OCI”). The Company’s OCI is comprised of foreign currency translation adjustments. Assets and liabilities of operations having non-U.S. dollar functional currencies are translated at period-end exchange rates, and revenues and expenses are translated at weighted average exchange rates for the period. Gains and losses resulting from translating foreign currency financial statements, net of related tax effects, are reflected in accumulated other comprehensive income, a separate component of stockholders’ equity.

The Company’s foreign subsidiaries generally use the U.S. dollar as their functional currency. The Company also has subsidiaries that utilize a functional currency other than the U.S. dollar, primarily comprising its Irish subsidiaries, which utilizes the Euro as the functional currency.

The Company may seek to reduce the impact of fluctuations in foreign exchange rates on its net investment in certain non-U.S. operations through the use of foreign currency forward contracts. For foreign currency forward contracts designated as hedges, the Company assesses its risk management objectives and strategy, including identification of the hedging instrument, the hedged item and the risk exposure and how effectiveness is to be assessed prospectively and retrospectively. The effectiveness of the hedge is assessed based on the overall changes in the fair value of the forward contracts. For qualifying net investment hedges, any gains or losses, to the extent effective, are included in Accumulated other comprehensive income on the consolidated statements of financial condition and Cumulative translation adjustment, net of tax, on the consolidated statements of comprehensive income. The ineffective portion, if any, is recorded in Investment income and other, net on the consolidated statements of operations.

### **Share-Based Compensation**

The fair value of awards issued for compensation prior to the Reorganization Transactions and the IPO was determined by management, with the assistance of an independent third party valuation firm, using a projected annual forfeiture rate, where applicable, on the date of grant.

Share-based awards issued for compensation in connection with or subsequent to the Reorganization Transaction and the IPO pursuant to the VFI 2015 Management Incentive Plan (as amended, the “2015 Amended and Restated Management Incentive Plan”) were in the form of stock options, Class A common stock and RSUs. The fair value of the stock option grants is determined through the application of the Black-Scholes-Merton model. The fair value of the Class A common stock and RSUs are determined based on the volume weighted average price for the three days preceding the grant, and with respect to the RSUs, a projected annual forfeiture rate. The fair value of share-based awards granted to employees is expensed based on the vesting conditions and are recognized on a straight line basis over the vesting period. The Company records as treasury stock shares repurchased from its employees for the purpose of settling tax liabilities incurred upon the issuance of Class A common stock, the vesting of RSUs or the exercise of stock options.

### **Variable Interest Entities**

A variable interest entity (“VIE”) is an entity that lacks one or more of the following characteristics (i) the total equity investment at risk is sufficient to enable the entity to finance its activities independently and (ii) the equity holders have the power to direct the activities of the entity that most significantly impact its economic performance, the obligation to absorb the losses of the entity and the right to receive the residual returns of the entity.

The Company will be considered to have a controlling financial interest and will consolidate a VIE if it has both (i) the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and (ii) the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE.

In October 2016, the Company invested in a joint venture (“JV”) with nine other parties. One of the parties was KCG. Upon the Merger, KCG was required to relinquish their ownership in the JV. As of December 31, 2017, each of the remaining parties owns approximately 11% of the voting shares and 11% of the equity of this JV, which is building microwave communication networks in the U.S. and Asia, and which is considered to be a VIE. The Company and all of its JV partners each pay monthly fees for the funding of the construction of the microwave communication networks. When completed, this JV may sell excess bandwidth that is not utilized by its joint venture members to third parties.

As a result of the Acquisition, the Company owns 50% of the voting shares and 50% of the equity of a JV which maintains microwave communication networks in the U.S. and Europe, and which is considered to be a VIE. The Company and its JV partner each pay monthly fees for the use of the microwave communication networks in connection with their respective trading activities, and the JV may sell excess bandwidth that is not utilized by the JV members to third parties.

In each of the JVs, the Company does not have the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance; therefore it does not have a controlling financial interest in the JV and does not consolidate the JVs. The Company records its interest in each JV under the equity method of accounting and records its investment in the JVs within Other assets and its amounts payable for communication services provided by the JV within Accrued expenses and other liabilities on the consolidated statements of financial condition. The Company records its pro-rata share of each JVs earnings or losses within Other, net and fees related to the use of communication services provided by the JVs within Communications and data processing on the consolidated statements of comprehensive income.

The Company’s exposure to the obligations of these VIEs is generally limited to its interests in each respective JV, which is the carrying value of the equity investment in each JV.

The following table presents the Company’s nonconsolidated VIE at December 31, 2017:

(in thousands)	Carrying Amount		Maximum Exposure to loss	VIE's assets
	Asset	Liability		
Equity investment	\$ 18,799	\$ —	\$ 18,799	\$ 41,936

### Recent Accounting Pronouncements

**Revenue** - In May 2014, the FASB issued Accounting Standard Update (“ASU”) 2014-09, *Revenue from Contracts with Customers*. ASU 2014-09 is a comprehensive new revenue recognition model that requires a company to recognize revenue to depict the transfer of goods or services to a customer at an amount that reflects the consideration it expects to receive in exchange for those goods or services. ASU 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. In August 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*. ASU 2015-14 defers the effective date of ASU 2014-09 by one year for public companies. ASU 2015-14 applies to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. In December 2016, FASB issued ASU 2016-20 *Technical Correction and Improvement (Topic 606): Revenue from Contracts with Customers*, which amends the guidance in ASU 2014-09. The effective date and transition requirements for the ASU are the same as ASU 2014-09. The Company adopted the new revenue standard on January 1, 2018 by applying the modified retrospective method, which did not result in a transition adjustment. The new standard does not apply to revenue associated with financial instruments that are accounted for under other GAAP, and as a result, did not have an impact on the Company’s consolidated statements of comprehensive income, most closely associated with financial instrument, including Trading income, net, and Interest and dividends income. The new revenue standard primarily impacts the revenue recognition and accounting policy related to technology services. The Company’s technology services contracts include certain variable considerations which will be estimated and included in the transaction price only to the extent that it is probable when a significant reversal in the amount of the cumulative revenue recognized will occur in the future period. The new revenue standard requires enhanced disclosures, which the Company

will include in the notes to the condensed consolidated financial statements beginning with the three months ended March 31, 2018.

**Financial Assets and Liabilities** — In January 2016, the FASB issued ASU 2016-01, *Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. The ASU intends to enhance the reporting model for financial instruments to provide users of financial statements with more decision-useful information and addresses certain aspects of the recognition, measurement, presentation, and disclosure of financial instruments. The new ASU affects all entities that hold financial assets or owe financial liabilities and is effective for annual reporting periods (including interim periods) beginning after December 15, 2017. The Company does not expect the adoption of ASU 2016-01 to have a material impact on its consolidated financial statements, as it does not currently classify any equity securities as available for sale, and it does not apply the fair value option to its own debt issuances.

**Leases** — In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. Under the new ASU, a lessee will be required to recognize assets and liabilities for leases with lease terms of more than 12 months. The liability will be equal to the present value of the future lease payments. The asset, referred to as a “right-of-use asset” will be based on the liability, subject to adjustment, such as for initial direct costs. For income statement purposes, leases will be classified as either operating or finance. Operating leases will result in straight-line expense (similar to current operating leases) while finance leases will result in a front-loaded expense pattern (similar to current capital leases). Classification will be based on criteria that are largely similar to those applied in current lease accounting, but without explicit bright lines. New quantitative and qualitative disclosures, including significant judgments made by management, will be required to provide greater information regarding the extent of revenue and expense recognized and expected to be recognized from existing contracts. The standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. . The Company anticipates adopting this ASU on January 1, 2019. The Company is not anticipating recognizing lease assets and lease liabilities for leases with a term of twelve months or less. As of December 31, 2017, the Company has not yet identified any significant changes in the timing of operating leases recognition when considering this ASU, but the Company’s implementation efforts are ongoing and such assessments may change prior to the January 1, 2019, anticipated implementation date. Upon adoption of this ASU, the Company expects to report increased assets and liabilities on its consolidated statement of financial condition as a result of recognizing right-of-use assets and lease liabilities related to certain equipment under noncancelable operating lease agreements, which currently are not reflected in its consolidated statement of financial condition.

**Statement of Cash Flows** – In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*. The ASU intended to reduce diversity in practice how certain transactions are classified in the statement of cash flows by mandating classification of certain activities. The ASU is effective for annual periods beginning after December 15, 2017, and interim periods within those annual periods. The Company has adopted this ASU, and it does not have a material impact on its consolidated financial statements.

**Income Taxes** – In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 749): Intra-Entity Transfers of Assets Other Than Inventory*. The ASU requires the reporting entity to recognize the tax expense from the sale of an asset in the seller’s tax jurisdiction when the transfer occurs, even though the pre-tax effects of the transactions are eliminated in consolidation. Any deferred tax asset that arises in the buyer’s jurisdiction would also be recognized at the time of the transfer. The ASU is effective for annual periods beginning after December 15, 2018, and interim reporting periods within annual reporting periods beginning after December 15, 2019. The Company is currently evaluating the potential effects of adoption of ASU 2016-16 on the Company’s consolidated financial statements.

**Restricted cash** – In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flow (Topic 230): Restricted Cash*, which is intended to reduce diversity in the presentation of restricted cash and restricted cash equivalent in the statements. The statement requires that restricted cash and restricted cash equivalents be included as components of total cash and cash equivalents as presented on the statement of cash flows. This ASU is effective for annual reporting periods beginning after December 15, 2017, and interim periods within those fiscal years. The Company elected to early adopt this ASU effective June 30, 2017.

**Accounting Changes** – In January 2017, the FASB issued ASU 2017-03, Accounting Changes and Error Correction (Topic 250) and Investments – Equity Method and Joint Ventures (Topic 323), which amends SEC Paragraphs Pursuant to Staff Announcements at the September 22, 2016 and November 17, 2016 EITF Meetings (SEC update). The SEC staff view is that a registrant should evaluate the impact of new accounting standards that have not yet been adopted to determine the appropriate financial disclosures on the potential material effects, especially on new standards on revenue recognition, leases, and financial instruments – credit losses. If a registrant cannot reasonably estimate the impact that adoption of the ASUs, the registrant should consider additional qualitative financial statement disclosures to assist the reader in assessing the significance of the impact. Additional qualitative disclosures should include a description of the effect of the accounting policies expected to be applied compared to current accounting policies. Furthermore, the registrant should describe the status of its process to implement the new standards and the significant implementation matters yet to be addressed. The Company adopted this ASU on January 1, 2017, and appropriate disclosures have been included in this Note for each recently issued accounting standard.

**Goodwill** - In January, 2017, the FASB issued ASU 2017-04, *Intangibles—Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment*. To simplify the subsequent measurement of goodwill, this ASU eliminated Step 2 from the goodwill impairment test. (In computing the implied fair value of goodwill under Step 2, an entity had to perform procedures to determine the fair value at the impairment testing date of its assets and liabilities (including unrecognized assets and liabilities) following the procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. Instead, under this ASU, an entity should perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. This ASU also eliminated the requirements for any reporting unit with a zero or negative carrying amount to perform a qualitative assessment and, if it fails that qualitative test, to perform Step 2 of the goodwill impairment test. This ASU is effective for public entities in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company does not expect the adoption of this ASU to have a material impact on the its consolidated financial statements.

**Business Combinations** - In January 2017, the FASB issued ASU 2017-01, Business Combinations (Topic 805), Clarifying the Definition of a Business, to amend the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The ASU is effective for reporting periods beginning after December 15, 2017. The impact of this ASU will depend on the nature of the Company's activities after adoption.

### 3. Acquisition of KCG Holdings, Inc.

As of the Closing Date of the Acquisition, each of KCG's issued and outstanding shares of Class A common stock, par value \$0.01 per share were cancelled and extinguished and converted into the right to receive \$20.00 in cash, without interest, less any applicable withholding taxes.

On the Closing Date, and in connection with the financing of the Acquisition, as described in Note 10, "Borrowings", the Company issued to Aranda Investments Pte. Ltd. ("Aranda"), an affiliate of Temasek Holdings (Private) Limited ("Temasek"), 6,346,155 shares of the Company's Class A common stock, pursuant to the investment agreement with Aranda (as amended, the "Aranda Investment Agreement") for an aggregate purchase price of approximately \$99.0 million. On August 10, 2017, the Company issued an additional 1,666,666 shares of its Class A common stock for an aggregate purchase price of \$26.0 million (collectively, the "Temasek Investment").

On the Closing Date, and in connection with the financing of the Acquisition, the Company issued to North Island Holdings I, LP ("NIH") 39,725,979 shares of the Company's Class A common stock for an aggregate purchase price of approximately \$613.5 million. On August 10, 2017 the Company issued an additional 338,124 shares of its Class A common stock for an aggregate purchase price of \$5.2 million (collectively, the "NIH Investment"). In connection with the Temasek Investment and NIH Investment, the Company incurred approximately \$7.8 million in fees which were recorded as a reduction to additional paid-in capital.

On July 21, 2017, the outstanding 6.875% Senior Secured Notes due 2020 issued by KCG were redeemed at a redemption price equal to 103.438% of the \$465.0 million principal amount, plus accrued and unpaid interest. The redemption was pursuant to the indenture, dated as of March 13, 2015 (as amended, restated, supplemented or otherwise modified), by and among KCG, the subsidiary guarantors party thereto and The Bank of New York Mellon, as trustee and collateral agent.

#### *Accounting treatment of the Acquisition*

The Acquisition is accounted for as a purchase of KCG by the Company, pursuant to provisions of ASC 805, *Business Combinations*. Under the acquisition method of accounting, the assets and liabilities of KCG, as of July 20, 2017, were recorded at their respective fair values and added to the carrying value of the Company's existing assets and liabilities. These fair values were determined with the assistance of third party valuation professionals. The reported financial condition, results of operations and cash flows of the Company for the periods following the Acquisition reflect KCG's and the Company's balances and reflect the impact of purchase accounting adjustments. As the Company is the accounting acquirer, the financial results for the year ended December 31, 2017 comprise the results of the Company for the entire applicable period and the results of KCG from Closing Date through December 31, 2017. All periods prior to 2017 comprise solely the results of the Company.

Certain former KCG management employees were terminated upon the Acquisition, and as a result were paid an aggregate of \$6.4 million pursuant to their existing employment contracts. This amount has been recognized as an expense by the Company and is included in Employee compensation and payroll taxes in the consolidated statements of comprehensive income for the year ending December 31, 2017. The Company also expects to make annual incentive compensation payments to former KCG employees who became employees of the Company following the Merger, and accrued related compensation expense of approximately \$35.3 million during the year ended December 31, 2017, which is included in Employee compensation and payroll taxes in the consolidated statements of comprehensive income.

#### *Purchase price and goodwill*

The aggregate cash purchase price of \$1.40 billion was determined as the sum of the fair value, at \$20.00 per share, of KCG shares and warrants outstanding to former KCG stockholders at closing and the fair value of KCG employee stock based awards that were outstanding, and which vested at the Closing Date.

The purchase price has been allocated to the assets acquired and liabilities assumed using their estimated fair values at the Closing Date of the Acquisition. Although the Company has substantially completed its analysis to record the allocation of the purchase price to the KCG acquired assets and liabilities, the allocation of the purchase price may be modified over the measurement period, which does not exceed twelve months from the Closing Date, as more information is obtained about the fair values of assets acquired and liabilities assumed. Adjustments to the provisional values during the measurement period will be recorded in the reporting period in which the adjustment amounts are determined. The Company has engaged third party specialists for the purchase price allocation.

During the quarter ended December 31, 2017, the Company recorded adjustments to its initial fair value estimates in the Acquisition. Among the adjustments recorded, the fair value of acquired intangible assets and property, equipment and capitalized software were increased by \$18.7 million and \$2.2 million, respectively, and other assets, primarily income taxes receivable, decreased by \$8.6 million. Cash and securities segregated under federal regulations of \$3.0 million was reclassified into cash and equivalents, and payables to customers of \$17.6 million were reclassified to accounts payable and accrued expenses and other liabilities. Deferred tax assets were adjusted to account for the effects of the aforementioned adjustments, and goodwill decreased by \$14.7 million as a result of these adjustments.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the Closing Date:

(in thousands)	September 30, 2017	Measurement Period	December 31, 2017
Cash and equivalents	\$ 592,993	\$ 2,676	\$ 595,669
Cash and securities segregated under federal regulations	3,000	(3,000)	-
Securities borrowed	1,406,444	-	1,406,444
Securities purchased under agreements to resell	16,894	-	16,894
Receivables from broker dealers and clearing organizations	553,031	(211)	552,820
Financial instruments owned, at fair value	2,095,339	-	2,095,339
Property, equipment and capitalized software	112,204	2,163	114,367
Intangibles	156,300	18,695	174,995
Deferred tax assets	22,928	980	23,908
Other assets	331,820	(8,636)	323,184
<b>Total Assets</b>	<b>\$ 5,290,953</b>	<b>\$ 12,667</b>	<b>\$ 5,303,620</b>
Securities loaned	\$ 166,189	-	\$ 166,189
Securities sold under agreements to repurchase	841,606	-	841,606
Payables to broker dealers and clearing organizations	536,653	-	536,653
Payables to customers	17,583	(17,583)	-
Financial instruments sold, not yet purchased, at fair value	1,756,647	-	1,756,647
Accounts payable and accrued expenses and other liabilities	239,004	15,524	254,528
Debt	480,987	-	480,987
<b>Total Liabilities</b>	<b>\$ 4,038,669</b>	<b>\$ (2,059)</b>	<b>\$ 4,036,610</b>
<b>Total identified assets acquired, net of assumed liabilities</b>	<b>\$ 1,252,284</b>	<b>\$ 14,726</b>	<b>\$ 1,267,010</b>
Goodwill	\$ 143,012	\$ (14,726)	\$ 128,286
<b>Total Purchase Price</b>	<b>\$ 1,395,296</b>	<b>\$ -</b>	<b>\$ 1,395,296</b>



Amounts allocated to intangible assets, the amortization period and goodwill were as follows

<b>(in thousands)</b>	<b>Amount</b>	<b>Amortization Years</b>
Technology	\$ 67,700	1-6 years
Customer relationships	94,000	13 - 17 years
Trade names	1,000	10 years
Favorable leases	5,895	2-15 years
Exchange memberships	6,400	Indefinite
Intangible assets	\$ 174,995	
Goodwill	128,286	
Total	<u>\$ 303,281</u>	

Of the total Goodwill of \$128.3 million, \$96.2 million has been assigned to the Market Making segment and \$32.1 million has been assigned to the Execution Services segment. Such goodwill is attributable to the expansion of products offerings and expected synergies of the combined workforce, products and technologies of the Company and KCG.

#### *Tax treatment of the Acquisition*

The Company believes that the Acquisition will be treated as a tax-free transaction to the Company that does not result in a step up in tax basis in the acquired assets and, therefore, KCG's tax basis in its assets and liabilities generally carries over to the Company following the Acquisition. None of the goodwill is expected to be deductible for tax purposes.

The Company recorded net deferred tax assets of \$23.9 million with respect to recording KCG's assets and liabilities under the purchase method of accounting as described above as well as recording the value of other tax attributes acquired as a result of the Acquisition, as described in Note 13 "Income Tax".

#### *Pro forma results*

Included in the Company's results for the year ended December 31, 2017 are results from the business acquired as a result of the Acquisition, from the Closing Date through December 31, 2017 as follows:

<b>(in thousands)</b>		
Revenues	\$	379,203
Income before income taxes and noncontrolling interest		14,340

The financial information in the table below summarizes the combined pro forma results of operations of the Company and KCG, based on adding the pre-tax historical results of KCG and the Company, and adjusting primarily for amortization of intangibles created in the Acquisition, debt raised in conjunction with the Acquisition and nonrecurring costs associated with the Acquisition, which comprise advisory and other professional fees incurred by the Company and KCG of \$24.2 and \$22.5 million, respectively. The pro forma data assumes all of KCG's issued and outstanding shares of Class A common stock, par value \$0.01 per share were cancelled and extinguished and converted into the right to receive \$20.00 in cash, without interest, less any applicable withholding taxes on January 1, 2016 and does not include adjustments to reflect the Company's operating costs or expected differences in the way funds generated by the Company are invested.

This pro forma financial information is based on estimates and assumptions that have been made solely for purposes of developing such pro forma information, including, without limitation, preliminary purchase accounting adjustments. The pro forma financial information does not reflect any synergies or operating cost reductions that may be achieved from the combined operations. The pro forma financial information combines the historical results for the Company and KCG for the years ended December 31, 2017 and 2016:

(in thousands, except per share amounts)	For the Years Ended	
	2017	2016
Revenue	\$ 1,528,588	\$ 2,153,008
Net income (loss)	(14,151)	443,101
Net income (loss) attributable to common stockholders	(5,219)	163,407

#### 4. Business Held for Sale

In October 2017, the Company entered into an Asset Purchase Agreement (the "BondPoint Agreement") with ICE pursuant to which the Company has agreed to sell specified assets and to assign specified liabilities constituting its BondPoint division and fixed income venue ("BondPoint"). BondPoint is a provider of electronic fixed income trading solutions for the buy-side and sell-side offering access to centralized liquidity and automated trade execution services, and is included in the Company's Execution Services segment, see Note 19 "Geographic Information and Business Segments".

The purchase price payable by ICE for BondPoint at the closing of the transaction is \$400.0 million in cash subject to a customary adjustment for working capital of BondPoint. The consummation of the transaction is subject to the satisfaction of customary closing conditions and receipt of certain regulatory clearances, including from the Financial Industry Regulatory Authority, Inc. and the Municipal Securities Rulemaking Board and the expiration or termination of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

The BondPoint Agreement contains customary representations, warranties, covenants and indemnification provisions. The parties have agreed to execute a transition services agreement simultaneously with the closing of the transaction. The transaction closed on January 2, 2018, which is further discussed in Note 22 "Subsequent Events".

The assets and liabilities of businesses held for sale as of December 31, 2017 are summarized as follows:

(in thousand)	
Receivables from broker dealers and clearing organizations	\$ 3,383
Intangibles	
Technology	5,982
Customer relationships	43,819
Trade names	955
Capitalized software	518
Other assets	413
Total assets	<u>\$ 55,070</u>
Payable to brokers, dealers and clearing organizations	\$ 50
Accrued expenses and other liabilities	678
Total liabilities	<u>\$ 728</u>

The total assets and total liabilities are included in assets of business held for sale and accounts payables and accrued expenses and other liabilities, respectively, on the Company's consolidated statement of financial condition.

## 5. Earnings per Share

The below table contains a reconciliation of net income before noncontrolling interest to net income available for common stockholders:

(in thousands)	For the Year ended December 31		
	2017	2016	2015
Income before income taxes and noncontrolling interest	\$ 113,164	\$ 179,591	\$ 215,929
Provision for income taxes	94,266	21,251	18,439
Net income	18,898	158,340	197,490
Net income allocable to members of Virtu Financial (for the period January 1, 2015 through April 15, 2015)	—	—	(83,147)
Noncontrolling interest	(15,959)	(125,360)	(93,456)
Net income available for common stockholders	<u>\$ 2,939</u>	<u>\$ 32,980</u>	<u>\$ 20,887</u>

The calculation of basic and diluted earnings per share is presented below:

(in thousands, except for share or per share data)	For the Year Ended December 31,		
	2017	2016	2015
Basic earnings per share:			
Net income available for common stockholders	\$ 2,939	\$ 32,980	\$ 20,887
Less: Dividends and undistributed earnings allocated to participating securities	(1,326)	(809)	—
Net income available for common stockholders, net of dividends and undistributed earnings allocated to participating securities	1,613	32,171	20,887
Weighted average shares of common stock outstanding:			
Class A	62,579,147	38,539,091	34,964,312
Basic Earnings per share	<u>\$ 0.03</u>	<u>\$ 0.83</u>	<u>\$ 0.60</u>

(in thousands, except for share or per share data)	For the Year Ended December 31,		
	2017	2016	2015
Diluted earnings per share:			
Net income available for common stockholders, net of dividends and undistributed earnings allocated to participating securities	\$ 1,613	\$ 32,171	\$ 20,887
Weighted average shares of common stock outstanding:			
Class A			
Issued and outstanding	62,579,147	38,539,091	34,964,312
Issuable pursuant to 2015 Management Incentive Plan(1)	—	—	375,273
	62,579,147	38,539,091	35,339,585
Diluted Earnings per share	\$ 0.03	\$ 0.83	\$ 0.59

(1) The dilutive impact of unexercised stock options excludes from the computation of EPS 1,740,630, 743,096 and 0 options for the years ended December 31, 2017, 2016 and 2015, respectively, because inclusion of the options would have been anti-dilutive.

## 6. Tax Receivable Agreements

In connection with the IPO and the Reorganization Transactions, the Company entered into tax receivable agreements to make payments to certain Virtu Members, as defined in Note 15 “Capital Structure”, that are generally equal to 85% of the applicable cash tax savings, if any, that the Company actually realizes as a result of favorable tax attributes that were and will continue to be available to the Company as a result of the Reorganization Transactions, exchanges of membership interests for Class A common stock or Class B common stock and payments made under the tax receivable agreements. Payments will occur only after the filing of the U.S. federal and state income tax returns and realization of the cash tax savings from the favorable tax attributes. The first payment was due 120 days after the filing of the Company’s tax return for the year ended December 31, 2015, which was due March 15, 2016, but the due date was extended until September 15, 2016. Future payments under the tax receivable agreements in respect of subsequent exchanges would be in addition to these amounts. The Company made its first payment of \$7.0 million in February 2017.

As a result of (i) the purchase of equity interests in Virtu Financial from certain Virtu Members in connection with the Reorganization Transactions, (ii) the purchase of non-voting common interest units in Virtu Financial (the “Virtu Financial Units”) (along with the corresponding shares of Class C common stock) from certain of the Virtu Members in connection with the IPO, (iii) the purchase of Virtu Financial Units (along with the corresponding shares of Class C common stock) and the exchange of Virtu Financial Units (along with the corresponding shares of Class C common stock) for shares of Class A common stock in connection with the Secondary Offerings, the Company recorded a deferred tax asset of \$220.8 million associated with the increase in tax basis that results from such events. Payments to certain Virtu Members in respect of the purchases were expected to range from approximately \$0.3 million to \$12.8 million per year over the next 15 years. The corresponding deduction to additional paid-in capital was approximately \$19.9 million for the difference between the tax receivable agreements liability and the related deferred tax asset.

In connection with the February 2017, May 2017, August 2017 and November 2017 employee exchanges (as described in Note 15 “Capital Structure”), the Company recorded an additional deferred tax asset of \$10.8 million and payment liability pursuant to the tax receivable agreements of \$9.3 million, with the \$1.5 million difference recorded as an increase to additional paid-in capital.

As a result of the reduction in the U.S. federal income tax rate as described below, the aforementioned deferred tax asset and related payment liability were subsequently reduced as described below. The amounts recorded as of December 31, 2017 are based on best estimates available at the respective dates and may be subject to change after the filing of the Company’s U.S. federal and state income tax returns for the years in which tax savings were realized.

On December 22, 2017, the Tax Cuts and Jobs Act (“2017 Tax Act”) was signed into law. This act includes, among other items, a permanent reduction to the U.S. corporate income tax rate from 35% to 21% effective January 1, 2018 as further described in Note 13 “Income Taxes”. As a result, at December 31, 2017, the Company recorded a reduction of its tax receivable agreement obligation of \$86.6 million which is included in other, net in the consolidated statement of operations for the year ended December 31, 2017. As further described in Note 13 “Income Taxes”, the Company also recorded a reduction of its deferred tax assets, including deferred tax assets relating to the deferred tax assets described above. At December 31, 2017 and December 31, 2016, the Company’s remaining deferred tax assets were approximately \$101.6 million and \$185.7 million, respectively, and the Company’s payment liabilities pursuant to the tax receivable agreements were approximately \$147.0 million and \$231.4 million, respectively.

For the tax receivable agreements discussed above, the cash savings realized by the Company are computed by comparing the actual income tax liability of the Company to the amount of such taxes the Company would have been required to pay had there been (i) no increase to the tax basis of the assets of Virtu Financial as a result of the purchase or exchange of Virtu Financial Units, (ii) no tax benefit from the tax basis in the intangible assets of Virtu Financial on the date of the IPO and (iii) no tax benefit as a result of the Net Operating Losses (“NOLs”) and other tax attributes of Virtu Financial. Subsequent adjustments of the tax receivable agreements obligations due to certain events (e.g., changes to the expected realization of NOLs or changes in tax rates) will be recognized within income before taxes and noncontrolling interests in the consolidated statements of comprehensive income.

## 7. Goodwill and Intangible Assets

Prior to the Acquisition, the Company was managed and operated as one business, and accordingly, operated under one reportable segment. As a result of the acquisition of KCG, beginning in the third quarter of 2017 the Company has three operating segments: (i) Market Making; (ii) Execution Services; and (iii) Corporate. The Company allocated goodwill to the new reporting units using a relative fair value approach. In addition, the Company performed an assessment of potential goodwill impairment for all reporting units immediately prior to the reallocation and determined that no impairment was indicated.

The following table presents the details of goodwill by segment:

(in thousands)	Market Making	Execution Services	Corporate	Total
Balance as of December 31, 2016	\$ 657,985	\$ 57,394	\$ —	\$ 715,379
Additions	97,307	32,197	—	129,504
Balance as of December 31, 2017	\$ 755,292	\$ 89,591	\$ —	\$ 844,883

On May 3, 2017, the Company completed the acquisition of certain legal entities that owned select strategic telecommunications assets from Teza Technologies. The total purchase price incurred was \$5.6 million, of which \$1.2 million was recorded as goodwill, and \$2.0 million was recorded as intangible assets. This acquisition was accounted for as a business combination.

As described in Note 3 “Acquisition of KCG Holdings, Inc.”, on July 20, 2017 the Company completed the acquisition of KCG. The aggregate cash purchase price of \$1.40 billion has been allocated to the assets acquired and liabilities assumed using their estimated fair values at the Closing Date of the Acquisition. The Company has allocated \$128.3 million and \$175.0 million to goodwill and identified intangible assets, respectively.

As of December 31, 2017 and December 31, 2016, the Company’s total amount of goodwill recorded was \$844.9 million and \$715.4 million, respectively. No goodwill impairment was recognized in the years ended December 31, 2017 and 2016.

As described in Note 4 “Business Held for Sale”, the Company reclassified net assets related to the BondPoint

Sale to Business held for sale on the consolidated statement of financial condition as of December 31, 2017. An aggregated net carrying amount of \$50.8 million ( \$53.7 million of gross carrying amount net of \$2.9 million accumulated amortization from the period between the Closing Date of the Acquisition of KCG to December 31, 2017) was reclassified from intangible assets to Business held for sale.

Acquired intangible assets consisted of the following as of December 31, 2017 and December 31, 2016:

(in thousands)	As of December 31, 2017			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Useful Lives (Years)
Purchased technology	\$ 110,000	\$ 110,000	\$ —	1.4 to 2.5
ETF issuer relationships	950	559	391	9
ETF buyer relationships	950	559	390	9
Leases	1,800	397	1,403	3
FCC licenses	200	19	181	7
Technology	60,000	9,644	50,356	1 to 6
Customer relationships	49,000	1,822	47,178	12 to 17
Favorable occupancy leases	5,895	408	5,487	7
Exchange memberships	5,838	—	5,838	Indefinite
	<u>\$ 234,633</u>	<u>\$ 123,408</u>	<u>\$ 111,224</u>	

(in thousands)	As of December 31, 2016			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Useful Lives (Years)
Purchased technology	\$ 110,000	\$ 110,000	\$ —	1.4 to 2.5
ETF issuer relationships	950	454	496	9
ETF buyer relationships	950	454	496	9
	<u>\$ 111,900</u>	<u>\$ 110,908</u>	<u>\$ 992</u>	

Amortization expense relating to finite-lived intangible assets was approximately \$15.4 million, \$0.2 million, and \$0.2 million for the years ended December 31, 2017, 2016, and 2015, respectively. This is included in amortization of purchased intangibles and acquired capitalized software in the accompanying consolidated statements of comprehensive income.

## 8. Receivables from/Payables to Broker-Dealers and Clearing Organizations

The following is a summary of receivables from and payables to brokers-dealers and clearing organizations at December 31, 2017 and December 31, 2016:

(in thousands)	2017	2016
<b>Assets</b>		
Due from prime brokers	\$ 219,573	\$ 91,476
Deposits with clearing organizations	112,847	21,995
Net equity with futures commission merchants	203,711	213,030
Unsettled trades with clearing organization	173,778	44,312
Securities failed to deliver	248,088	77,915
Commissions and fees	14,021	—
Total receivables from broker-dealers and clearing organizations	<u>\$ 972,018</u>	<u>\$ 448,728</u>
<b>Liabilities</b>		
Due to prime brokers	\$ 197,439	\$ 227,335
Net equity with futures commission merchants	44,526	38,838
Unsettled trades with clearing organization	420,029	429,800
Securities failed to receive	51,143	5
Commissions and fees	3,068	—
Total payables to broker-dealers and clearing organizations	<u>\$ 716,205</u>	<u>\$ 695,978</u>

Included as a deduction from “Due from prime brokers” and “Net equity with futures commission merchants” is the outstanding principal balance on all of the Company’s short-term credit facilities (described in Note 9 “Collateralized Transactions”) of approximately \$205.7 million and \$309.1 million as of December 31, 2017 and 2016, respectively. The

loan proceeds from the credit facilities are available only to meet the initial margin requirements associated with the Company's ordinary course futures and other trading positions, which are held in the Company's trading accounts with an affiliate of the respective financial institutions. The credit facilities are fully collateralized by the Company's trading accounts and deposit accounts with these financial institutions. "Securities failed to deliver" and "Securities failed to receive" include amounts with a clearing organization and other broker-dealers.

## 9. Collateralized Transactions

The Company is permitted to sell or repledge securities received as collateral and use these securities to secure repurchase agreements, enter into securities lending transactions or deliver these securities to counterparties or clearing organizations to cover short positions. At December 31, 2017 and December 31, 2016, substantially all of the securities received as collateral have been repledged. The fair value of the collateralized transactions at December 31, 2017 and December 31, 2016 are summarized as follows:

(in thousands)	2017	2016
<b>Securities received as collateral:</b>		
Securities borrowed	\$ 1,415,793	\$ 213,203
	<u>\$ 1,415,793</u>	<u>\$ 213,203</u>

In the normal course of business, the Company pledges qualified securities with clearing organizations to satisfy daily margin and clearing fund requirements.

Financial instruments owned and pledged, where the counterparty has the right to repledge, at December 31, 2017 and December 31, 2016 consisted of the following:

(in thousands)	2017	2016
Equities	\$ 586,251	\$ 128,202
U.S. and Non-U.S. government obligations	99	—
Exchange traded notes	8,693	15,681
	<u>\$ 595,043</u>	<u>\$ 143,883</u>

## 10. Borrowings

### Broker-Dealer Credit Facilities

The Company is a party to two secured credit facilities with a financial institution to finance overnight securities positions purchased as part of its ordinary course broker-dealer market making activities. One of the facilities (the "Uncommitted Facility"), is provided on an uncommitted basis collateralized by one of the Company's broker-dealer subsidiaries trading and deposit account with the financial institution.

On November 3, 2017, the Company entered the second credit facility ("Revolving Credit Facility") with the same financial institution for an aggregated borrowing limit of \$500.0 million. The Revolving Credit Facility consists two borrowing bases: Borrowing Base A Loan is to be used to finance the purchase and settlement of securities; Borrowing Base B Loan is to be used to fund margin deposit with the NSCC. Each of the three broker-dealers has a sublimit under Borrowing Base A Loan, from \$25.0 million to \$500.0 million, which bears interest at the adjusted LIBOR or base rate plus 1.25% per annum. Two out of the three broker-dealers have sublimit under Borrowing Base B Loan, from \$40.0 million to \$100.0 million, which bears interest at the adjusted LIBOR or base rate plus 2.50% per annum. A commitment fee of 0.50% per annum on the average daily unused portion of this facility is payable quarterly in arrears.

The following summarizes the Company's broker-dealer credit facilities carrying value, net of unamortized debt issuance costs, where applicable:

At December 31, 2017					
(in thousands)	Interest Rate	Financing Available	Outstanding Principal	Deferred Debt Issuance Cost	Outstanding Borrowings, net
<b>Broker-dealer credit facilities:</b>					
Uncommitted facility	2.42%	\$ 150,000	\$ 25,000	\$ —	\$ 25,000
Revolving credit facility	2.81%	500,000	7,000	(4,117)	2,883
		<u>\$ 650,000</u>	<u>\$ 32,000</u>	<u>\$ (4,117)</u>	<u>\$ 27,883</u>

At December 31, 2016					
(in thousands)	Interest Rate	Financing Available	Borrowing Outstanding	Deferred Debt Issuance Cost	Outstanding Borrowings, net
<b>Broker-dealer credit facilities:</b>					
Uncommitted facility	1.66%	\$ 125,000	\$ 25,000	\$ —	\$ 25,000
Committed facility (1)	n/a	75,000	—	—	—
		<u>\$ 200,000</u>	<u>\$ 25,000</u>	<u>\$ —</u>	<u>\$ 25,000</u>

The following summarizes interest expense for the broker-dealer facilities. Interest expense is included within interest and dividends expense in the accompanying consolidated statements of comprehensive income.

For the Years Ended December 31,				
(in thousands)	2017	2016	2015	
<b>Broker-dealer credit facilities:</b>				
Uncommitted facility	\$ 1,667	\$ 1,191	\$ 903	
Committed facility (1)	33	41	15	
Revolving credit facility	19	—	—	
	<u>\$ 1,719</u>	<u>\$ 1,232</u>	<u>\$ 918</u>	

(1) Facility was terminated in July 2017.

### Short-Term Credit Facilities

The Company maintains short-term credit facilities with various prime brokers and other financial institutions from which it receives execution or clearing services. The proceeds of these facilities are used to meet margin requirements associated with the products traded by the Company in the ordinary course, and amounts borrowed are collateralized by the Company's trading accounts with the applicable financial institution.

At December 31, 2017			
Short-Term Credit Facilities:	Weighted Average Interest Rate	Financing Available	Borrowing Outstanding
Short-term credit facilities (2)	3.86%	\$ 543,000	\$ 205,677
		<u>\$ 543,000</u>	<u>\$ 205,677</u>

At December 31, 2016			
Short-Term Credit Facilities:	Weighted Average Interest Rate	Financing Available	Borrowing Outstanding
Short-term credit facilities (2)	3.12%	\$ 493,000	\$ 309,086
		<u>\$ 493,000</u>	<u>\$ 309,086</u>



- (2) Outstanding borrowings were included with receivable from broker-dealers and clearing organization within the consolidated statements of financial condition.

Interest expense in relation to the facilities for the years ended December 31, 2017, 2016 and 2015 was approximately \$6.6 million, \$6.3 million, and \$5.5 million, respectively.

### Long-Term Borrowings

The following summarizes the Company's long-term borrowings, net of unamortized discount and debt issuance costs, where applicable:

(in thousands)	Maturity Date	Interest Rate	At December, 2017			
			Outstanding Principal	Discount	Deferred Debt Issuance Cost	Outstanding Borrowings, net
<b>Long-term borrowings:</b>						
Fourth Amended and Restate Credit Agreement	December 2021	5.13%	\$ 900,000	\$ (999)	\$ (18,504)	\$ 880,497
Senior secured Second Lien Notes	June 2022	6.75%	500,000	—	(22,961)	477,039
SBI bonds	January 2020	5.00%	31,059	—	(47)	31,012
			<u>\$ 1,431,059</u>	<u>\$ (999)</u>	<u>\$ (41,512)</u>	<u>\$ 1,388,548</u>

(in thousands)	Maturity Date	Interest Rate	At December 31, 2016			
			Outstanding Principal	Discount	Deferred Debt Issuance Cost	Outstanding Borrowings, net
<b>Long-term borrowings:</b>						
Senior secured credit facility	December 2021	4.25%	\$ 540,000	\$ (956)	\$ (3,941)	\$ 535,103
Revolving credit facility	(3)	5.50%	—	—	—	—
SBI bonds	January 2020	5.00%	29,925	—	(71)	29,854
			<u>\$ 569,925</u>	<u>\$ (956)</u>	<u>\$ (4,012)</u>	<u>\$ 564,957</u>

- (3) Prior to the Fourth Amended Restated Credit Agreement described below, the Company entered into a revolving credit facility with the lenders for an aggregated commitment of \$100.0 million. This facility was terminated in July 2017 as a result of refinancing.

#### Fourth Amended and Restated Credit Agreement

On June 30, 2017, Virtu Financial and VFH Parent LLC ("VFH") entered into a fourth amended and restated credit agreement (the "Fourth Amended and Restated Credit Agreement") for an aggregate \$1.15 billion of first lien secured term loans (the "Term Loan Facility") with the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, sole lead arranger and bookrunner, which amended and restated in its entirety the existing Credit Agreement.

For the year ended December 31, 2017, \$250.0 million of prepayments were made under the Fourth Amended and Restated Credit Agreement. In connection with the debt refinancing and the debt prepayment, the Company accelerated approximately \$10.5 million unamortized financing costs incurred that were scheduled to be amortized over the term of the loan, including original issue discount and underwriting and legal fees, which is included within debt issue cost related to debt refinancing in the consolidated statements of comprehensive income.

The Fourth Amended and Restated Credit Agreement contains certain customary covenant and certain customary events of default, including relating to a change of control. If an event of default occurs and is continuing, the lenders under the Fourth Amended and Restated Credit Agreement will be entitled to take various actions, including the acceleration of amounts outstanding under the Fourth Amended and Restated Credit Agreement and all actions permitted

to be taken by a secured creditor in respect of the collateral securing the obligations under the Fourth Amended and Restated Credit Agreement.

#### *Senior Secured Second Lien Notes*

On June 16, 2017, the Escrow Issuer and Orchestra Co-Issuer, Inc. (the “Co-Issuer”) completed the offering of \$500.0 million aggregate principal amount of 6.750% Senior Secured Second Lien Notes due 2022 (the “Notes”). The Notes were issued under an Indenture, dated June 16, 2017 (the “Indenture”), among the Escrow Issuer, the Co-Issuer and U.S. Bank National Associations, as trustee and collateral agent.

On July 20, 2017, VFH assumed all of the obligations of the Escrow Issuer under the Indenture and the Notes. The Notes are guaranteed by Virtu Financial and each of Virtu Financial’s wholly-owned domestic restricted subsidiaries that guarantees the Fourth Amended and Restated Credit Agreement.

The Indenture imposes certain limitations on the Company, and contains certain customary events of default, including, among others, payment defaults related to the failure to pay principal or interest on Notes, covenant defaults, final maturity default or cross-acceleration with respect to material indebtedness and certain bankruptcy events. The gross proceeds from the Notes were deposited into a segregated escrow account with an escrow agent. The proceeds were released from escrow as of the Closing Date and were used to finance, in part, the Acquisition, and to repay certain indebtedness of the Company and KCG. (See Note 3 “Acquisition of KCG Holdings, Inc.” for further details).

#### *SBI Bonds*

On July 25, 2016, VFH issued Japanese Yen Bonds (collectively the “SBI Bonds”) in the aggregate principal amount of ¥3.5 billion (\$33.1 million at issuance date) to SBI Life Insurance Co., Ltd. and SBI Insurance Co., Ltd. The proceeds from the SBI Bonds were used to partially fund the investment in SBI (as described in Note 11 “Financial assets and liabilities”). The SBI Bonds are guaranteed by Virtu Financial. The SBI Bonds are subject to fluctuations on the Japanese Yen currency rates relative to the Company’s reporting currency (U.S. Dollar) with the changes reflected in other, net in the consolidated statements of comprehensive income. The principal balance was ¥3.5 billion (\$31.0 million) as of December 31, 2017 and ¥3.5 billion (\$29.9 million) as of December 31, 2016. The Company recorded a gain of \$1.1 million and a loss of \$3.2 million due to the change in currency rates during the years ended December 31, 2017 and 2016, respectively.

Aggregate future required minimum principal payments based on the terms of the long-term borrowings at December 31, 2017 were as follows:

<b>(in thousands)</b>	
2018	\$ —
2019	—
2020	31,059
2021 and thereafter	1,400,000
Total principal of long-term borrowings	<u>\$ 1,431,059</u>

## **11. Financial Assets and Liabilities**

### *Financial Instruments Measured at Fair Value*

The fair value of equities, options, on the run U.S. government obligations and exchange traded notes is estimated using recently executed transactions and market price quotations in active markets and are categorized as Level 1 with the exception of inactively traded equities and certain financial instruments noted in the preceding paragraph, which are categorized as Level 2. The Company’s corporate bonds, derivative contracts and other U.S. and non-U.S. government obligations have been categorized as Level 2. Fair value of the Company’s derivative contracts is based on the indicative prices obtained from broadly distributed bank and broker dealers, as well as management’s own

analyses. The indicative prices have been independently validated through the Company's risk management systems, which are designed to check prices with information independently obtained from exchanges and venues where such financial instruments are listed or to compare prices of similar instruments with similar maturities for listed financial futures in foreign exchange.

As of March 31, 2017, the Company began pricing certain financial instruments held for trading at fair value based on theoretical prices which can differ from quoted market prices. The theoretical prices reflect price adjustments primarily caused by the fact that the Company continuously prices its financial instruments based on all available information. This information includes prices for identical and near-identical positions, as well as the prices for securities underlying the Company's positions, on other exchanges that are open after the exchange on which the financial instruments is traded closes. The Company validates that all price adjustments can be substantiated with market inputs and checks the theoretical prices independently. Consequently, such financial instruments are classified as Level 2. The Company concluded that this is a change in accounting estimate and no retrospective adjustments were necessary.

Fair value measurements for those items measured on a recurring basis are summarized below as of December 31, 2017:

(in thousands)	December 31, 2017				
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Counterparty and Cash Collateral Netting	Total Fair Value
<b>Assets</b>					
Financial instruments owned, at fair value:					
Equity securities	\$ 758,596	\$ 1,167,995	\$ —	\$ —	\$ 1,926,591
U.S. and Non-U.S. government obligations	5,968	16,815	—	—	22,783
Corporate Bonds	—	60,975	—	—	60,975
Exchange traded notes	13,576	68,819	—	—	82,395
Currency forwards	—	2,045,487	—	(2,027,697)	17,790
Options	7,045	—	—	—	7,045
	785,185	3,360,091	—	(2,027,697)	2,117,579
Financial instruments owned, pledged as collateral:					
Equity securities	\$ 410,670	\$ 175,581	\$ —	\$ —	\$ 586,251
U.S. and Non-U.S. government obligations	99	—	—	—	99
Exchange traded notes	82	8,611	—	—	8,693
	410,851	184,192	—	—	595,043
Other Assets					
Equity investment	\$ —	\$ —	\$ 40,588	\$ —	\$ 40,588
Exchange stock	1,952	—	—	—	1,952
Other <sup>(1)</sup>	—	55,824	—	—	55,824
	1,952	55,824	40,588	—	98,364
<b>Liabilities</b>					
Financial instruments sold, not yet purchased, at fair value:					
Equity securities	\$ 847,816	\$ 1,355,616	\$ —	\$ —	\$ 2,203,432
U.S. and Non-U.S. government obligations	18,940	12,481	—	—	31,421
Corporate Bonds	—	81,118	—	—	81,118
Exchange traded notes	1,514	54,248	—	—	55,762
Currency forwards	—	2,032,017	—	(2,024,991)	7,026
Options	5,839	—	—	—	5,839
	\$ 874,109	\$ 3,535,480	\$ —	\$ (2,024,991)	\$ 2,384,598

(1) Other primarily consists of a \$55.8 million receivable from Bats related to the sale of KCG Hotspot.

Fair value measurements for those items measured on a recurring basis are summarized below as of December 31, 2016:

(in thousands)	December 31, 2016					Total Fair Value
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Counterparty and Cash Collateral Netting		
<b>Assets</b>						
Financial instruments owned, at fair value:						
Equity securities	\$ 1,597,049	\$ 31,988	\$ —	\$ —	\$ 1,629,037	
Non-U.S. government obligations	—	10,765	—	—	10,765	
Exchange traded notes	37,034	—	—	—	37,034	
Currency forwards	—	1,147,261	—	(1,140,239)	7,022	
Options	—	141	—	—	141	
	<u>\$ 1,634,083</u>	<u>\$ 1,190,155</u>	<u>\$ —</u>	<u>\$ (1,140,239)</u>	<u>\$ 1,683,999</u>	
Financial instruments owned, pledged as collateral:						
Equity securities	\$ 128,202	\$ —	\$ —	\$ —	\$ 128,202	
Exchange traded notes	15,681	—	—	—	15,681	
	<u>\$ 143,883</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 143,883</u>	
<b>Other Assets</b>						
Equity investment	\$ —	\$ —	\$ 36,031	\$ —	\$ 36,031	
Exchange stock	449	—	—	—	449	
	<u>\$ 449</u>	<u>\$ —</u>	<u>\$ 36,031</u>	<u>\$ —</u>	<u>\$ 36,480</u>	
<b>Liabilities</b>						
Financial instruments sold, not yet purchased, at fair value:						
Equity securities	\$ 1,323,693	\$ 6,638	\$ —	\$ —	\$ 1,330,331	
Exchange traded notes	18,744	—	—	—	18,744	
Currency forwards	—	1,009,038	—	(1,009,038)	—	
Options	—	80	—	—	80	
	<u>\$ 1,342,437</u>	<u>\$ 1,015,756</u>	<u>\$ —</u>	<u>\$ (1,009,038)</u>	<u>\$ 1,349,155</u>	

On July 27, 2016, the Company purchased an additional minority investment (29.4%) in SBI Japannext Co., Ltd (“SBI Japannext”), a proprietary trading system based in Tokyo for \$38.8 million in cash (“SBI Investment”), which increased the Company’s total minority investment in SBI Japannext to 29.9%. The Company elected the fair value option to account for this equity investment because it believes that fair value is the most relevant measurement attribute for this investment, as well as to reduce operational and accounting complexity. This investment has been categorized as Level 3, and the valuation process involved for Level 3 measurements is completed on a quarterly basis. The Company employs two valuation methodologies when determining the fair value of investments categorized as Level 3, market comparable analysis and discounted cash flow analysis. The market comparable analysis considers key financial inputs, recent public and private transactions and other available measures. The discounted cash flow analysis incorporates significant assumptions and judgments and the estimates of key inputs used in this methodology include the discount rate for the investment and assumed inputs used to calculate terminal values, such as price/earnings multiples. Upon completion of the valuations conducted using these methodologies, a weighting is ascribed to each method and to the ultimate fair value recorded for a particular investment. When determining the weighting ascribed to each valuation methodology, the Company considers, among other factors, the availability of direct market comparables, the applicability of a discounted cash flow analysis and the expected holding period.

As of December 31, 2017, the fair value of SBI Investment was determined using the discounted cash flow method, an income approach, with the discount rate of 15.0% applied to the cash flow forecasts. The Company also used a market approach based on 14x average price/earnings multiples of comparable companies to corroborate the income approach. The fair value of the SBI Investment at December 31, 2017 was determined by taking the weighted average of enterprise valuations based on discounted cash flow on projected income from the next five years, the implied enterprise valuations on comparable companies, and the implied enterprise valuations on comparable transactions. The fair value measurement is highly sensitive to significant changes in the unobservable inputs and significant increases (decreases) in discount rate or decreases (increases) in price/earnings multiples would result in a significantly lower (higher) fair value

measurement. Changes in the fair value of the SBI Investment are reflected in other, net in the consolidated statements of comprehensive income.

There were no transfers of financial instruments between levels during the years ended December 31, 2017 and 2016.

*Receivable from Bats Global Markets, Inc. (“Bats”)*

In March 2015, KCG sold KCG Hotspot, an institutional spot foreign exchange electronic communications networks (“ECN”), to Bats, which is now a subsidiary of CBOE Holdings, Inc. KCG and Bats agreed to share certain tax benefits, which as of December 31, 2017 comprise a \$50.0 million payment and an annual payment of up to \$6.6 million, both of which are due in April 2018. The \$6.8 million annual payment is contingent on Bats (and CBOE) generating sufficient taxable net income to receive the tax benefits.

The Company has elected the fair value option related to the receivable from Bats and considers the receivable to be a Level 2 asset in the fair value hierarchy as the fair value is derived from observable significant inputs such as contractual cash flows and market discount rates. The remaining additional potential payments of \$56.8 million are recorded at a fair value of \$55.8 million in other assets on the consolidated statements of financial condition as of December 31, 2017.

*Financial Instruments Not Measured at Fair Value*

The table below presents the carrying value, fair value and fair value hierarchy category of certain financial instruments that are not measured at fair value on the consolidated statement of financial condition. The table below excludes non-financial assets and liabilities. The carrying value of financial instruments not measured at fair value categorized in the fair value hierarchy as Level 1 and Level 2 approximates fair value due to the relatively short-term nature of the underlying assets. The fair value of the Company’s long-term borrowings is categorized as Level 2 in the fair value hierarchy, which is based on quoted prices from the market.

Financial assets and liabilities not measured at fair value as of December 31, 2017:

	December 31, 2017				
	Carrying Value	Fair Value	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
			(Level 1)	(Level 2)	(Level 3)
<b>Assets</b>					
Cash and cash equivalents	\$ 532,887	\$ 532,887	\$ 532,887	\$ —	\$ —
Securities borrowed	\$ 1,471,172	\$ 1,471,172	\$ —	\$ 1,471,172	\$ —
Receivables from broker dealers and clearing organizations	972,018	972,018	36,513	935,505	—
<b>Total Assets</b>	<b>\$ 2,976,077</b>	<b>\$ 2,976,077</b>	<b>\$ 569,400</b>	<b>\$ 2,406,677</b>	<b>\$ —</b>
<b>Liabilities</b>					
Short-term borrowings	\$ 27,883	\$ 27,883	\$ —	\$ 27,883	\$ —
Long-term borrowings	\$ 1,388,548	\$ 1,465,489	\$ —	\$ 1,465,489	\$ —
Securities loaned	\$ 754,687	\$ 754,687	\$ —	\$ 754,687	\$ —
Securities sold under agreements to repurchase	\$ 390,642	\$ 390,642	\$ —	\$ 390,642	\$ —
Payables to broker dealer and clearing organizations	716,205	716,205	2,925	713,280	—
<b>Total Liabilities</b>	<b>\$ 3,277,965</b>	<b>\$ 3,354,906</b>	<b>\$ 2,925</b>	<b>\$ 3,351,981</b>	<b>\$ —</b>

Financial assets and liabilities not measured at fair value as of December 31, 2016:

	December 31, 2016				
	Carrying Value	Fair Value	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
			(Level 1)	(Level 2)	(Level 3)
<b>Assets</b>					
Cash and cash equivalents	\$ 181,415	\$ 181,415	\$ 181,415	\$ —	\$ —
Securities borrowed	\$ 220,005	\$ 220,005	\$ —	\$ 220,005	\$ —
Receivables from broker dealers and clearing organizations	448,728	972,018	—	972,018	—
<b>Total Assets</b>	<b>\$ 850,148</b>	<b>\$ 1,373,438</b>	<b>\$ 181,415</b>	<b>\$ 1,192,023</b>	<b>\$ 0</b>
<b>Liabilities</b>					
Short-term borrowings	\$ 25,000	\$ 25,000	\$ —	\$ 25,000	\$ —
Long-term borrowings	\$ 564,957	\$ 564,957	\$ —	\$ 564,957	\$ —
Securities loaned	\$ 222,203	\$ 222,203	\$ —	\$ 222,203	\$ —
Payables to broker dealer and clearing organizations	695,978	695,978	—	695,978	—
<b>Total Liabilities</b>	<b>\$ 1,508,138</b>	<b>\$ 1,508,138</b>	<b>\$ —</b>	<b>\$ 1,508,138</b>	<b>\$ —</b>

The following presents the changes in Level 3 financial instruments measured at fair value on a recurring basis:

Year Ended December 31, 2017							
(in thousands)	Balance at December 31, 2016	Purchases	Total Realized and Unrealized Gains / (Losses)	Net Transfers into (out of) Level 3	Settlement	Balance at December 31 2017	Change in Net Unrealized Gains / (Losses) on Investments still held at December 31 2017
<b>Assets</b>							
Other assets:							
Equity investment	\$ 36,031	\$ —	\$ 4,557	\$ —	\$ —	\$ 40,588	\$ 4,557
Other	—	3,000	—	—	(3,000)	—	—
<b>Total</b>	<b>\$ 36,031</b>	<b>\$ 3,000</b>	<b>\$ 4,557</b>	<b>\$ —</b>	<b>\$ (3,000)</b>	<b>\$ 40,588</b>	<b>\$ 4,557</b>

Year Ended December 31, 2016							
(in thousands)	Balance at December 31, 2015	Purchases	Total Realized and Unrealized Gains / (Losses)	Net Transfers into (out of) Level 3	Balance at December 31 2016	Change in Net Unrealized Gains / (Losses) on Investments still held at December 31 2016	
<b>Assets</b>							
Other assets:							
Equity investment	\$ —	\$ 38,754	\$ (3,117)	\$ 394	\$ 36,031	\$ (3,117)	
<b>Total</b>	<b>\$ —</b>	<b>\$ 38,754</b>	<b>\$ (3,117)</b>	<b>\$ 394</b>	<b>\$ 36,031</b>	<b>\$ (3,117)</b>	

#### Offsetting of Financial Assets and Liabilities

The Company does not net securities borrowed and securities loaned, or securities purchased under agreements to resell and securities sold under agreements to repurchase. These financial instruments are presented on a gross basis in the consolidated statements of financial condition. In the tables below, the amounts of financial instruments owned that are not offset in the consolidated statements of financial condition, but could be netted against financial liabilities with specific counterparties under legally enforceable master netting agreements in the event of default, are presented to provide financial statement readers with the Company's estimate of its net exposure to counterparties for these financial instruments.

The following tables set forth the gross and net presentation of certain financial assets and financial liabilities as of December 31, 2017 and 2016.

December 31, 2017						
(in thousands)	Gross Amounts of Recognized Assets	Gross Amounts Offset in the Consolidated Statement of Financial Condition	Net Amounts of Assets Presented in the Consolidated Statement of Financial Condition	Gross Amounts Not Offset In the Statement of Financial Condition		Net Amount
				Financial Instruments	Cash Collateral Received	
<b>Offsetting of Financial Assets:</b>						
Securities borrowed	\$ 1,471,172	\$ —	\$ 1,471,172	\$ (1,418,672)	\$ (13,318)	\$ 39,182
<b>Trading assets, at fair value:</b>						
Currency forwards	2,045,487	(2,027,697)	17,790	—	—	17,790
Options	7,045	—	7,045	(45)	—	7,000
<b>Total</b>	<b>\$ 3,523,704</b>	<b>\$ (2,027,697)</b>	<b>\$ 1,496,007</b>	<b>\$ (1,418,717)</b>	<b>\$ (13,318)</b>	<b>\$ 63,972</b>

	Gross Amounts of Recognized Liabilities	Gross Amounts Offset in the Consolidated Statement of Financial Condition	Net Amounts of Liabilities Presented in the Consolidated Statement of Financial Condition	Gross Amounts Not Offset In the Statement of Financial Condition		Net Amount
				Financial Instruments	Cash Collateral Pledged	
Offsetting of Financial Liabilities:						
Securities loaned	\$ 754,687	\$ —	\$ 754,687	\$ (737,731)	\$ (10,776)	\$ 6,180
Securities sold under agreements to repurchase	390,642	—	390,642	(390,642)	—	—
Trading liabilities, at fair value:						
Currency forwards	2,032,017	(2,024,991)	7,026	—	—	7,026
Options	5,839	—	5,839	(56)	—	5,783
<b>Total</b>	<b>\$ 3,183,185</b>	<b>\$ (2,024,991)</b>	<b>\$ 1,158,194</b>	<b>\$ (1,128,429)</b>	<b>\$ (10,776)</b>	<b>\$ 18,989</b>

December 31, 2016

(in thousands)	Gross Amounts of Recognized Assets	Gross Amounts Offset in the Consolidated Statement of Financial Condition	Net Amounts of Assets Presented in the Consolidated Statement of Financial Condition	Gross Amounts Not Offset In the Statement of Financial Condition		Net Amount
				Financial Instruments	Cash Collateral Received	
Offsetting of Financial Assets:						
Securities borrowed	\$ 220,005	\$ —	\$ 220,005	\$ (216,778)	\$ (248)	\$ 2,979
Trading assets, at fair value:						
Currency forwards	1,147,261	(1,140,239)	7,022	—	—	7,022
Options	141	—	141	(80)	(13)	48
<b>Total</b>	<b>\$ 1,367,407</b>	<b>\$ (1,140,239)</b>	<b>\$ 227,168</b>	<b>\$ (216,858)</b>	<b>\$ (261)</b>	<b>\$ 10,049</b>

(in thousands)	Gross Amounts of Recognized Liabilities	Gross Amounts Offset in the Consolidated Statement of Financial Condition	Net Amounts of Liabilities Presented in the Consolidated Statement of Financial Condition	Gross Amounts Not Offset In the Consolidated Statement of Financial Condition		Net Amount
				Financial Instruments	Cash Collateral Pledged	
Offsetting of Financial Liabilities:						
Securities loaned	\$ 222,203	\$ —	\$ 222,203	\$ (221,792)	\$ —	\$ 411
Trading liabilities, at fair value:						
Currency forwards	1,009,038	(1,009,038)	—	—	—	—
Options	80	—	80	(80)	—	—
<b>Total</b>	<b>\$ 1,231,321</b>	<b>\$ (1,009,038)</b>	<b>\$ 222,283</b>	<b>\$ (221,872)</b>	<b>\$ —</b>	<b>\$ 411</b>

The following table presents gross obligations for securities lending transactions by remaining contractual maturity and the class of collateral pledged.

(in thousands)	December 31, 2017				
	Remaining Contractual Maturity				
	Overnight and Continuous	Less than 30 days	30 - 60 days	61 - 90 Days	Total
Repurchase agreements:					
Equity securities	\$ —	\$ 100,000	\$ 90,000	\$ 200,000	\$ 390,000
U.S. and Non-U.S. government obligations	642	—	—	—	642
<b>Total</b>	<b>\$ 642</b>	<b>\$ 100,000</b>	<b>\$ 90,000</b>	<b>\$ 200,000</b>	<b>\$ 390,642</b>
Securities lending transactions:					
Equity securities	\$ 754,687	\$ —	\$ —	\$ —	\$ 754,687
<b>Total</b>	<b>\$ 754,687</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 754,687</b>



(in thousands)	December 31, 2016				
	Remaining Contractual Maturity				
	Overnight and Continuous	Less than 30 days	30 - 60 days	61 - 90 Days	Total
Repurchase agreements:					
Equity securities	\$ 222,203	\$ —	\$ —	\$ —	\$ 222,203
Total	\$ 222,203	\$ —	\$ —	\$ —	\$ 222,203

## 12. Derivative Instruments

The fair value of the Company's derivative instruments on a gross basis consisted of the following at December 31, 2017 and December 31, 2016:

(in thousands)	Financial Statements Location	December 31, 2017		December 31, 2016	
		Fair Value	Notional	Fair Value	Notional
<b>Derivatives Assets</b>					
<b>Derivative instruments not designated as hedging instruments:</b>					
Equities futures	Receivables from broker dealers and clearing organizations	\$ (505)	\$ 1,985,770	\$ 2,403	\$ 1,461,286
Commodity futures	Receivables from broker dealers and clearing organizations	971	21,231,001	13,964	3,918,778
Currency futures	Receivables from broker dealers and clearing organizations	26,548	3,994,412	1,591	3,264,093
Fixed income futures	Receivables from broker dealers and clearing organizations	73	44,395	31	5,730
Options	Financial instruments owned	7,045	682,369	141	6,844
Currency forwards	Financial instruments owned	2,045,487	124,000,221	1,147,261	94,192,414
<b>Derivatives Liabilities</b>					
<b>Derivative instruments not designated as hedging instruments:</b>					
Equities futures	Payables to broker dealers and clearing organizations	\$ (575)	\$ 142,658	\$ (43)	\$ 62,417
Commodity futures	Payables to broker dealers and clearing organizations	(1,602)	130,042	2,842	22,616,170
Currency futures	Payables to broker dealers and clearing organizations	(13,947)	7,756,958	(6,282)	1,137,908
Fixed income futures	Payables to broker dealers and clearing organizations	(1)	2,584	—	—
Options	Financial instruments sold, not yet purchased	5,839	681,147	80	4,486
Currency forwards	Financial instruments sold, not yet purchased	2,032,017	123,993,234	1,009,038	85,874,684
<b>Derivative instruments designated as hedging instruments:</b>					
Currency forwards	Financial instruments sold, not yet purchased	(514)	16,115	—	—

Amounts included in receivables from and payables to broker-dealers and clearing organizations represent net variation margin on long and short futures contracts.

The following table summarizes the net gain from derivative instruments not designated as hedging instruments under ASC 815, which are recorded in trading income, net, and from those designated as hedging instrument under ASC 815, which are recorded in accumulated other comprehensive income in the accompanying consolidated statements of

comprehensive income for the years ended December 31, 2017, 2016, and 2015.

(in thousands)	Financial Statements Location	December 31,		
		2017	2016	2015
<b>Derivative instruments not designated as hedging instruments:</b>				
Futures	Trading income, net	\$ 290,609	\$ 559,626	\$ 1,180,483
Currency forwards	Trading income, net	2,603	1,915	(16,431)
Options	Trading income, net	(7,166)	(410)	(1,784)
Others	Trading income, net		(6)	4
		<u>\$ 286,046</u>	<u>\$ 561,125</u>	<u>\$ 1,162,272</u>
<b>Derivative instruments designated as hedging instruments:</b>				
Foreign exchange - forward contract	Accumulated other comprehensive income	\$ (642)	\$ —	\$ —

### 13. Income Taxes

Income before income taxes and noncontrolling interest is as follows for the years ended December 31, 2017, 2016 and 2015:

(in thousands)	December 31,		
	2017	2016	2015
U.S. operations	\$ 70,484	\$ 138,950	\$ 154,947
Non-U.S. operations	42,680	40,641	60,982
	<u>\$ 113,164</u>	<u>\$ 179,591</u>	<u>\$ 215,929</u>

The provision for income taxes consists of the following for the years ended December 31, 2017, 2016 and 2015.

(in thousands)	For the years ended December 31,		
	2017	2016	2015
<b>Current provision (benefit)</b>			
Federal	\$ (9,991)	\$ 2,690	\$ 7,584
State and Local	65	38	108
Foreign	1,219	5,210	6,762
<b>Deferred provision (benefit)</b>			
Federal	106,415	13,547	3,345
State and Local	(3,380)	194	48
Foreign	(62)	(428)	592
Provision for income taxes	<u>\$ 94,266</u>	<u>\$ 21,251</u>	<u>\$ 18,439</u>

The Tax Cuts and Jobs Act ("2017 Tax Act") was signed into law on December 22, 2017. The 2017 Tax Act significantly revises the U.S. corporate income tax by, among other things, lowering the statutory corporate tax rate from 35% to 21%, and eliminating certain deductions. The Company has not completed its determination of the accounting implications of the 2017 Tax Act on its tax accruals. However, the Company has reasonably estimated the effects of the 2017 Tax Act and recorded provisional amounts in our financial statements as of December 31, 2017. The Company recorded a provisional deferred tax expense for the impact of the 2017 Tax Act of approximately \$90.6 million, which is primarily composed of the remeasurement of federal net deferred tax assets as a result of the permanent reduction in the U.S. statutory corporate tax rate to 21% from 35%. The Company expects to complete its analysis of the 2017 Tax Act by the third quarter of 2018, which is within the one-year measurement period prescribed by SEC Staff Accounting Bulletin No. 118. As the Company completes its analysis, collects and prepares necessary data, and interprets any additional guidance issued by the U.S. Treasury Department, the IRS, and other standard-setting bodies, it may make adjustments to the provisional amounts. Those adjustments may materially impact the Company's provision for income

taxes in the period in which the adjustments are made.

As discussed in Note 6 “Tax Receivable Agreements” the Company revalued its tax receivable agreement obligation as a result of this decrease in the U.S. corporate income tax rate and recorded a gain of \$86.6 million, which is reported in Other, net on the consolidated statements of operations for the year ended December 31, 2017. This gain does not impact the Company’s provision for income taxes.

The reconciliation of the tax provision at the U.S. Federal Statutory Rate to the provision for income taxes for the years ended December 31, 2017, 2016 and 2015 is as follows:

	December 31,		
	2017	2016	2015
<b>(in thousands, except percentages)</b>			
Tax provision at the U.S. federal statutory rate	35.0 %	35.0 %	35.0 %
Less: rate attributable to noncontrolling interest	(19.1)	(24.4)	(27.8)
State and local taxes, net of federal benefit	(1.9)	1.3	1.4
Impact of 2017 Tax Act on deferred tax assets	80.1	—	—
Impact of 2017 Tax Act on tax receivable agreement obligation	(12.9)	—	—
Non-deductible expenses, net	1.9	—	—
Other, net	0.2	—	—
Provision for income taxes	<u>83.3 %</u>	<u>11.9 %</u>	<u>8.6 %</u>

The components of the deferred tax assets and liabilities as of December 31, 2017 and 2016 are as follows:

	December 31,	
	2017	2016
<b>(in thousands)</b>		
<b>Deferred income tax assets</b>		
Tax Receivable Agreement	\$ 101,594	\$ 185,677
Share-based compensation	5,213	5,664
Intangibles	14,547	—
Fixed assets and other	13,425	2,518
Tax credits and net operating loss carryforwards	50,867	—
Less: Valuation allowance on net operating loss carryforwards and tax credits	(43,544)	—
Total deferred income tax assets	<u>\$ 142,102</u>	<u>\$ 193,859</u>
<b>Deferred income tax liabilities</b>		
Intangibles	16,342	—
Fixed assets	—	84
Total deferred income tax liabilities	<u>\$ 16,342</u>	<u>\$ 84</u>

Subsequent to consummation of the Reorganization Transactions and the IPO, the Company is subject to U.S. federal, state and local income tax at the rate applicable to corporations less the rate attributable to the noncontrolling interest in Virtu Financial. These noncontrolling interests are subject to U.S. taxation as partnerships. Accordingly, for years ended December 31, 2017, 2016 and 2015, the income attributable to these noncontrolling interests is reported in the consolidated statements of comprehensive income, but the related U.S. income tax expense attributable to these noncontrolling interests is not reported by the Company as it is the obligation of the individual partners. Income tax expense is also affected by the differing effective tax rates in foreign, state and local jurisdictions where certain of the Company’s subsidiaries are subject to corporate taxation.

Included in other assets on the consolidated statements of financial condition at December 31, 2017 and 2016 are current income tax receivables of \$115.2 million and \$5.8 million, respectively. The balance at December 31, 2017 primarily comprises the income tax benefit of KCG net operating losses that were generated prior to the Acquisition of KCG and that are eligible to be carried back by the Company.

Deferred income taxes arise primarily due to the amortization of the deferred tax assets recognized in

connection with the IPO (Note 6 “Tax Receivable Agreements” and Note 15 “Capital Structure”) and the Acquisition of KCG (Note 3 “Acquisition of KCG Holdings, Inc”), differences in the valuation of financial assets and liabilities, and in connection with other temporary differences arising from the deductibility of compensation and depreciation expenses in different time periods for book and income tax return purposes.

There are no expiration dates on the deferred tax assets. The Company’s deferred tax asset at December 31, 2017 includes an alternative minimum tax credit carryforward of \$0.6 million, which can be either be refunded or applied against future income tax liability pursuant to the 2017 Tax Act. The provisions of ASC 740 require that carrying amounts of deferred tax assets be reduced by a valuation allowance if, based on the available evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Accordingly, the need to establish valuation allowances for deferred tax assets is assessed periodically with appropriate consideration given to all positive and negative evidence related to the realization of the deferred tax assets. As a result of the Acquisition of KCG, the Company has non-U.S. net operating losses of \$231.8 million at December 31, 2017 and has recorded a related deferred tax asset of \$43.5 million. A full valuation allowance was also recorded against this deferred tax asset at December 31, 2017 as it is more likely than not that this deferred tax asset will not be realized. No valuation allowance against the remaining deferred taxes was recorded as of December 31, 2017 and 2016 because it is more likely than not that these deferred tax assets will be fully realized.

The Company is subject to taxation in U.S. federal, state, local and foreign jurisdictions. As of December 31, 2017, the Company’s tax years for 2013 through 2016 and 2010 through 2017 are subject to examination by U.S. and non-U.S. tax authorities, respectively. As a result of the Acquisition of KCG, the Company has assumed any KCG tax exposures. KCG is currently subject to U.S. Federal income tax examinations for 2013 through 2017, and to non-U.S. income tax examinations for the tax years 2007 through 2016. In addition, the Company is subject to state and local income tax examinations in various jurisdictions for the tax years 2007 through 2016. The final outcome of these examinations is not yet determinable. However, the Company anticipates that adjustments to the unrecognized tax benefits, if any, will not result in a material change to the financial condition, results of operations and cash flows.

The Company’s policy for recording interest and penalties associated with audits is to record such items as a component of income or loss before income taxes and noncontrolling interest. Penalties, if any, are recorded in operations and administrative expense and interest received or paid is recorded in other, net or operations and administrative expense in the consolidated statement of comprehensive income

The Company had \$7.3 million of unrecognized tax benefits as of December 31, 2017, all of which would affect the Company’s effective tax rate if recognized. The Company has determined that there are no uncertain tax positions that would have a material impact on the Company’s financial position as of December 31, 2016.

The following table reconciles the beginning and ending amount of unrecognized tax benefits:

	<u>December 31,</u>
(in thousands)	<u>2017</u>
Balance at December 31, 2016	\$ —
Increase from Acquisition of KCG	7,232
Decreases based on tax positions related to prior period	—
Increase based on tax positions related to current period	68
Balance at December 31, 2017	<u>\$ 7,300</u>

## 14. Commitments, Contingencies and Guarantees

At December 31, 2017, minimum rental commitments under non-cancellable leases are approximately as follows:

Year Ending December 31	Minimum Rental Commitments	
	Capital	Operating
2018	18,829	33,331
2019	17,759	30,712
2020	6,942	29,238
2021	—	21,017
2022	—	18,063
Thereafter	—	127,723
<b>Total minimum lease payments</b>	<b>\$ 43,530</b>	<b>\$ 260,084</b>

Total operating lease expense, net of amortization expense related to landlord incentives, for the years ended December 31, 2017, 2016 and 2015 was approximately \$13.1 million, \$2.4 million, and \$5.3 million, respectively. Occupancy lease expense for the years ended December 31, 2017, 2016 and 2015 of \$12.9 million, \$1.3 million and \$3.9 million, respectively, is included within operations and administrative expenses in the consolidated statements of comprehensive income. Communication equipment lease expense for the years ended December 31, 2017, 2016 and 2015 of \$0.2 million, \$1.1 million and \$1.4 million, respectively, is included within communication and data processing in the accompanying consolidated statements of comprehensive income.

### Legal Proceedings

In the ordinary course of business, the nature of the Company's business subjects it to claims, lawsuits, regulatory examinations or investigations and other proceedings. The Company and its subsidiaries are subject to several of these matters at the present time. Given the inherent difficulty of predicting the outcome of litigation and regulatory matters, particularly in regulatory examinations or investigations or other proceedings in which substantial or indeterminate damages or fines are sought, or where such matters are in the early stages, the Company cannot estimate losses or ranges of losses for such matters where there is only a reasonable possibility that a loss may be incurred. In addition, there are numerous factors that result in a greater degree of complexity in class-action lawsuits as compared to other types of litigation. There can be no assurance that these matters will not have a material adverse effect on the Company's results of operations in any future period, and a material judgment, fine or sanction could have a material adverse impact on the Company's financial condition, results of operations and cash flows. However, it is the opinion of management, after consultation with legal counsel that, based on information currently available, the ultimate outcome of these matters will not have a material adverse impact on the business, financial condition or operating results of the Company although they might be material to the operating results for any particular reporting period. The Company carries directors' and officers' liability insurance coverage for potential claims, including securities actions, against the Company and its respective directors and officers.

In connection with the Acquisition of KCG, a previously filed complaint, which was initially captioned *Greenway v. KCG Holdings, Inc., et al., Case No. 2017-0421-JTL* and filed on behalf of a putative class in Delaware Chancery Court, was recaptioned *Chester County Employees' Retirement Fund v. KCG Holdings, Inc., et al.*, amended and refiled on February 14, 2018 to include claims for the alleged breach of fiduciary duties against former KCG board members, claims against each of Virtu and Jefferies for allegedly aiding and abetting the KCG board members' alleged breaches of fiduciary duty and a claim against Virtu and Jefferies for alleged civil conspiracy. No amount of damages is stated in the amended complaint, which Virtu intends to defend vigorously.

### Other Legal and Regulatory Matters

The Company owns subsidiaries including regulated entities that are subject to extensive oversight under federal, state and applicable international laws as well as self-regulatory organization ("SRO") rules. Changes in market structure and the need to remain competitive require constant changes to the Company's systems, order routing and order handling procedures. The Company makes these changes while continuously endeavoring to comply with many complex

laws and rules. Compliance, surveillance and trading issues common in the securities industry are monitored by, reported to, and/or reviewed in the ordinary course of business by the Company's regulators in the U.S. and abroad. As a major order flow execution destination, the Company is named from time to time in, or is asked to respond to a number of regulatory matters brought by U.S. regulators, foreign regulators, SROs, as well as actions brought by private plaintiffs, which arise from its business activities. There has recently been an increased focus by regulators on Anti-Money Laundering and sanctions compliance by broker-dealers and similar entities, as well as an enhanced interest on suspicious activity reporting and transactions involving microcap securities. In addition, there has been an increased focus by Congress, federal and state regulators, SROs and the media on market structure issues, and in particular, high frequency trading, best execution, internalization, ATS manner of operations, market fragmentation and complexity, colocation, cybersecurity, access to market data feeds and remuneration arrangements, such as payment for order flow and exchange fee structures. The Company has received information requests from various authorities, including the SEC, requesting, among other items, information regarding these market structure matters, to which the Company has responded or is in the process of responding.

The Company is currently the subject of various regulatory reviews and investigations by federal, state and foreign regulators and SROs, including the SEC and the Financial Industry Regulatory Authority. In some instances, these matters may rise to a disciplinary action and/or a civil or administrative action. For example, the Autorité des Marchés Financiers ("AMF") fined the Company's European subsidiary in the amount of €5.0 million (approximately \$5.4 million) based on its allegations that the subsidiary of a predecessor entity engaged in price manipulation and violations of the AMF General Regulation and Euronext Market Rules. The fine was subsequently reduced in 2017 to €3.3 million (approximately \$3.9 million). The Company had fully reserved for the monetary penalty as of December 31, 2017 and anticipates paying the fine during the year ended December 31, 2018.

### **Indemnification Arrangements**

Consistent with standard business practices in the normal course of business, the Company has provided general indemnifications to its managers, officers, directors, employees, and agents against expenses, judgments, fines, settlements, and other amounts actually and reasonably incurred by such persons under certain circumstances as more fully disclosed in its operating agreement. The overall maximum amount of the obligations (if any) cannot reasonably be estimated as it will depend on the facts and circumstances that give rise to any future claims.

### **15. Capital Structure**

The Company has four classes of authorized common stock. The Class A common stock and the Class C common stock have one vote per share. The Class B common stock and the Class D common stock have 10 votes per share. Shares of the Company's common stock generally vote together as a single class on all matters submitted to a vote of the Company's stockholders.

### **Initial Public Offering and Reorganization Transactions**

Prior to the IPO, the Company's business was conducted through Virtu Financial and its subsidiaries. In a series of transactions that occurred in connection with the IPO, (i) the Company became the sole managing member of Virtu Financial and acquired Virtu Financial Units, (ii) certain direct or indirect equityholders of Virtu Financial acquired shares of the Company's Class A common stock and (iii) certain direct or indirect equityholders of Virtu Financial had their interests reclassified into Virtu Financial Units and acquired shares of the Company's Class C common stock or, in the case of the TJMT Holdings LLC only, shares of the Company's Class D common stock (collectively, the "Virtu Members").

On April 21, 2015, the Company completed its IPO of 19,012,112 shares of its Class A common stock, par value \$0.00001 per share, including 2,479,840 shares of Class A common stock sold in connection with the full exercise of the option to purchase additional shares granted to the underwriters, at a price to the public of \$19.00 per share. The shares began trading on NASDAQ on April 16, 2015 under the ticker symbol "VIRT" and the offering was closed on April 21, 2015. In connection with the Reorganization Transactions, the Company sold 16,532,272 shares of Class A common stock. The Company used its net proceeds from its IPO to purchase shares of Class A common stock from an

affiliate of Silver Lake Partners, purchase Virtu Financial Units and corresponding shares of Class C common stock from certain Virtu Members, and for working capital and general corporate purposes.

### **Amended and Restated 2015 Management Incentive Plan**

The Company's board of directors and stockholders adopted the 2015 Management Incentive Plan, which became effective upon consummation of the IPO, and was subsequently amended and restated following receipt of approval from the Company's stockholders on June 30, 2017. The Amended and Restated 2015 Management Incentive Plan provides for the grant of stock options, restricted stock units, and other awards based on an aggregate of 16,000,000 shares of Class A common stock, subject to additional sublimits, including limits on the total option grant to any one participant in a single year and the total performance award to any one participant in a single year.

### **Secondary Offerings**

In September 2016, the Company completed a public offering (the "September 2016 Secondary Offering," collectively with the November 2015 Secondary Offering, the "Secondary Offerings") of 1,103,668 shares of the Company's Class A common stock. The Company sold 1,103,668 shares of Class A common stock at a price to the public of \$15.75 per share. The Company used the net proceeds from the September 2016 Secondary Offering to purchase Virtu Financial Units (together with corresponding shares of Class C common stock) from certain employees at a net price equal to the price paid by the underwriters for shares of its Class A common stock, which was the price at which the shares were offered to the public less underwriting discounts and commissions of \$0.10 per share.

### **Acquisition of KCG**

On the Closing Date and in connection with the financing of the Acquisition, the Company issued 6,346,155 shares of the Company's Class A common stock to Aranda for an aggregate purchase price of approximately \$99.0 million and 39,725,979 shares of the Company Class A Common Stock to NIH for an aggregate purchase price of approximately \$613.5 million. On August 10, 2017, the Company issued an additional 1,666,666 shares of its Class A Common Stock for an aggregate purchase price of \$26.0 million and an additional 338,124 shares of its Class A Common Stock for an aggregate purchase price of \$5.2 million. See Note 3 for further details.

### **Employee Exchanges**

In February, May, August and November 2017, pursuant to the exchange agreement by and among the Company, Virtu Financial and holders of Virtu Financial common units, certain current and former employees elected to exchange 683,762, 307,544, 155,009, and 209,448 units, respectively, in Virtu Financial held on their behalf by Virtu Financial Employee Holdco LLC ("Employee Holdco") on a one-for-one basis for shares of Class A common stock.

As a result of the completion of the IPO, the Reorganization Transactions, the Secondary Offerings, employee exchange, and the share issuance in connection with the Acquisition, the Company holds approximately 48.3% interest in Virtu Financial at December 31, 2017.

## **16. Share-based Compensation**

### **Share-based compensation prior to the Company's Reorganization completed on April 15, 2015 and IPO commenced on April 16, 2015:**

Class A-2 profits interests were issued to Employee Holdco LLC, a holding company that holds the interests on behalf of certain key employees or stakeholders. During the years ended December 31, 2017, 2016 and 2015, the Company recorded expense relating to non-voting common interest units, which were originally granted as Class A-2 profits interests and were reclassified into non-voting common interest units in connection with the Reorganization Transactions. The non-voting common interest units are subject to the same vesting requirements as the prior Class A-2 profits interests, which were either fully vested upon issuance or vested over a period of up to four years, and in each case are subject to repurchase provisions upon certain termination events. These awards were accounted for as equity awards and were measured at fair value at the date of grant. The Company recognized compensation expense related to

the vesting of non-voting common interest units (formerly Class A-2 profits interests) of \$0.7 million, \$1.3 million and \$1.5 million for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017 and 2016, total unrecognized share-based compensation expense related to unvested non-voting common interest units (formerly Class A-2 profits interests), was \$0.1 million and \$0.8 million, respectively; and this amount is expected to be recognized over a weighted average period of 0.1 years and 0.8 years, respectively.

On July 8, 2011, 2,625,000 Class A-2 capital interests were contributed by Class A-2 members to Virtu East MIP LLC ("East MIP"). East MIP issued Class A interests to the members who contributed the Class A-2 capital interests, and Class B interests ("East MIP Class B interests") to certain key employees. Additionally, Class B interests were issued to Employee Holdco on behalf of certain key employees and stakeholders on July 8, 2011, and on subsequent dates. East MIP Class B interests and Class B interests were each subject to time based vesting over four years and only fully vested upon the consummation of a qualifying capital transaction by the Company, including an IPO. In connection with the Reorganization Transactions, East MIP was liquidated and a portion of the Class A-2 capital interests held by East MIP were contributed to Virtu Employee Holdco on behalf of holders of East MIP Class B Interests (or, in the case of certain employees located outside the United States, contributed to a trust whose trustee is one of the Company's subsidiaries), which Class A-2 capital interests were subsequently reclassified into non-voting common interest units. The Company recognized compensation expense in respect of non-voting common interest units (formerly Class B interests) vested of \$0.7 million, \$1.1 million and \$44.9 million for the years ended December 31, 2017, 2016 and 2015, respectively. The compensation expense related to non-voting common interest units (formerly Class B interests) was included within charges related to share based compensation at IPO in the consolidated statements of comprehensive income. As of December 31, 2017 and 2016, total unrecognized share-based compensation expense related to unvested non-voting common interest units (formerly Class B interests) was \$0.1 million and \$0.8 million, respectively; and this amount is expected to be recognized over a weighted average period of 0.1 years and 1.0 years, respectively.

Additionally, in connection with the compensation charges related to non-voting common interest units (formerly Class B interests) mentioned above, the Company capitalized \$0.04 million, \$0.09 million and \$9.2 million for the years ended December 31, 2017, 2016 and 2015, respectively. The amortization costs related to these capitalized compensation charges and previously capitalized compensation charges related to East MIP Class B interests and Class B interests were approximately \$0.07 million, \$0.7 million and \$8.5 million for the years ended December 31, 2017, 2016 and 2015, respectively. The costs attributable to employees incurred in development of software for internal use were included within charges related to share based compensation at IPO in the consolidated statements of comprehensive income.

The fair value of the Class A-2 profit, Class B and East MIP Class B interest was estimated by the Company using an option pricing methodology based on expected volatility, risk-free rates and expected life. Expected volatility is calculated based on companies in the same peer group as the Company.

In connection with the Reorganization Transactions, all Class A-2 profits interests, Class B and East MIP Class B interests were reclassified into non-voting common interest units. As of December 31, 2017 and 2016, there were 12,301,067 and 14,231,535 non-voting common interest units outstanding, respectively, and 1,930,468, 1,162,891 and 57,106 non-voting common interest units and corresponding Class C common stock were exchanged into Class A common stock, forfeited or repurchased during the years ended December 31, 2017, 2016 and 2015, respectively.

**Share-based compensation after the Company's Reorganization completed on April 15, 2015 and IPO completed on April 16, 2015:**

Pursuant to 2015 Management Incentive Plan as described in Note 15 "Capital Structure", and in connection with the IPO, non-qualified stock options to purchase shares of Class A common stock were granted, each of which vests in equal annual installments over a period of the four years from grant date and expires not later than 10 years from the date of grant.

The following table summarizes activity related to stock options for the year ended December 31, 2017 and 2016:



	Options Outstanding			Options Exercisable	
	Number of Options	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life	Number of Options	Weighted Average Exercise Price Per Share
At December 31, 2014	—	\$ —	—	—	\$ —
Granted	9,228,000	19.00	10.00	—	—
Exercised	—	—	—	—	—
Forfeited or expired	(234,000)	—	—	—	—
At December 31, 2015	8,994,000	\$ 19.00	9.29	—	\$ —
Granted	—	—	—	—	—
Exercised	—	—	—	—	—
Forfeited or expired	(760,000)	—	—	—	—
At December 31, 2016	8,234,000	\$ 19.00	8.29	2,058,500	\$ 19.00
Granted	—	—	—	—	—
Exercised	—	—	—	—	—
Forfeited or expired	(496,000)	—	—	—	—
At December 31, 2017	7,738,000	\$ 19.00	7.29	3,869,000	\$ 19.00

The expected life has been determined based on an average of vesting and contractual period. The risk-free interest rate was determined based on the yields available on U.S. Treasury zero-coupon issues. The expected stock price volatility was determined based on historical volatilities of comparable companies. The expected dividend yield was determined based on estimated future dividend payments divided by the IPO stock price.

The Company recognized \$5.2 million, \$5.6 million and \$4.7 million of compensation expense in relation to the stock options issued and outstanding for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017 and 2016, total unrecognized share-based compensation expense related to unvested stock options was \$7.5 million and \$14.2 million, respectively, and these amounts are to be recognized over a weighted average period of 1.3 years and 2.3 years, respectively.

#### Class A common stock and Restricted Stock Units

Pursuant to the 2015 Management Incentive Plan as described in Note 15, “Capital Structure”, subsequent to the IPO, shares of immediately vested Class A common stock and restricted stock units were granted, the latter which vest over a period of up to 4 years. The fair value of the Class A common stock and RSUs was determined based on a volume weighted average price and is being recognized on a straight line basis over the vesting period. For the years ended December 31, 2017, 2016 and 2015, there were 19,719, 656,019 and 576,693 shares of immediately vested Class A common stock granted as part of year-end compensation, and the Company recorded compensation expense of \$0.3 million, \$10.6 million and \$13.2 million, respectively. In addition, the Company accrued compensation expense of \$11.0 million for the year ended December 31, 2017 related to immediately vested Class A common stock expected to be awarded in early 2018 as part of year-end incentive compensation for the 2017 performance year, which is included in employee compensation and payroll taxes on the Consolidated Statements of Comprehensive Income and accounts payable and accrued expenses and other liabilities on the Consolidated Statements of Financial Condition.

The following table summarizes activity related to the RSUs:

	Number of Shares	Weighted Average Fair Value
At December 31, 2014	—	\$ —
Granted	984,466	22.32
Forfeited	—	—
Vested	—	—
At December 31, 2015	984,466	\$ 22.32
Granted	1,019,148	16.06
Forfeited	(133,138)	22.51
Vested	(297,035)	16.48
At December 31, 2016	1,573,441	\$ 18.28
Granted	64,402	18.09
Forfeited	(258,250)	18.40
Vested	(526,546)	18.75
At December 31, 2017	853,047	\$ 17.94

The Company recognized \$9.9 million, \$6.3 million and \$0.5 million of compensation expense in relation to the restricted stock units for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017 and 2016, total unrecognized share-based compensation expense related to unvested RSUs was \$14.3 million and \$28.5 million, respectively, and this amount is to be recognized over a weighted average period of 1.5 years and 2.6 years, respectively.

## 17. Property, Equipment and Capitalized Software

Property, equipment and capitalized software consisted of the following at December 31, 2017 and 2016:

(in thousands)	2017	2016
Capitalized software costs	\$ 94,915	\$ 77,591
Leasehold improvements	93,624	3,636
Furniture and equipment	324,135	61,540
Land	—	77
	512,674	142,844
Less: Accumulated depreciation and amortization	(375,656)	(113,184)
Total property, equipment and capitalized software, net	\$ 137,018	\$ 29,660

Depreciation expense for property and equipment for the years ended December 31, 2017, 2016, and 2015 was approximately \$36.8 million, \$19.6 million and \$24.0 million, respectively, and is included within depreciation and amortization expense in the accompanying consolidated statements of comprehensive income.

The Company's capitalized software development costs excluding the compensation charges recognized in relation to the IPO disclosed below were approximately \$15.7 million, \$11.1 million, and \$10.1 million for years ended December 31, 2017, 2016 and 2015, respectively. The related amortization expense was approximately \$10.1 million, \$10.1 million, and \$9.6 million for the years ended December 31, 2017, 2016, and 2015, respectively, and is included within depreciation and amortization expense in the accompanying consolidated statements of comprehensive income.

Additionally, in connection with the compensation charges related to non-voting interest units (formerly Class B interests) recognized upon the IPO (Note 16 "Share-based Compensation"), the Company capitalized approximately \$0.04 million, \$0.09 million and \$9.2 million for the years ended December 31, 2017, 2016 and 2015 respectively. The amortization costs related to these capitalized compensation charges and previously capitalized compensation charges related to East MIP Class B interests and Class B interests were approximately \$0.07 million, \$0.7 million and \$8.5 million for the years ended December 31, 2017, 2016 and 2015, respectively.

## 18. Regulatory Requirement

As of December 31, 2017 and 2016, broker-dealer subsidiaries of the Company are subject to the SEC Uniform Net Capital Rule 15c3-1, which requires the maintenance of minimum net capital of \$1.0 million for each of the three broker-dealer subsidiaries. Pursuant to NYSE and NYSE MKT (formerly NYSE Amex) rules, Virtu Financial Capital Markets LLC was also required to maintain \$4.1 million and \$1.9 million of capital in connection with the operation of its DMM business as of December 31, 2017 and December 31, 2016, respectively. The required amount is determined under the exchange rules as the greater of \$1 million or 15% of the market value of 60 trading units for each symbol in which the broker-dealer subsidiary is registered as the DMM.

The regulatory capital and regulatory capital requirements of these subsidiaries as of December 31, 2017 was as follows:

<b>(in thousands)</b>	<b>Regulatory Capital</b>	<b>Regulatory Capital Requirement</b>	<b>Excess Regulatory Capital</b>
Virtu Americas LLC	\$ 379,875	\$ 1,000	\$ 378,875
Virtu Financial BD LLC	40,683	1,000	39,683
Virtu Financial Capital Markets LLC	8,308	5,114	3,194

The regulatory capital and regulatory capital requirements of these subsidiaries as of December 31, 2016 was as follows:

<b>(in thousands)</b>	<b>Regulatory Capital</b>	<b>Regulatory Capital Requirement</b>	<b>Excess Regulatory Capital</b>
Virtu Financial BD LLC	74,467	1,000	73,467
Virtu Financial Capital Markets LLC	10,830	2,886	7,944

## 19. Geographic Information and Business Segments

The Company operates its business in the U.S. and internationally, primarily in Europe and Asia. Significant transactions and balances between geographic regions occur primarily as a result of certain Company's subsidiaries incurring operating expenses such as employee compensation, communications and data processing and other overhead costs, for the purpose of providing execution, clearing and other support services to affiliates. Charges for transactions between regions are designed to approximate full costs. Intra-region income and expenses and related balances have been eliminated in the geographic information presented below to accurately reflect the external business conducted in each geographical region. The revenues are attributed to countries based on the locations of the subsidiaries. The following table presents total revenues by geographic area for the years ended December 31, 2017, 2016, and 2015:

<b>(in thousands)</b>	<b>December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
<b>Revenues:</b>			
United States	\$ 791,044	\$ 455,418	\$ 537,310
Ireland	97,637	139,642	166,739
United Kingdom	21,143	—	—
Singapore	113,891	106,813	91,816
Sweden	3,986	—	—
Others	281	399	348
Total revenues	<u>\$ 1,027,982</u>	<u>\$ 702,272</u>	<u>\$ 796,213</u>

Prior to the Acquisition, the Company was managed and operated as one business, and, accordingly, operated under one reportable segment. As a result of the acquisition of KCG, beginning in the third quarter of 2017 the Company has three operating segments: (i) Market Making; (ii) Execution Services; and (iii) Corporate.

The Market Making segment principally consists of market making in the cash, futures and options markets across global equities, options, fixed income, currencies and commodities. As a market maker, the Company commits capital on a principal basis by offering to buy securities from, or sell securities to, broker dealers, banks and institutions. The Company engages in principal trading in the Market Making segment direct to clients as well as in a supplemental capacity on exchanges, ECNs and alternative trading systems ATs. The Company is an active participant on all major global equity and futures exchanges and also trades on substantially all domestic electronic options exchanges. As a complement to electronic market making, the cash trading business handles specialized orders and also transacts on the OTC Bulletin Board marketplaces operated by the OTC Markets Group Inc. and the AIM.

The Execution Services segment comprises agency-based trading and trading venues, offering execution services in global equities, options, futures and fixed income on behalf of institutions, banks and broker dealers as well as technology services revenues. The Company earns commissions and commission equivalents as an agent on behalf of clients as well as between principals to transactions; in addition, the Company will commit capital on behalf of clients as needed. Agency-based, execution-only trading in the segment is done primarily through a variety of access points including: (i) algorithmic trading and order routing in global equities and options; (ii) institutional sales traders executing program, block and riskless principal trades in global equities and ETFs; (iii) a fixed income ECN that also offers trading applications; and (iv) an ATS for U.S. equities. Technology licensing fees are earned from third parties for licensing of the Company's proprietary risk management and trading infrastructure technology and the provision of associated management and hosting services.

The Corporate segment contains the Company's investments, principally in strategic trading-related opportunities and maintains corporate overhead expenses and all other income and expenses that are not attributable to the Company's other segments.

Management evaluates the performance of its segments on a pre-tax basis. Segment assets and liabilities are not used for evaluating segment performance or in deciding how to allocate resources to segments. The Company's total revenues and income before income taxes and noncontrolling interest ("Pre-tax earnings") by segment are summarized in the following table:

(in thousands)	Market Making	Execution Services	Corporate (1)	Consolidated Total
<b>2017:</b>				
Total revenue	\$ 836,707	\$ 99,135	\$ 92,140	\$ 1,027,982
Income before income taxes and noncontrolling interest	74,633	(12,519)	51,050	113,164
<b>2016:</b>				
Total revenue	\$ 691,884	\$ 10,352	\$ 36	\$ 702,272
Income (loss) before income taxes and noncontrolling interest	176,145	4,403	(957)	179,591
<b>2015:</b>				
Total revenue	\$ 785,591	\$ 10,622	\$ -	\$ 796,213
Income before income taxes and noncontrolling interest	211,443	4,486	-	215,929

(1) Amounts shown in the Corporate segment include eliminations of income statement and balance sheet items included in the Company's other segments.

## 20. Related Party Transactions

The Company incurs expenses and maintains balances with its affiliates in the ordinary course of business. As of December 31, 2017, and December 31, 2016, the Company had a receivable of \$0.08 million and a payable of \$0.2 million to its affiliates, respectively.

The Company conducts securities lending transactions with Industrial and Commercial Bank of China (“ICBC”), which is partially owned by Temasek Holdings (Private) Limited and its affiliates. As of December 31, 2017, the Company had a securities borrowed contract of \$23.1 million and a securities loaned contract of \$1.1 million with ICBC. The Company did not have outstanding securities with ICBC as of December 31, 2016.

The Company purchases network connections services from affiliates of Level 3 Communications (“Level 3”). Temasek Holdings (Private) Limited and its affiliates have a significant ownership interest in Level 3. During the years ended December 31, 2017, 2016 and 2015 the Company paid \$2.5 million, \$2.4 million, and \$4.3 million, respectively, to Level 3 for these services.

The Company purchases and leases computer equipment and maintenance and support from affiliates of Dell Inc. (“Dell”). Temasek Holdings (Private) Limited and its affiliates have a significant ownership interest in Dell. During the years ended December 31, 2017, 2016 and 2015, the Company paid \$2.5 million, \$2.7 million and \$3.6 million, respectively, to Dell for these purchases and leases.

The Company purchases telecommunications services from Singapore Telecommunications Limited (“Singtel”). Temasek and its affiliates have a significant ownership interest in Singtel. During the years ended December 31, 2017, 2016, and 2015, the Company paid \$0.1 million, \$0.2 million, and \$0.1 million, respectively, to Singtel for these purchases.

The Company employed the son of the Company’s Founder and Executive Chairman, as a trader during the year ended December 31, 2015. This employee was paid approximately \$0.8 million of employee compensation during year ended December 31, 2015, and granted 60,000 stock options with respect to shares of the Company’s Class A common stock under the 2015 Management Incentive Plan. The Company had no such expense during the years ended December 31, 2017 and 2016.

The Company has engaged a member of the Board of Directors to provide leadership consulting services. The Company has paid approximately \$4 thousand, \$0.03 million and \$0.1 million for such engagement for the years ended December 31, 2017, 2016, and 2015, respectively.

Additionally, the Company entered into sublease arrangements with affiliates of the Company’s Founder and Executive Chairman for office space no longer used by the Company. For the years ended December 31, 2017, 2016 and 2015, the Company received \$0.06 million, \$0.04 million and \$0.1 million, respectively, pursuant to these arrangements.

The Company has held a minority interest in SBI since 2016 (See Note 11, “Financial Assets and Liabilities”). The Company pays exchange fees to SBI for the trading activities conducted on its proprietary trading system. The Company paid \$6.0 million and \$2.2 million for the year ended December 31, 2017 and for the period since the completion of the minority interest investment to December 31, 2016, respectively.

The Company makes payments to two JVs (See Note 2, “Summary of Significant Accounting Policies”) to fund the construction of the microwave communication networks, and to purchase microwave communication networks, which are recorded within communications and data processing on the consolidated statements of comprehensive income. The Company made payments of \$8.3 million and \$0.6 million to the JVs for the years ended December 31, 2017 and 2016, respectively. The Company made no such payments for the year ended December 31, 2015.

## **21. Parent Company**

VFI is the sole managing member of Virtu Financial, which guarantees the indebtedness of its direct subsidiary under the senior secured facility and senior secured second lien notes (Note 10 “Borrowings”). VFI is limited to its ability to receive distributions (including for purposes of paying corporate and other overhead expenses and dividends) from Virtu Financial under its Fourth Amended and Restated Credit Agreement and senior secured second lien notes. The following financial statements (the “Parent Company Only Financial Statements”) should be read in conjunction with the consolidated financial statements of the Company and the foregoing.

The condensed statements of financial condition as of December 31, 2017 and 2016 reflect the condensed financial condition of VFI. The condensed statements of comprehensive income and of cash flows for the year ended December 31, 2015 reflect the condensed operating results and cash flows of Virtu Financial prior to April 15, 2015 and reflect the condensed operating results and cash flows of VFI from April 16, 2015 through December 31, 2015.

**Virtu Financial, Inc.**  
**(Parent Company Only)**  
**Condensed Statements of Financial Condition**

(In thousands except interest data)	As of December 31,	
	December 31, 2017	December 31, 2016
<b>Assets</b>		
Cash	\$ 60,193	\$ 17,149
Deferred tax asset	124,631	192,961
Investment in subsidiary	1,549,162	165,204
Other assets	10,731	1,892
Total assets	\$ 1,744,717	\$ 377,206
<b>Liabilities, redeemable membership interest and equity</b>		
<b>Liabilities</b>		
Payable to affiliate	\$ 767,101	\$ 129
Accounts payable and accrued expenses and other liabilities	7	—
Tax receivable agreement obligations	147,040	231,404
Total liabilities	\$ 914,148	\$ 231,533
<b>Virtu Financial Inc. Stockholders' equity</b>		
Class A-1 — Authorized and Issued — 0 and 0 interests, Outstanding — 0 and 0 interests, at December 31, 2017 and 2016, respectively	—	—
Class A-2 — Authorized and Issued — 0 and 0 interests, Outstanding — 0 and 0 interests, at December 31, 2017 and 2016, respectively	—	—
Class A common stock (par value \$0.00001), Authorized — 1,000,000,000 and 1,000,000,000 shares, Issued — 90,415,532 and 40,436,580 shares, Outstanding — 89,798,609 and 39,983,514 shares at December 31, 2017 and 2016, respectively	1	—
Class B common stock (par value \$0.00001), Authorized — 175,000,000 and 175,000,000 shares, Issued and Outstanding — 0 and 0 shares at December 31, 2017 and 2016, respectively	—	—
Class C common stock (par value \$0.00001), Authorized — 90,000,000 and 90,000,000 shares, Issued — 17,880,239 and 19,810,707 shares, Outstanding — 17,880,239 and 19,810,707, at December 31, 2017 and 2016, respectively	—	—
Class D common stock (par value \$0.00001), Authorized — 175,000,000 and 175,000,000 shares, Issued and Outstanding — 79,610,490 and 79,610,490 shares at December 31, 2017 and 2016, respectively	1	1
Treasury stock, at cost, 616,923 and 453,066 shares at December 31, 2017 and 2016, respectively	(11,041)	(8,358)
Additional paid-in capital	900,746	155,536
Accumulated deficit	(62,129)	(1,254)
Accumulated other comprehensive income (loss)	2,991	(252)
Total Virtu Financial Inc. stockholders' equity	\$ 830,569	\$ 145,673
Total liabilities and stockholders' equity	\$ 1,744,717	\$ 377,206

**Virtu Financial, Inc.**  
**(Parent Company Only)**  
**Condensed Statements of Comprehensive Income**

(in thousands)	For the Years Ended December 31,		
	2017	2016	2015
<b>Revenues:</b>			
Service fee revenue	\$ —	\$ —	\$ 445
Other Income	86,599	—	—
	<u>86,599</u>	<u>—</u>	<u>445</u>
<b>Operating Expenses:</b>			
Operations and administrative	181	198	447
	<u>86,418</u>	<u>(198)</u>	<u>(2)</u>
Income (loss) before equity in income of subsidiary			
Equity in income of subsidiary, net of tax	(83,479)	33,178	104,036
Net income	<u>\$ 2,939</u>	<u>\$ 32,980</u>	<u>\$ 104,034</u>
Net income attributable to common stockholders	2,939	32,980	20,887
<b>Other comprehensive income (loss):</b>			
Foreign currency translation adjustment, net of taxes	3,243	(351)	(4,534)
Comprehensive income	<u>\$ 6,182</u>	<u>\$ 32,629</u>	<u>\$ 16,353</u>

**Virtu Financial, Inc.**  
**(Parent Company Only)**  
**Condensed Statements of Cash Flows**

(in thousands)	For the Years Ended December 31,		
	2017	2016	2015
<b>Cash flows from operating activities</b>			
Net income	\$ 2,939	\$ 32,980	\$ 104,034
Adjustments to reconcile net income to net cash provided by operating activities:			
Equity in income of subsidiary, net of tax	(513,601)	157,975	(18,237)
Tax receivable agreement obligation reduction	(86,599)	—	—
Deferred taxes	102,973	13,197	3,392
Other	(8,500)	—	—
Changes in operating assets and liabilities:	(8,832)	(4,012)	5,900
Net cash provided by (used in) operating activities	(511,620)	200,140	95,089
<b>Cash flows from investing activities</b>			
Acquisition of KCG Holdings, net of cash acquired, described in Note 3	(23,908)	—	—
Investments in subsidiaries, equity basis	16,846	24,893	64,624
Net cash provided by (used in) investing activities	(7,062)	24,893	64,624
<b>Cash flows from financing activities</b>			
Distribution to members	—	—	(130,000)
Distribution from Virtu Financial to non-controlling interest	(89,563)	(162,969)	(81,377)
Dividends	(63,814)	(37,759)	(17,362)
Payments on repurchase of non-voting common interest	(11,143)	(2,000)	(2,097)
Repurchase of Class C common stock	—	(98)	—
Purchase of treasury stock	(2,683)	(4,539)	(3,819)
Tax receivable agreement obligations	(7,045)	—	—
Issuance of common stock, net of offering costs	735,974	—	327,366
Repurchase of Virtu Financial Units and corresponding number of Class A and C common stock in connections with IPO	—	—	(277,153)
Issuance of common stock in connection with secondary offering, net of offering costs	—	16,677	7,782
Repurchase of Virtu Financial Units and corresponding number of Class C common stock in connection with secondary offering	—	(17,383)	(8,805)
Net cash provided by (used in) financing activities	\$ 561,726	\$ (208,071)	\$ (185,465)
Net increase (decrease) in Cash	\$ 43,044	\$ 16,962	\$ (25,752)
Cash, beginning of period	17,149	187	25,939
Cash, end of period	<u>\$ 60,193</u>	<u>\$ 17,149</u>	<u>\$ 187</u>
<b>Supplemental disclosure of cash flow information:</b>			
Taxes paid	<u>\$ 133</u>	<u>\$ 8,813</u>	<u>\$ 5,615</u>
<b>Non-cash financing activities</b>			
Tax receivable agreement described in Note 6	1,534	-	(21,854)
Secondary offerings described in Note 15	-	1,350	-



## 22. Subsequent Events

The Company has evaluated subsequent events for adjustment to or disclosure in its consolidated financial statements through the date of this report, and has not identified any recordable or disclosable events, not otherwise reported in these consolidated financial statements or the notes thereto, except for the following:

On January 2, 2018, the Company completed the sale of its BondPoint business to ICE for total gross proceeds of \$400 million. The Company used the after-tax net proceeds to prepay \$250.0 million of principal under its Fourth Amended and Restated Credit Agreement. Concurrently with the closing of the sale of BondPoint, on January 8, 2018, the Company entered into a refinancing transaction to reprice its senior secured term loan at LIBOR plus 3.25%, along with additional principal repayment of \$26.0 million. Following the refinancing the transaction, the total principal outstanding under the senior secured facility is \$624 million.

The following table contains information about the Company's purchases of its Class A common stock during the period from January 1, 2018 to the date of this report (in thousands, except average price paid per share):

<u>Period</u>	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid per Share</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs(1)</u>	<u>Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs</u>
January 1, 2018 - January 31, 2018 Common stock repurchases	—	—	—	—
February 1, 2018 - February 28, 2018 Common stock repurchases	375,000	\$ 29.27	375,000	39,023,750
March 1, 2018 - March 13, 2018 Common stock repurchases	—	—	—	39,023,750
<b>Total</b> Common stock repurchases	<u>375,000</u>	<u>29.27</u>	<u>375,000</u>	<u>39,023,750</u>

- (1) On February 8, 2018, the Company's board of directors authorized a new share repurchase program of up to \$50.0 million in Class A common stock and common units by March 31, 2019. The Company may repurchase shares from time to time in open market transactions, privately negotiated transactions or by other means. Repurchases may also be made under Rule 10b5-1 plans. The timing and amount of repurchase transactions will be determined by the Company's management based on its evaluation of market conditions, share price, legal requirements and other factors. The program may be suspended, modified or discontinued at any time without prior notice. There are no assurances that any further repurchases will actually occur.

On February 8, 2018, the Company's board of directors declared a dividend of \$0.24 per share of Class A common stock and Class B common stock and per Restricted Stock Unit that will be paid on March 15, 2018 to holders of record as of March 1, 2018.

**SUPPLEMENTAL FINANCIAL INFORMATION**
**Consolidated Quarterly Results of Operations (Unaudited)**

(in thousands, except share and per share data)	For the Three Months Ended			
	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017
Total revenue	\$ 147,287	\$ 144,888	\$ 271,286	\$ 464,521
Total operating expenses	123,405	139,696	317,781	333,936
Operating income (loss)	\$ 23,882	\$ 5,192	\$ (46,495)	\$ 130,585
Net income (loss)	\$ 21,074	\$ 4,413	\$ (39,990)	\$ 33,401
Less: net income (loss) attributable to noncontrolling interests	16,494	3,512	(26,472)	22,425
Net income (loss) attributable to Virtu Financial, Inc.	\$ 4,580	\$ 901	\$ (13,518)	\$ 10,976
Net income per share of common stock:				
Basic	\$ 0.10	\$ 0.01	\$ (0.17)	\$ 0.12
Diluted	\$ 0.10	\$ 0.01	\$ (0.17)	\$ 0.12

(in thousands, except share and per share data)	For the Three Months Ended			
	March 31, 2016	June 30, 2016	September 30, 2016	December 31, 2016
Total revenue	\$ 192,638	\$ 174,181	\$ 164,806	\$ 170,647
Total operating expenses	133,936	129,767	126,932	132,046
Operating income	\$ 58,702	\$ 44,414	\$ 37,874	\$ 38,601
Net income	\$ 51,356	\$ 39,286	\$ 33,023	\$ 34,675
Less: net income attributable to noncontrolling interests	41,008	30,908	25,997	27,447
Net income attributable to Virtu Financial, Inc.	\$ 10,348	\$ 8,378	\$ 7,026	\$ 7,228
Net income per share of common stock:				
Basic	\$ 0.27	\$ 0.21	\$ 0.18	\$ 0.18
Diluted	\$ 0.26	\$ 0.21	\$ 0.18	\$ 0.18

**ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

**ITEM 9A. CONTROLS AND PROCEDURES**

**Evaluation of Disclosure Controls and Procedures**

Under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, management has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) of the Securities Exchange Act of 1934, (the “Exchange Act”)) as of December 31, 2017. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2017, our disclosure controls and procedures were effective to ensure information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the periods specified in the Securities and Exchange Commission’s rules and forms and is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, with the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error and mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of controls.

The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, a control may become inadequate because of changes in conditions or because the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be detected.

## Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those written policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles;
- provide reasonable assurance that receipts and expenditures are being made only in accordance with management and director authorization; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2017. Management based this assessment on criteria described in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management determined that as of December 31, 2017, we maintained effective internal control over financial reporting.

We acquired KCG Holdings, Inc. ("KCG") on July 20, 2017, and have not yet included KCG in our assessment of the effectiveness of our internal control over financial reporting. SEC staff guidance permits a company to exclude an acquired business from management's assessment of the effectiveness of internal control over financial reporting for the year in which the acquisition completed. As of December 31, 2017, KCG accounted for 3.5 billion of our total assets, and \$379 million of our total revenue for the year end December 31, 2017.

## Attestation Report on Internal Control over Financial Reporting

As an emerging growth company under Section 103 of the JOBS Act, we are not required to provide, and this report does not include, an attestation report of our independent registered public accounting firm regarding our internal control over financial reporting.

## Changes to Internal Control over Financial Reporting

No change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) occurred during the year ended December 31, 2017 that has or is reasonably likely to materially affect, our internal control over financial reporting.

## ITEM 9B. OTHER INFORMATION

None.

## **PART III**

### **ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE**

Information with respect to this Item will be set forth in our 2018 Proxy Statement, which will be filed with the Securities and Exchange Commission no later than 120 days after December 31, 2017. For the limited purpose of providing the information necessary to comply with this Item 10, the 2018 Proxy Statement is incorporated herein by this reference. All references to the Proxy Statement in this Part III are exclusive of the information set forth under the caption “Audit Committee Report.”

Our board of directors has adopted a Code of Business Conduct and Ethics applicable to all officers, directors and employees, which is available on our website ([www.virtu.com](http://www.virtu.com)) under “Corporate Governance.” We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding amendment to, or waiver from, a provision of our Code of Business Conduct and Ethics by posting such information on our website at the address and location specified above.

### **ITEM 11. EXECUTIVE COMPENSATION**

Information with respect to this Item will be set forth in our 2018 Proxy Statement, which will be filed with the Securities and Exchange Commission no later than 120 days after December 31, 2017. For the limited purpose of providing the information necessary to comply with this Item 11, the 2018 Proxy Statement is incorporated herein by this reference.

### **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

Information with respect to this Item will be set forth in our 2018 Proxy Statement, which will be filed with the Securities and Exchange Commission no later than 120 days after December 31, 2017. For the limited purpose of providing the information necessary to comply with this Item 12, the 2018 Proxy Statement is incorporated herein by this reference.

### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

Information with respect to this Item will be set forth in our 2018 Proxy Statement, which will be filed with the Securities and Exchange Commission no later than 120 days after December 31, 2017. For the limited purpose of providing the information necessary to comply with this Item 13, the 2018 Proxy Statement is incorporated herein by this reference.

### **ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

Information with respect to this Item will be set forth in our 2018 Proxy Statement, which will be filed with the Securities and Exchange Commission no later than 120 days after December 31, 2017. For the limited purpose of providing the information necessary to comply with this Item 14, the 2018 Proxy Statement is incorporated herein by this reference.

**PART IV****ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES****1. Consolidated Financial statements**

The consolidated financial statement required to be filed in the Form 10-K are listed in Part II, Item 8 hereof.

**2. Financial Statement Schedule**

See “Index to Consolidated Financial Statements” in this Form 10-K listed in Part II, Item 8 hereof.

**3. Exhibits**

<u>Exhibit Number</u>	<u>Description</u>
2.1	<a href="#">Reorganization Agreement, dated April 15, 2015, by and among Virtu Financial, Inc., Virtu Financial Merger Sub LLC, Virtu Financial Intermediate Holdings LLC, Virtu Financial Merger Sub II LLC, Virtu Financial Intermediate Holdings II LLC, Virtu Financial LLC, VFH Parent LLC, SLP Virtu Investors, LLC, SLP III EW Feeder I, L.P., SLP III EW Feeder II, L.P., Silver Lake Technology Associates III, L.P., SLP III EW Feeder LLC, Havelock Fund Investments Pte Ltd, Wilbur Investments LLC, VV Investment LLC, Virtu East MIP LLC, Virtu Employee Holdco LLC, TJMT Holdings LLC (f/k/a Virtu Holdings LLC), Virtu Financial Holdings LLC and the Other Class A Members named therein (incorporated herein by reference to Exhibit 2.1 to the Company’s Quarterly Report on Form 10-Q, as amended (File No. 001-37352), filed on May 29, 2015).</a>
2.2	<a href="#">Merger Agreement, dated April 15, 2015, by and among Virtu Financial, Inc., Virtu Financial Merger Sub LLC, Virtu Financial Intermediate Holdings LLC, SLP III EW Feeder Corp., SLP III EW Feeder I, L.P. and Havelock Fund Investments Pte Ltd (incorporated herein by reference to Exhibit 2.2 to the Company’s quarterly report on Form 10-Q, as amended (File No. 001-37352), filed on May 29, 2015).</a>
2.3	<a href="#">Merger Agreement, dated April 15, 2015, by and among Virtu Financial, Inc., Virtu Financial Merger Sub II LLC, Virtu Financial Intermediate Holdings II LLC and Wilbur Investments LLC (incorporated herein by reference to Exhibit 2.3 to the Company’s Quarterly Report on Form 10-Q, as amended (File No. 001-37352), filed on May 29, 2015).</a>
2.4	<a href="#">Agreement and Plan of Merger, dated April 20, 2017, by and among Virtu Financial, Inc., Orchestra Merger Sub, Inc. and KCG Holdings, Inc. (incorporated herein by reference to Exhibit 2.1 to the Company’s Current Report on Form 8-K (File No. 001-37352) filed on April 21, 2017).</a>
2.5	<a href="#">Temasek Investment Agreement, dated April 20, 2017, by and between Virtu Financial, Inc. and Aranda Investments Pte. Ltd. (incorporated herein by reference to Exhibit 2.2 to the Company’s Quarterly Report on Form 10-Q (File No. 001-37352) filed on May 10, 2017).</a>
3.1	<a href="#">Amended and Restated Certificate of Incorporation of the Registrant (incorporated herein by reference to Exhibit 3.1 to the Company’s Quarterly Report on Form 10-Q, as amended (File No. 001-37352), filed on May 29, 2015).</a>
3.2	<a href="#">Amended and Restated By-laws of the Registrant (incorporated herein by reference to Exhibit 3.2 to the Company’s Quarterly Report on Form 10-Q, as amended (File No. 001-37352), filed on May 29, 2015).</a>
4.1	<a href="#">Indenture, dated as of June 16, 2017, by and among Orchestra Borrower LLC, Orchestra Co-Issuer, Inc. and U.S. Bank National Association (incorporated herein by reference to Exhibit 4.1 to the Company’s Quarterly Report on Form 10-Q (File No. 001-37352) filed on August 9, 2017).</a>
4.2	<a href="#">Escrow End Date Supplemental Indenture, dated as July 20, 2017, by and among VFH Parent LLC, Orchestra Borrower LLC, Orchestra Co-Issuer, Inc. Virtu Financial LLC, the other parties that are signatories thereto as Guarantors and U.S. Bank National Association (incorporated herein by reference to Exhibit 4.2 to the Company’s Quarterly Report on Form 10-Q (File No. 001-37352) filed on August 9, 2017).</a>

<u>Exhibit Number</u>	<u>Description</u>
10.1†	<a href="#">Form of Indemnification Agreement (incorporated herein by reference to Exhibit 10.2 to the Company's Amendment No. 2 to Form S-1 Registration Statement (File No. 333-194473) filed on February 20, 2015).</a>
10.2†	<a href="#">Employment Agreement, dated as of August 7, 2013, by and between Virtu Financial, Inc. and Mr. Joseph Molluso (incorporated herein by reference to Exhibit 10.23 to the Company's Amendment No. 1 to Form S-1 Registration Statement (File No. 333-194473) filed on March 26, 2014)</a>
10.3†	<a href="#">Employment Agreement, dated as of April 15, 2015, by and between Virtu Financial, Inc. and Mr. Vincent Viola (incorporated herein by reference to Exhibit 10.14 to the Company's Quarterly Report on Form 10-Q, as amended, (File No. 001-37352) filed on May 29, 2015).</a>
10.4†*	<a href="#">Amended and Restated Employment Agreement, dated as of November 15, 2017, by and between Virtu Financial, Inc. and Mr. Douglas A. Cifu.</a>
10.5†	<a href="#">Virtu Financial, Inc. 2015 Management Incentive Plan Employee Restricted Stock Unit and Common Stock Award Agreement, dated as of December 31, 2015, by and between Virtu Financial, Inc. and Joseph Molluso (incorporated herein by reference to Exhibit 10.12 to the Company's Quarterly Report on Form 10-Q, (File No. 001-37352) filed on August 9, 2017).</a>
10.6†	<a href="#">Virtu Financial, Inc. 2015 Management Incentive Plan Employee Restricted Stock Unit and Common Stock Award Agreement, dated as of December 31, 2016, by and between Virtu Financial, Inc. and Joseph Molluso (incorporated herein by reference to Exhibit 10.13 to the Company's Quarterly Report on Form 10-Q (File No. 001-37352) filed on August 9, 2017).</a>
10.7†*	<a href="#">Confidential Separation Agreement, Interest Repurchase and General Release of Claims, dated as of September 11, 2017, by and between Virtu Financial Inc. and Mr. Venu Palaparathi.</a>
10.8†*	<a href="#">Virtu Financial, Inc. 2015 Management Incentive Plan Employee Restricted Stock Unit and Common Stock Award Agreement, dated as of January 23, 2018, by and between Virtu Financial, Inc. and Joseph Molluso.</a>
10.9†*	<a href="#">Virtu Financial, Inc. 2015 Management Incentive Plan Employee Restricted Stock Unit and Common Stock Award Agreement, dated as of January 23, 2018, by and between Virtu Financial, Inc. and Douglas A. Cifu.</a>
10.10†*	<a href="#">Virtu Financial, Inc. 2015 Amended and Restated Management Incentive Plan Employee Restricted Stock Award Agreement, dated as of February 2, 2018, by and between Virtu Financial, Inc. and Douglas A. Cifu.</a>
10.11	<a href="#">Fourth Amended and Restated Credit Agreement, dated June 30, 2017, by and between Virtu Financial LLC, VFH Parent LLC, the lenders party thereto and JPMorgan Chase Bank, N.A. (incorporated herein by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q (File No. 001-37352) filed on August 9, 2017).</a>
10.12	<a href="#">Escrow Credit Agreement, dated as of June 30, 2017, by and between Orchestra Borrower LLC, the lenders party thereto and JPMorgan Chase Bank, N.A. as Administrative Agent (incorporated herein by reference to Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q (File No. 001-37352) filed on August 9, 2017).</a>
10.13	<a href="#">Stockholders Agreement, dated as of April 15, 2015, by and among Virtu Financial, Inc. and the stockholders named therein (incorporated herein by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, as amended (File No. 001-37352) filed on May 29, 2015).</a>
10.14	<a href="#">Exchange Agreement, dated as of April 15, 2015, by and among Virtu Financial LLC, Virtu Financial, Inc. and the holders of Common Units and shares of Class C Common Stock or Class D Common Stock (as each defined therein) (incorporated herein by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, as amended (File No. 001-37352) filed on May 29, 2015).</a>
10.15	<a href="#">Tax Receivable Agreement, dated as of April 15, 2015, by and among Virtu Financial, Inc., the Founder Member, Virtu Employee Holdco, the Management Members and other pre-IPO investors (incorporated herein by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q, as amended (File No. 001-37352) filed on May 29, 2015).</a>
10.16	<a href="#">Tax Receivable Agreement, dated as of April 15, 2015, by and between Virtu Financial, Inc. and the Investor Post-IPO Stockholders (incorporated herein by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q, as amended (File No. 001-37352) filed on May 29, 2015).</a>

<u>Exhibit Number</u>	<u>Description</u>
10.17	<a href="#">Tax Receivable Agreement, dated as of April 15, 2015, by and among Virtu Financial, Inc. and the Silver Lake Post-IPO Members (incorporated herein by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q, as amended (File No. 001-37352) filed on May 29, 2015).</a>
10.18	<a href="#">Third Amended and Restated Limited Liability Company Agreement of Virtu Financial LLC, dated as of April 15, 2015 (incorporated herein by reference to Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q, as amended (File No. 001-37352) filed on May 29, 2015).</a>
10.19	<a href="#">Amended and Restated Limited Liability Company Agreement of Virtu Employee Holdco LLC, dated as of April 15, 2015 (incorporated herein by reference to Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q, as amended (File No. 001-37352), filed on May 29, 2015).</a>
10.20	<a href="#">Class C Common Stock Subscription Agreement, dated as of April 15, 2015 (incorporated herein by reference to Exhibit 10.10 to the Company's Quarterly Report on Form 10-Q, as amended (File No. 001-37352) filed on May 29, 2015).</a>
10.21	<a href="#">Class D Common Stock Subscription Agreement, dated as of April 15, 2015 (incorporated herein by reference to Exhibit 10.11 to the Company's Quarterly Report on Form 10-Q, as amended (File No. 001-37352) filed on May 29, 2015).</a>
10.22	<a href="#">Class A Common Stock Purchase Agreement, dated as of April 15, 2015, by and between SLP III EW Feeder I, L.P. and Virtu Financial, Inc. (incorporated herein by reference to Exhibit 10.12 to the Company's Quarterly Report on Form 10-Q, as amended (File No. 001-37352) filed on May 29, 2015).</a>
10.23	<a href="#">Unit Purchase Agreement, dated as of April 15, 2015, by and among Virtu Financial, Inc. and the sellers listed therein (incorporated herein by reference to Exhibit 10.13 to the Company's Quarterly Report on Form 10-Q, as amended (File No. 001-37352) filed on May 29, 2015).</a>
10.24	<a href="#">Voting Agreement, dated April 20, 2017, by and among Virtu Financial, Inc., Orchestra Merger Sub, Inc. and Jefferies LLC (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, (File No. 001-37352) filed on April 21, 2017).</a>
10.25	<a href="#">Stockholders Agreement, dated April 20, 2017, by and among Virtu Financial, Inc., TJMT Holdings LLC, Aranda Investments Pte. Ltd., Havelock Fund Investments Pte Ltd. and North Island Holdings I, LP (incorporated herein by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, (File No. 001-37352) filed on May 10, 2017).</a>
10.26	<a href="#">Amended and Restated Registration Rights Agreement, dated April 20, 2017, by and among Virtu Financial, Inc., TJMT Holdings LLC, Aranda Investments Pte. Ltd., Havelock Fund Investments Pte Ltd., North Island Holdings I, LP and the additional holders named therein (incorporated herein by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 001-37352) filed on May 10, 2017).</a>
10.27	<a href="#">Second Amendment, dated as of June 2, 2017, to the Third Amended and Restated Limited Liability Company Agreement of Virtu Financial LLC, by and among Virtu Financial LLC, Virtu Financial, Inc. and TJMT Holdings LLC (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-37352) filed on June 2, 2017).</a>
10.28	<a href="#">Amended and Restated Investment Agreement, dated as of June 23, 2017, by and between Virtu Financial, Inc. and North Island Holdings I, LP (incorporated herein by reference to Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q (File No. 001-37352) filed on August 9, 2017).</a>
10.29*	<a href="#">Amendment No. 1, dated as of January 2, 2018, to the Fourth Amended and Restated Credit Agreement, dated June 30, 2017, by and between Virtu Financial LLC, VFH Parent LLC, the lenders party thereto and JPMorgan Chase Bank, N.A.</a>
10.30*	<a href="#">Third Amendment, dated as of January 5, 2018, to the Third Amended and Restated Limited Liability Company Agreement of Virtu Financial LLC, dated as of April 15, 2015.</a>
21.1*	<a href="#">Subsidiaries of Virtu Financial, Inc.</a>
23.1*	<a href="#">Consent of Deloitte &amp; Touche LLP.</a>
31.1*	<a href="#">Certification of Chief Executive Officer required by Rule 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>
31.2*	<a href="#">Certification of Chief Financial Officer required by Rule 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>



<u>Exhibit Number</u>	<u>Description</u>
32.1*	<a href="#">Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith).</a>
32.2*	<a href="#">Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith).</a>
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase
101.LAB*	XBRL Taxonomy Extension Label Linkbase
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase
101.DEF*	XBRL Taxonomy Extension Definition Document

\* Filed herewith.

†Management contract or compensatory plan or arrangement.

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Virtu Financial, Inc.

DATE: March 13, 2018

By: /s/ Douglas A. Cifu  
Douglas A. Cifu  
Chief Executive Officer

DATE: March 13, 2018

By: /s/ Joseph Molluso  
Joseph Molluso  
Chief Financial Officer

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Douglas A. Cifu and Joseph Molluso, and each of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully and to all intents and purposes as he or she might or could do in person hereby ratifying and confirming all that said attorneys-in-fact and agents, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities and Exchange Act of 1934, the report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on March 13, 2018.

<u>Signature</u>	<u>Title</u>
<u>/s/ Douglas A. Cifu</u> Douglas A. Cifu	Chief Executive Officer (Principal Executive Officer) and Director
<u>/s/ Joseph Molluso</u> Joseph Molluso	Chief Financial Officer (Principal Financial and Accounting Officer)
<u>/s/ Robert Greifeld</u> Robert Greifeld	Chairman of the Board of Directors
<u>/s/ Vincent Viola</u> Vincent Viola	Chairman Emeritus and Director
<u>/s/ John Philip Abizaid</u> John Philip Abizaid	Director
<u>/s/ William F. Cruger, Jr.</u> William F. Cruger, Jr.	Director
<u>/s/ John D. Nixon</u> John D. Nixon	Director

<hr/>	/s/ Christopher Quick	Director
	Christopher Quick	
<hr/>	/s/ John F. Sandner	Director
	John F. Sandner	
<hr/>	/s/ Joseph J. Grano, Jr.	Director
	Joseph J. Grano, Jr.	
<hr/>	/s/ Glenn Hutchins	Director
	Glenn Hutchins	
<hr/>	/s/ Michael T. Viola	Director
	Michael T. Viola	

**VIRTU FINANCIAL, INC.**  
**2015 AMENDED AND RESTATED MANAGEMENT INCENTIVE PLAN**  
**EMPLOYEE**  
**RESTRICTED STOCK AWARD AGREEMENT**

THIS RESTRICTED STOCK AWARD AGREEMENT (the "Agreement"), is entered into as of February 2, 2018 (the "Date of Grant"), by and between Virtu Financial, Inc., a Delaware corporation (the "Company"), and Douglas A. Cifu (the "Participant").

WHEREAS, the Company has adopted the Virtu Financial, Inc. 2015 Amended and Restated Management Incentive Plan (the "Plan"), pursuant to which Restricted Stock (the "Restricted Shares") may be granted;

WHEREAS, the Company and the Participant entered into that certain Amended and Restated Employment Agreement, dated as of November 15, 2017 (the "Employment Agreement"), pursuant to which the Participant is eligible to receive an equity award at the beginning of each calendar year during the Term (as defined in the Employment Agreement); and

WHEREAS, the Compensation Committee of the Board of Directors of the Company has determined that it is in the best interests of the Company and its stockholders to grant the Restricted Shares provided for herein to the Participant subject to the terms set forth herein.

NOW, THEREFORE, for and in consideration of the premises and the covenants of the parties contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereto, for themselves, their successors and assigns, hereby agree as follows:

**1. Grant of Restricted Shares.**

(a) Grant. The Company hereby grants to the Participant a total of 150,000 Restricted Shares, on the terms and conditions set forth in this Agreement and as otherwise provided in the Plan. The Restricted Shares shall be earned and vest in accordance with Section 2.

(b) Incorporation by Reference. The provisions of the Plan are incorporated herein by reference. Except as otherwise expressly set forth herein, this Agreement shall be construed in accordance with the provisions of the Plan and any interpretations, amendments, rules and regulations promulgated by the Committee from time to time pursuant to the Plan. Any capitalized terms not otherwise defined in this Agreement shall have the definitions set forth in the Plan. The Committee shall have final authority to interpret and construe the Plan and this Agreement and to make any and all determinations under them, and its decision shall be binding and conclusive upon the Participant and his legal representative in respect of any questions arising under the Plan or this Agreement. The Participant acknowledges that he has received a copy of the Plan and has had an opportunity to review the Plan and agrees to be bound by all the terms and provisions of the Plan.

**2. Vesting.**

(a) Subject to the Participant's continued employment or service with the Company or an Affiliate, except as may otherwise be provided herein or in the Employment Agreement, the number of Restricted Shares earned pursuant to Section 2(b) hereof shall vest in two (2) equal installments on each of December 31, 2018 and December 31, 2019 (each such date, a "Vesting Date"). Upon each Vesting Date, such portion of the Restricted Shares that vest on such date shall no longer be subject to the transfer restrictions pursuant to Section 8(a) hereof or cancellation pursuant to Section 4 hereof. Any fractional

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Restricted Shares resulting from the application of the vesting schedule shall be aggregated and the Restricted Shares resulting from such aggregation shall vest on the final Vesting Date.

(b) The number of Restricted Shares earned under this Agreement shall be determined based on the percentage of the Company's Adjusted EBITDA target of \$444,900,000 ("Budgeted EBITDA") achieved in calendar year 2018 in accordance with the table below. The Budgeted EBITDA shall be determined in a manner consistent with the methodology utilized by the Company in the ordinary course consistent with past practice.

<b>Percentage of Budgeted EBITDA Achieved</b>	<b>Number of Shares Earned</b>
75% or more	150,000
74%	135,000
73%	120,000
72%	105,000
71%	90,000
70%	75,000
Less than 70%	0

If the percentage of the Company's Budgeted EBITDA achieved is greater than 70% but less than 75%, then the amount of earned shares in the table above will be determined based on linear interpolation.

**3. Dividends.** In the event of any issuance of a cash dividend on the shares of Class A Common Stock (a "Dividend"), the Participant shall be entitled to receive, with respect to each Restricted Share granted pursuant to this Agreement and outstanding as of the record date for such Dividend, payment of an amount equal to the Dividend at the same time as the Dividend is paid to holders of shares of Class A Common Stock generally.

**4. Termination of Employment or Service.** If the Participant's employment or service with the Company and its Affiliates terminates for any reason, any unearned and unvested Restricted Shares shall be accelerated, remain eligible to be earned or cancelled in accordance with the terms of the Employment Agreement.

**5. Issuance.** The Restricted Shares shall be issued by the Company and shall be registered in the Participant's name on the stock transfer books of the Company promptly after the date hereof in book-entry form, subject to the Company's directions at all times prior to the date the Restricted Shares vest. As a condition of the award of Restricted Shares, Participant shall deliver to the Company a stock power, endorsed in blank, relating to such Restricted Shares. The Committee or the Company may cause a legend or legends to be put on the certificate to make appropriate reference to such restrictions as the Committee or the Company may deem advisable under the Plan or as may be required by the rules, regulations, and other requirements of the Securities and Exchange Commission, NASDAQ or any other securities exchange or inter-dealer quotation system on which the Class A Common Stock is listed or quoted, and any applicable federal, state or local laws. To the extent allowable by applicable law, neither the Committee, the Company, nor their respective designees, as applicable, shall be liable for any act it or

they may do or omit to do with respect to holding the Restricted Shares in escrow and while acting in good faith in the exercise of its or their judgment.

**6. Rights as a Stockholder.** The Participant shall be, and shall have the rights or privileges of, a stockholder of the Company, including, without limitation, any voting rights, in respect of the Restricted Shares.

**7. Compliance with Legal Requirements.**

(a) Generally. The granting and settlement of the Restricted Shares, and any other obligations of the Company under this Agreement, shall be subject to all applicable U.S. federal, state and local laws, rules and regulations, all applicable non-U.S. laws, rules and regulations and to such approvals by any regulatory or governmental agency as may be required. The Participant agrees to take all steps the Committee or the Company determines are reasonably necessary to comply with all applicable provisions of U.S. federal and state securities law and non-U.S. securities law in exercising his rights under this Agreement.

(b) Taxes and Withholding. The vesting of the Restricted Shares shall be subject to the Participant satisfying any applicable U.S. federal, state and local tax withholding obligations and non-U.S. tax withholding obligations. The Participant shall be required to pay to the Company, and the Company shall have the right and is hereby authorized to withhold any cash, shares of Class A Common Stock, other securities or other property or from any compensation or other amounts owing to the Participant, the amount (in cash, Class A Common Stock, other securities or other property) of any required withholding taxes in respect of the Restricted Shares or any payment or transfer of the Restricted Shares, and to take any such other action as the Committee or the Company deem necessary to satisfy all obligations for the payment of such withholding taxes. In its sole discretion, the Company may permit the Participant to satisfy, in whole or in part, the tax obligations by withholding shares of Class A Common Stock that would otherwise be deliverable to the Participant upon vesting of the Restricted Shares with a Fair Market Value equal to such withholding liability.

**8. Restrictive Covenants.**

(a) The Participant acknowledges and agrees that the Participant remains bound by the confidentiality and restrictive covenant provisions set forth in Sections 9.04 and 12.11 of the Third Amended and Restated Limited Liability Company Agreement of Virtu Financial, LLC, dated as of the Date of Grant (or any successor provisions) as a "Member" thereof.

(b) In the event that the Participant violates any of the restrictive covenants referred to in this Section 8, in addition to any other remedy which may be available at law or in equity, the Restricted Shares shall be automatically forfeited effective as of the date on which such violation first occurs. The foregoing rights and remedies are in addition to any other rights and remedies that may be available to the Company and shall not prevent (and the Participant shall not assert that they shall prevent) the Company from bringing one or more actions in any applicable jurisdiction to recover damages as a result of the Participant's breach of such restrictive covenants.

**9. Miscellaneous.**

(a) Transferability. The Restricted Shares may not be assigned, alienated, pledged, attached, sold or otherwise transferred or encumbered (a "Transfer") by the Participant other than by will or by the laws of descent and distribution, pursuant to a qualified domestic relations order or as otherwise permitted under Section 15(b) of the Plan. Any attempted Transfer of the Restricted Shares contrary to the

provisions hereof, and the levy of any execution, attachment or similar process upon the Restricted Shares, shall be null and void and without effect.

(b) Waiver. Any right of the Company contained in this Agreement may be waived in writing by the Committee. No waiver of any right hereunder by any party shall operate as a waiver of any other right, or as a waiver of the same right with respect to any subsequent occasion for its exercise, or as a waiver of any right to damages. No waiver by any party of any breach of this Agreement shall be held to constitute a waiver of any other breach or a waiver of the continuation of the same breach.

(c) Section 409A. The Restricted Shares are intended to be exempt from, or compliant with, Section 409A of the Code. Notwithstanding the foregoing or any provision of the Plan or this Agreement, if any provision of the Plan or this Agreement contravenes Section 409A of the Code or could cause the Participant to incur any tax, interest or penalties under Section 409A of the Code, the Committee may, in its sole discretion and without the Participant's consent, modify such provision to (i) comply with, or avoid being subject to, Section 409A of the Code, or to avoid the incurrence of taxes, interest and penalties under Section 409A of the Code, and/or (ii) maintain, to the maximum extent practicable, the original intent and economic benefit to the Participant of the applicable provision without materially increasing the cost to the Company or contravening the provisions of Section 409A of the Code. This Section 10(c) does not create an obligation on the part of the Company to modify the Plan or this Agreement and does not guarantee that the Restricted Shares will not be subject to interest and penalties under Section 409A.

(d) Notices. Any notices provided for in this Agreement or the Plan shall be in writing and shall be deemed sufficiently given if either hand delivered or if sent by fax, pdf/email or overnight courier, or by postage paid first class mail. Notices sent by mail shall be deemed received three business days after mailing but in no event later than the date of actual receipt. Notices shall be directed, if to the Participant, at the Participant's address indicated by the Company's records, or if to the Company, to the attention of the General Counsel at the Company's principal executive office.

(e) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, and each other provision of this Agreement shall be severable and enforceable to the extent permitted by law.

(f) No Rights to Employment or Service. Nothing contained in this Agreement shall be construed as giving the Participant any right to be retained, in any position, as an employee, consultant or director of the Company or its Affiliates or shall interfere with or restrict in any way the rights of the Company or its Affiliates, which are hereby expressly reserved, to remove, terminate or discharge the Participant at any time for any reason whatsoever.

(g) Fractional Shares. In lieu of issuing a fraction of a share of Class A Common Stock resulting from adjustment of the Restricted Shares pursuant to Section 12 of the Plan or otherwise, the Company shall be entitled to pay to the Participant an amount in cash equal to the Fair Market Value of such fractional share.

(h) Beneficiary. The Participant may file with the Committee a written designation of a beneficiary on such form as may be prescribed by the Committee and may, from time to time, amend or revoke such designation.

(i) Successors. The terms of this Agreement shall be binding upon and inure to the benefit of the Company and its successors and assigns, and of the Participant and the beneficiaries, executors, administrators, heirs and successors of the Participant.

(j) Entire Agreement. This Agreement and the Plan contain the entire agreement and understanding of the parties hereto with respect to the subject matter contained herein and supersede all prior communications, representations and negotiations in respect thereto. No change, modification or waiver of any provision of this Agreement shall be valid unless the same be in writing and signed by the parties hereto, except for any changes permitted without consent under Section 12 or 14 of the Plan.

(k) Governing Law and Venue. This Agreement shall be construed and interpreted in accordance with the laws of the State of Delaware, without regard to principles of conflicts of laws thereof, or principles of conflicts of laws of any other jurisdiction which could cause the application of the laws of any jurisdiction other than the State of Delaware.

(i) Dispute Resolution; Consent to Jurisdiction. All disputes between or among any Persons arising out of or in any way connected with the Plan, this Agreement, the Restricted Shares shall be solely and finally settled by the Committee, acting in good faith, the determination of which shall be final. Any matters not covered by the preceding sentence shall be solely and finally settled in accordance with the Plan, and the Participant and the Company consent to the personal jurisdiction of the United States Federal and state courts sitting in Wilmington, Delaware as the exclusive jurisdiction with respect to matters arising out of or related to the enforcement of the Committee's determinations and resolution of matters, if any, related to the Plan or this Agreement not required to be resolved by the Committee. Each such Person hereby irrevocably consents to the service of process of any of the aforementioned courts in any such suit, action or proceeding by the mailing of copies thereof by registered or certified mail, postage prepaid, to the last known address of such Person, such service to become effective ten (10) days after such mailing.

(ii) Waiver of Jury Trial. Each party hereto hereby waives, to the fullest extent permitted by applicable law, any right it may have to a trial by jury in any legal proceeding directly or indirectly arising out of or relating to this Agreement or the transactions contemplated (whether based on contract, tort or any other theory). Each party hereto (A) certifies that no representative, agent or attorney of any other party has represented, expressly or otherwise, that such other party would not, in the event of litigation, seek to enforce the foregoing waiver and (B) acknowledges that it and the other parties hereto have been induced to enter into this Agreement by, among other things, the mutual waivers and certifications in this section.

(l) Headings; Gender. The headings of the Sections hereof are provided for convenience only and are not to serve as a basis for interpretation or construction, and shall not constitute a part, of this Agreement. Masculine pronouns and other words of masculine gender shall refer to both men and women as appropriate.

(m) Counterparts. This Agreement may be executed in one or more counterparts (including via facsimile and electronic image scan (pdf)), each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties.

(n) Electronic Signature and Delivery. This Agreement may be accepted by return signature or by electronic confirmation. By accepting this Agreement, the Participant consents to the electronic delivery of prospectuses, annual reports and other information required to be delivered by U.S. Securities and Exchange Commission rules (which consent may be revoked in writing by the Participant at any time upon three business days' notice to the Company, in which case subsequent prospectuses, annual reports and other information will be delivered in hard copy to the Participant).



(o) Electronic Participation in Plan. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

*[remainder of page intentionally left blank]*

IN WITNESS WHEREOF, this Agreement has been executed by the Company and the Participant as of the day first written above.

VIRTU FINANCIAL, INC.

By: /s/ Robert Greifeld

Name: Robert Greifeld

Title: Chairman

/s/ Douglas A. Cifu

Douglas A. Cifu

*[Signature Page to Restricted Stock Award Agreement]*

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AMENDMENT NO. 1, dated as of January 2, 2018 (this "Amendment"), to the Fourth Amended and Restated Credit Agreement, dated as of June 30, 2017 (as amended, restated, modified or otherwise supplemented from time to time, the "Credit Agreement"), by and among VIRTU FINANCIAL LLC, a Delaware limited liability company ("Holdings"), VFH PARENT LLC, a Delaware limited liability company (the "Borrower"), the LENDERS party thereto from time to time and JPMORGAN CHASE BANK, N.A., as administrative agent (the "Administrative Agent") and as collateral agent (the "Collateral Agent"). Capitalized terms used but not defined herein shall have the meanings assigned to such terms in the Credit Agreement as amended by this Amendment.

WHEREAS, the Borrower wishes to replace all New Term Loans with Term B-1 Loans and to make certain other amendments to the Credit Agreement;

WHEREAS, the Required Lenders and each Lender with a Converted New Term Loan (as defined in Exhibit A) have agreed to the amendments contemplated above;

WHEREAS, JPMorgan Chase Bank, N.A. (in such capacity, the "Term B-1 Lender") has agreed to provide the Term B-1 Commitment (as defined in Exhibit A); and

WHEREAS, each Lender with outstanding New Term Loans that has executed a signature page to this Amendment has, to the extent set forth on such signature page, agreed to convert all of such New Term Loans to Term B-1 Loans (or such lesser amount as may be notified to such Lender by the Administrative Agent prior to the Amendment No. 1 Effective Date).

NOW, THEREFORE, in consideration of the premises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

SECTION 1. Amendment of the Credit Agreement. The Credit Agreement is, effective as of the Amendment No. 1 Effective Date, hereby amended to delete the stricken text (indicated textually in the same manner as the following example: ~~stricken text~~) and to add the double-underlined text (indicated textually in the same manner as the following example: double-underlined text) as set forth in the pages of the Credit Agreement attached as Exhibit A hereto.

SECTION 2. Effectiveness. This Amendment shall become effective on the date (such date and time of effectiveness, the "Amendment No. 1 Effective Date") that each of the conditions precedent set forth below shall have been satisfied:

(a) The Administrative Agent shall have received executed counterparts hereof from each of the Loan Parties, Lenders constituting the Required Lenders and the Term B-1 Lender;

(b) The Administrative Agent shall have received written opinions (addressed to the Administrative Agent and the Lenders and dated the Amendment No. 1 Effective Date) of Paul, Weiss, Rifkind, Wharton & Garrison LLP, New York counsel for the Loan Parties, and regulatory counsel for the Loan Parties reasonably acceptable to the Administrative Agent, as to

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such matters as the Administrative Agent may reasonably request and in form and substance reasonably satisfactory to the Administrative Agent. Each of Holdings and the Borrower hereby requests such counsels to deliver such opinions;

(c) The Administrative Agent shall have received a Borrowing Request requesting the borrowing of the Term B-1 Loans and a notice of prepayment of the Non- Converted New Term Loans (as defined in Exhibit A);

(d) The Administrative Agent shall have received a certificate from the chief financial officer or chief operating officer of the Borrower (x) in the form of Exhibit Q to the Credit Agreement certifying as to the solvency of the Borrower and its Subsidiaries on a consolidated basis after giving effect to the transactions to be consummated on the Amendment No. 1 Effective Date and (y) as to the satisfaction of the conditions set forth in Section 4.02 of the Credit Agreement;

(e) The Administrative Agent shall have received copies of lien searches in such jurisdictions as the Lead Arranger may reasonably request (it being understood that lien searches in the jurisdiction of organization or formation of each Loan Party shall be sufficient);

(f) The Administrative Agent shall have received a certificate of each Loan Party, dated the Amendment No. 1 Effective Date, substantially in the form of Exhibit G to the Credit Agreement with appropriate insertions, executed by any Responsible Officer of such Loan Party, and including or attaching the documents referred to in paragraph (g) of this Section;

(g) The Administrative Agent shall have received a copy of (i) each Organizational Document of each Loan Party certified, to the extent applicable, as of a recent date by the applicable Governmental Authority, or a certification from such Loan Party that its Organizational Documents in the form delivered to the Administrative Agent on the Restatement Effective Date or the Escrow Assumption Date, as applicable, have not been amended or modified since the date of such delivery and are in full force and effect, (ii) signature and incumbency certificates of the Responsible Officers of each Loan Party executing the Loan Documents to which it is a party, (iii) resolutions of the board of directors and/or similar governing bodies of each Loan Party approving and authorizing the execution, delivery and performance of the Loan Documents to which it is a party, certified as of the Amendment No. 1 Effective Date by its secretary, an assistant secretary or a Responsible Officer as being in full force and effect without modification or amendment, and (iv) a good standing certificate (to the extent such concept exists) from the applicable Governmental Authority of each Loan Party's jurisdiction of incorporation, organization or formation; and

(h) The Borrower shall have paid, or concurrently herewith shall pay to JPMorgan Chase Bank, N.A. such fees as have separately been agreed by JPMorgan Chase Bank, N.A. and the Borrower and, to the extent invoiced, the reasonable and documented out-of- pocket expenses of the Administrative Agent and the Lead Arranger in connection with this Amendment (including the reasonable fees and expenses of Cahill Gordon & Reindel LLP, counsel to the Lead Arranger and the Administrative Agent).

SECTION 3. Representations and Warranties. In order to induce the Lenders and

the Administrative Agent to enter into this Amendment, each of the Loan Parties represents and warrants to each of the Lenders and the Administrative Agent that, as of the Amendment No. 1 Effective Date, both before and after giving effect to the transactions contemplated by this Amendment:

(a) no Default or Event of Default exists; and

(b) the representations and warranties of each Loan Party contained in Article III of the Credit Agreement or any other Loan Document are true and correct in all material respects on and as of such date (except, to the extent that such representations and warranties specifically refer to an earlier date, they are true and correct as of such earlier date); provided, that, to the extent that such representations and warranties are qualified by materiality, material adverse effect or similar language, they are true and correct in all respects.

SECTION 4. Reference to and Effect on the Loan Documents; Reaffirmation.

(a) On and after the Amendment No. 1 Effective Date, each reference in the Credit Agreement to “this Agreement,” “hereunder,” “hereof” or words of like import referring to the Credit Agreement, and each reference in the Notes and each of the other Loan Documents to “the Credit Agreement,” “thereunder,” “thereof” or words of like import referring to the Credit Agreement, shall mean and be a reference to the Credit Agreement, as amended by this Amendment. The execution, delivery and effectiveness of this Amendment shall not, except as expressly provided herein, operate as a waiver of (or otherwise affect) any right, power or remedy of any Lender or any Agent under any of the Loan Documents, nor constitute a waiver of any provision of any of the Loan Documents. This Amendment shall not constitute a novation of the Credit Agreement or any other Loan Document.

(b) Each of the Loan Parties, (i) hereby consents to the Amendment, (ii) without limiting its obligations under, or the provisions of, the Guarantee Agreement, hereby confirms its respective guarantees, as applicable, under the Guarantee Agreement, (iii) without limiting its obligations under, or the provisions of, the Collateral Agreement, hereby confirms its respective assignments, pledges and grants of security interests, as applicable, under the Collateral Agreement and each of the other Loan Documents to which it is party, (iv) without limiting its obligations under, or the provisions of, any Loan Document, hereby confirms that the obligations of the Borrower under the Credit Agreement are entitled to the benefits of the guarantees and the security interests set forth or created in the Guarantee Agreement, the Collateral Agreement and the other Loan Documents and constitute “Obligations,” “Loan Document Obligations,” “Secured Obligations” or other similar term for purposes thereof, (v) hereby agrees that, after giving effect to this Amendment, such guarantees, and pledges and grants of security interests, as applicable, shall continue to be in full force and effect and shall continue to inure to the benefit of the Lenders and the other Secured Parties, (vi) hereby ratifies, confirms and agrees that all Liens granted, conveyed, or assigned to the Administrative Agent by such Person pursuant to any Loan Document to which it is a party remain in full force and effect, are not released or reduced, and after giving effect to the Credit Agreement and the Transactions continue to secure full payment and performance of the obligations under the Credit Agreement and such Liens continue unimpaired with the same priority to secure repayment of such

obligations whether heretofore or hereafter incurred and no new filings are required to be made and no other action is required to be taken to perfect or to maintain the perfection of such Liens and (vii) the Obligations of Borrower and the other Loan Parties under the Credit Agreement that remain unpaid and outstanding as of the Amendment No. 1 Effective Date shall continue to exist under and be evidenced by the Credit Agreement and the other Loan Documents.

(c) Each of the Loan Parties further agrees to take any action that may be required or that is requested by the Administrative Agent to ensure compliance by Holdings or the Borrower with the provisions of Section 5.12 of the Credit Agreement and hereby reaffirms its obligations under each similar provision of each Loan Document to which it is a party.

SECTION 5. Applicable Law; Waiver of Jury Trial.

**(A) THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK WITHOUT GIVING EFFECT TO ANY CONFLICTS PROVISIONS THAT WOULD RESULT IN THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION.**

**(B) EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL ACTION OR PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AMENDMENT (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY).**

SECTION 6. Headings. The Section headings used herein are for convenience of reference only, are not part of this Amendment and are not to affect the construction of, or to be taken into consideration in interpreting, this Amendment.

SECTION 7. Counterparts. This Amendment may be executed in any number of counterparts and by different parties hereto on separate counterparts, each of which when so executed and delivered shall be deemed to be an original, but all of which when taken together shall constitute a single instrument. Delivery of an executed counterpart of a signature page of this Amendment by facsimile or any other electronic transmission shall be effective as delivery of an original executed counterpart hereof.

[Signature pages to follow]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their respective authorized officers as of the day and year first written above.

**VFH PARENT LLC, as Borrower**

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**VIRTU FINANCIAL LLC, as Holdings**

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**ARATIKA LLC, as a Subsidiary Loan Party**

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**GLOBAL COLOCATION SERVICES LLC, as a Subsidiary Loan Party**

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**VIRTU KCG HOLDINGS LLC, as a Subsidiary Loan Party**

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**NATIONAL TOWER COMPANY LLC, as a Subsidiary Loan Party**

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

[Amendment No. 1 to Credit Agreement]

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**ORCHESTRA BORROWER LLC**, as a Subsidiary Loan Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**ORCHESTRA CO-ISSUER, INC.**, as a Subsidiary Loan Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**SERVICES DEVELOPMENT COMPANY LLC**, as a Subsidiary Loan Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**VIRTU FINANCIAL ENERGY AND COMMODITIES, LLC**, as a Subsidiary Loan Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**VIRTU FINANCIAL F/X LLC**, as a Subsidiary Loan Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**VIRTU GETCO HOLDING COMPANY LLC**, as a Subsidiary Loan Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer



**VIRTU FINANCIAL GLOBAL SERVICES LLC**, as a  
Subsidiary Loan Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**VIRTU FINANCIAL OPERATING LLC**, as a Subsidiary  
Loan Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**VIRTU FINANCIAL SERVICES LLC**, as a Subsidiary  
Loan Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**VIRTU KNIGHT CAPITAL GROUP LLC**, as a  
Subsidiary Loan Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**VIRTU STRATEGIC HOLDINGS LLC**, as a Subsidiary  
Loan Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

**VIRTU TECHNOLOGIES LLC**, as a Subsidiary Loan  
Party

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer and Treasurer

[Amendment No. 1 to Credit Agreement]

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JPMORGAN CHASE BANK, N.A., as Administrative  
Agent

By: /s/ Victoria Teterceva

Name: Victoria Teterceva

Title: Vice President

J. P. Morgan

[Amendment No. 1 to Credit Agreement]

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By: /s/ Victoria Teterceva

Name: Victoria Teterceva

Title: Vice President

J. P. Morgan

[Amendment No. 1 to Credit Agreement]

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**Term Lender Signature Page to Amendment No. 1**

The undersigned hereby irrevocably and unconditionally approves Amendment No. 1 and consents as follows (check ONE option):

**Cashless Settlement Option**

- to exchange 100% of the outstanding principal amount of the New Term Loans held by such Lender for Term B-1 Loans in an equal principal amount (or such lesser amount as may be notified to such Lender by JPMorgan Chase Bank, N.A. prior to the Amendment No. 1 Effective Date).

**Post-Closing Settlement Option**

- to have 100% of the outstanding principal amount of the New Term Loans held by such Lender prepaid on the Amendment No. 1 Effective Date and purchase by assignment the principal amount of Term B-1 Loans committed to separately by the undersigned.

[NAME OF INSTITUTION]

By: \_\_\_\_\_  
Name:  
Title:

If a second signature is necessary:

By: \_\_\_\_\_  
Name:  
Title:

[Amendment No. 1 to Credit Agreement]

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**Exhibit A**

See attached.

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FOURTH AMENDED AND RESTATED CREDIT AGREEMENT

dated as of June 30, 2017,

as amended by Amendment No. 1 dated as of January 2, 2018

among

VIRTU FINANCIAL LLC,  
as Holdings,

VFH PARENT LLC,  
as Borrower,

The Lenders Party Hereto,

and

JPMORGAN CHASE BANK, N.A.,  
as Administrative Agent

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JPMORGAN CHASE BANK, N.A.,  
as Sole Lead Arranger and Bookrunner

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**FOURTH AMENDED AND RESTATED CREDIT AGREEMENT**, dated as of June 30, 2017 (this “**Agreement**”), among VIRTU FINANCIAL LLC, a Delaware limited liability company (“**Holdings**”), VFH PARENT LLC, a Delaware limited liability company (the “**Borrower**”), the LENDERS party hereto and JPMORGAN CHASE BANK, N.A., as administrative agent and collateral agent (in such capacities, including any successor thereto, the “**Administrative Agent**”). This Agreement amends and restates the Existing Credit Agreement (as defined below) in its entirety.

**WHEREAS**, Holdings, the Borrower, the Lenders, the Administrative Agent, and other parties are party to a credit agreement dated as of October 27, 2016 (as amended, restated, supplemented or otherwise modified prior to the Restatement Effective Date, the “**Existing Credit Agreement**”), and the parties to the Restatement Agreement (as defined below) have agreed to amend and restate in its entirety the Existing Credit Agreement and replace it in its entirety with this Agreement.

**WHEREAS**, the Borrower has further requested that on the Amendment No. 1 Effective Date, all New Term Loans be converted to Term B-1 Loans or be prepaid from the proceeds of newly funded Term B-1 Loans and/or cash on hand of the Borrower. Subject to the satisfaction of the conditions set forth in Section 2 of Amendment No. 1, the parties thereto have agreed to lend Term B-1 Loans and/or convert their New Term Loans into Term B-1 Loans, in each case, on the terms and subject to the conditions set forth therein and herein.

**NOW, THEREFORE**, in consideration of the premises and the agreements, provisions and covenants herein contained, the parties hereto agree as follows:

ARTICLE 1  
DEFINITIONS

Section 1.01. *Defined Terms.* As used in this Agreement, the following terms have the meanings specified below:

“**ABR**” when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Alternate Base Rate.

“**Acceptable Discount**” has the meaning assigned to such term in Section 2.09(a)(ii)(D).

“**Acceptable Prepayment Amount**” has the meaning assigned to such term in Section 2.09(a)(ii)(D).

“**Acceptance and Prepayment Notice**” means an irrevocable written notice from the Borrower accepting a Solicited Discounted Prepayment Offer to make a Discounted Term Loan Prepayment at the Acceptable Discount specified therein pursuant to Section 2.09(a)(ii)(D) substantially in the form of Exhibit O.

“**Acceptance Date**” has the meaning specified in Section 2.09(a)(ii)(D).

“**Acquired EBITDA**” means, with respect to any Acquired Entity or Business or any Converted Restricted Subsidiary (any of the foregoing, a “**Pro Forma Entity**”) for

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any period, the amount for such period of Consolidated EBITDA of such Pro Forma Entity (determined as if references to Holdings and the Restricted Subsidiaries in the definition of the term “**Consolidated EBITDA**” were references to such Pro Forma Entity and its subsidiaries which will become Restricted Subsidiaries), all as determined on a consolidated basis for such Pro Forma Entity.

“**Acquired Entity or Business**” has the meaning set forth in the definition of the term “Consolidated EBITDA”.

“**Additional Lender**” means any Additional Revolving Lender or any Additional Term Lender, as applicable.

“**Additional Notes**” has the meaning assigned to such term in Section 6.01(a)(xxii).

“**Additional Revolving Lender**” means, at any time, any bank or other financial institution that agrees to provide any portion of any Incremental Revolving Facility pursuant to an Incremental Revolving Facility Amendment in accordance with Section 2.18; *provided* that each Additional Revolving Lender (other than any Person that is a Revolving Lender, an Affiliate of a Revolving Lender or an Approved Fund of a Revolving Lender at such time) shall be subject to the approval of the Administrative Agent and, if such Additional Revolving Lender will provide loans under an Incremental Revolving Facility, a Revolving Commitment Increase or any Other Revolving Commitment, each Issuing Bank (such approval, in each case, not to be unreasonably withheld or delayed) and the Borrower.

“**Additional Term Lender**” means, at any time, any bank or other financial institution that agrees to provide any portion of any (a) Incremental Term Facility pursuant to an Incremental Term Facility Amendment in accordance with Section 2.18 or (b) Credit Agreement Refinancing Indebtedness pursuant to a Refinancing Amendment in accordance with Section 2.19; *provided* that each Additional Term Lender (other than any Person that is a Lender, an Affiliate of a Lender or an Approved Fund of a Lender at such time) shall be subject to the approval of the Administrative Agent (such approval not to be unreasonably withheld or delayed) and the Borrower.

“**Adjusted LIBO Rate**” means, with respect to any Eurodollar Borrowing for any Interest Period, an interest rate per annum equal to (i) the LIBO Rate for such Interest Period *multiplied* by (ii) the Statutory Reserve Rate.

“**Administrative Agent**” has the meaning set forth in the preamble hereto.

“**Administrative Questionnaire**” means an administrative questionnaire in a form supplied by the Administrative Agent.

“**Affiliate**” means, with respect to a specified Person, another Person that directly or indirectly Controls or is Controlled by or is under common Control with the Person specified.

“**Agency Transfer Agreement**” means the Successor Agent Agreement, dated as of October 27, 2016, by and among the Loan Parties, the Former Agent and the Administrative Agent.

“**Agent Parties**” has the meaning given to such term in Section 9.01(c).

“**Agreement**” has the meaning given to such term in the preliminary statements hereto.

“**Alternate Base Rate**” means, for any day, a rate per annum equal to the greatest of (a) the Prime Rate in effect on such day, (b) the NYFRB in effect on such day plus 1/2 of 1% and (c) the sum of (a) the Adjusted LIBO Rate (after giving effect to any Adjusted LIBO Rate “floor”) that would be payable on such day for a Eurodollar Borrowing with a one-month Interest Period plus (b) 1.00% per annum; *provided that for the purpose of this definition, the Adjusted LIBO Rate for any day shall be based on the LIBO Screen Rate (or if the LIBO Screen Rate is not available for such one month Interest Period, the Interpolated Rate) at approximately 11:00 a.m. London time on such date; provided, further, however,* that notwithstanding the foregoing, (x) solely with respect to the ~~New~~ Term B-1 Loans, the Alternate Base Rate will be deemed to be 2.00% per annum if the Alternate Base Rate calculated pursuant to the foregoing provisions would otherwise be less than 2.00% per annum and (y) for all other purposes, the Alternate Base Rate will be deemed to be 1.00% annum if the Alternate Base Rate calculated pursuant to the foregoing provisions would otherwise be less than 1.00%. Any change in the Alternate Base Rate due to a change in the Prime Rate ~~or~~, the NYFRB Rate or the Adjusted LIBO Rate shall be effective ~~on from and including~~ the effective ~~date~~ of such change in the Prime Rate, the NYFRB Rate or the NYFRB Rate, respectively Adjusted LIBO Rate, respectively. If the Alternate Base Rate is being used as an alternate rate of interest pursuant to Section 2.12 hereof, then the Alternate Base Rate shall be the greater of clauses (a) and (b) above and shall be determined without reference to clause (c) above.

“**Amendment No. 1**” means Amendment No. 1 to this Agreement dated as of January 2, 2018.

“**Amendment No. 1 Consenting Lender**” means each Lender that returned an executed counterpart to Amendment No. 1 to the Administrative Agent prior to the Amendment No. 1 Effective Date.

“**Amendment No. 1 Effective Date**” has the meaning set forth in Amendment No. 1.

“**Application**” means an application, in such form as the Issuing Bank may specify from time to time, requesting the Issuing Bank to open a Letter of Credit.

“**Applicable Account**” means, with respect to any payment to be made to the Administrative Agent hereunder, the account specified by the Administrative Agent from time to time for the purpose of receiving payments of such type.

“**Applicable Discount**” has the meaning assigned to such term in Section 2.09(a)(ii)(C).

“**Applicable Fronting Exposure**” means, with respect to any Person that is an Issuing Bank at any time, the sum of (a) the aggregate amount of all Letters of Credit issued by such Person in its capacity as an Issuing Bank (if applicable) that remains available for drawing at such time and (b) the aggregate amount of all LC Disbursements made by such Person in its capacity as an Issuing Bank (if applicable) that have not yet been reimbursed by or on behalf of the Borrower at such time.

“**Applicable Percentage**” means, at any time with respect to any Revolving Lender, the percentage of the Total Revolving Commitments represented by such Lender’s Revolving Commitment at such time and, solely for purposes of any reallocations made pursuant to Section 2.21(d), after giving effect to any Revolving Lender’s status as a Defaulting Lender at the time of determination. If the Revolving Commitments have terminated or expired, the Applicable Percentages shall be determined based upon the Revolving Commitments most recently in effect, giving effect to any assignments pursuant to this Agreement and to any Revolving Lender’s status as a Defaulting Lender at the time of determination.

“**Applicable Rate**” means, for any day, (A) with respect to any ~~New~~ Term B-1 Loan, (i) 2.725% per annum, in the case of an ABR Loan or (ii) 3.725% per annum, in the case of a Eurodollar Loan and (B) with respect to any Revolving Loan, (i) 2.00% per annum in the case of an ABR Loan or (ii) 3.00% per annum in the case of a Eurodollar Loan.

“**Approved Bank**” has the meaning assigned to such term in the definition of the term “Permitted Investments.”

“**Approved Fund**” means any Person (other than a natural person) that is (or will be) engaged in making, purchasing, holding or investing in commercial loans and similar extensions of credit in the ordinary course of its activities and that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

“**Assignment and Assumption**” means an assignment and assumption entered into by a Lender and an Eligible Assignee (with the consent of any Person whose consent is required by Section 9.04), substantially in the form of Exhibit A-1 or any other form reasonably approved by the Administrative Agent.

“**Assumed Tax Rate**” means the greater of (i) 45% and (ii) the maximum marginal combined federal, state and local income tax rate applicable at such time to a natural person residing in New York City, New York.

“**Available Revolving Commitment**” means as to any Revolving Lender at any time, an amount equal to the excess, if any, of (a) such Lender’s Revolving Commitment then in effect over (b) such Lender’s Revolving Exposure then outstanding.

**“Auction Agent”** means (a) the Administrative Agent or (b) any other financial institution or advisor employed by the Borrower (whether or not an Affiliate of the Administrative Agent) to act as an arranger in connection with any Discounted Term Loan Prepayment pursuant to Section 2.09(a)(ii); *provided* that the Borrower shall not designate the Administrative Agent as the Auction Agent without the written consent of the Administrative Agent (it being understood that the Administrative Agent shall be under no obligation to agree to act as the Auction Agent).

**“Audited Financial Statements”** means the audited consolidated balance sheet of Holdings for the fiscal year ended December 31, 2016 and the related consolidated statements of income, changes in equity and cash flows of Holdings, including the notes thereto.

**“Bail-In Action”** means the exercise of any Write-Down and Conversion Powers by the applicable EEA Resolution Authority in respect of any liability of an EEA Financial Institution.

**“Bail-in Legislation”** means, with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law for such EEA Member Country from time to time which is described in the EU Bail-in Legislation Schedule.

**“Bankruptcy Code”** means Title 11 of the United State Code, as amended, or any similar federal or state law for the relief of debtors.

**“Bankruptcy Event”** means with respect to any Person, such Person becomes insolvent or is otherwise the subject of a bankruptcy or insolvency proceeding, or has had a receiver, conservator, trustee, administrator, custodian, assignee for the benefit of creditors or similar Person charged with the reorganization or liquidation of its business appointed for it, or, in the good faith determination of the Administrative Agent, has taken any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any such proceeding or appointment; *provided* that a Bankruptcy Event shall not result solely by virtue of any ownership interest, or the acquisition of any ownership interest, in such Person by a Governmental Authority or instrumentality thereof; *provided further* that such ownership interest does not result in or provide such Person with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Person (or such Governmental Authority or instrumentality) to reject, repudiate, disavow or disaffirm any contracts or agreements made by such Person.

**“Beneficial Owner”** has the meaning assigned to such term in Rule 13d-3 and Rule 13d-5 under the Exchange Act, except that in calculating the beneficial ownership of any particular “person” (as that term is used in Section 13(d)(3) of the Exchange Act), such “person” will be deemed to have beneficial ownership of all securities that such “person” has the right to acquire by conversion or exercise of other securities, whether such right is currently exercisable or is exercisable only after the passage of time. The terms “Beneficially Owns” and “Beneficially Owned” have a corresponding meaning.

“Benefit Plan” means any of (a) an “employee benefit plan” (as defined in ERISA) that is subject to Title I of ERISA, (b) a “plan” as defined in Section 4975 of the Code or (c) any Person whose assets include (for purposes of ERISA Section 3(42) or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such “employee benefit plan” or “plan”.

“**Board of Directors**” means, with respect to any Person, (a) in the case of any corporation, the board of directors of such Person or any committee thereof duly authorized to act on behalf of such board, (b) in the case of any limited liability company, the board of managers of such Person, (c) in the case of any partnership, the board of directors or board of managers of the general partner of such Person and (d) in any other case, the functional equivalent of the foregoing.

“**Board of Governors**” means the Board of Governors of the Federal Reserve System of the United States of America.

“**Borrower**” has the meaning assigned to such term in the preamble.

“**Borrower Assignment and Assumption**” means an assignment and assumption agreement substantially in the form of Exhibit A-2, or any other form reasonably approved by the Administrative Agent.

“**Borrower Materials**” has the meaning assigned to such term in Section 5.01.

“**Borrower Offer of Specified Discount Prepayment**” means the offer by the Borrower to make a voluntary prepayment of Term Loans at a specified discount to par pursuant to Section 2.09(a)(ii)(B).

“**Borrower Solicitation of Discount Range Prepayment Offers**” means the solicitation by the Borrower of offers for, and the corresponding acceptance by a Term Lender of, a voluntary prepayment of Term Loans at a specified range at a discount to par pursuant to Section 2.09(a)(ii)(C).

“**Borrower Solicitation of Discounted Prepayment Offers**” means the solicitation by the Borrower of offers for, and the subsequent acceptance, if any, by a Term Lender of, a voluntary prepayment of Term Loans at a discount to par pursuant to Section 2.09(a)(ii)(D).

“**Borrowing**” means Loans of the same Class and Type, made, converted or continued on the same date and, in the case of Eurodollar Loans, as to which a single Interest Period is in effect.

“**Borrowing Request**” means a request by the Borrower for a Borrowing in accordance with Section 2.03.

“**Broker-Dealer Subsidiary**” means any Restricted Subsidiary that is registered as (a) a broker or a dealer pursuant to Section 15 of the Exchange Act or (b) a broker or a dealer or an underwriter under any foreign securities law.



“**Business Day**” means any day other than a Saturday, Sunday or day on which banks in New York City are authorized or required by law to close; *provided, however*, that when used in connection with a Eurodollar Loan or an ABR Loan based on the LIBO Rate, the term “**Business Day**” shall also exclude any day on which banks are not open for dealings in dollar deposits in the London interbank market.

“**Capital Lease Obligations**” of any Person means the obligations of such Person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital leases on a balance sheet of such Person under GAAP, and the amount of such obligations shall be the capitalized amount thereof determined in accordance with GAAP. For purposes of Section 6.02, a Capital Lease Obligation shall be deemed to be secured by a Lien on the property being leased and such property shall be deemed to be owned by the lessee.

“**Capitalized Leases**” means all leases that have been or should be, in accordance with GAAP, recorded as capitalized leases; *provided* that for all purposes hereunder the amount of obligations under any Capitalized Lease shall be the amount thereof accounted for as a liability in accordance with GAAP.

“**Capitalized Software Expenditures**” means, for any period, the aggregate of all expenditures (whether paid in cash or accrued as liabilities) by Holdings and its Restricted Subsidiaries during such period in respect of purchased software or internally developed software and software enhancements that, in conformity with GAAP, are or are required to be reflected as capitalized costs on the consolidated balance sheet of Holdings and the Restricted Subsidiaries.

“**Cash Management Obligations**” means obligations of Holdings, any Intermediate Parent, the Borrower or any Restricted Subsidiary in respect of any overdraft and related liabilities arising from treasury, depository and cash management services or any automated clearing house transfers of funds.

“**Casualty Event**” means any event that gives rise to the receipt by Holdings, any Intermediate Parent, the Borrower or any Subsidiary of any insurance proceeds or condemnation awards in respect of any equipment, fixed assets or real property (including any improvements thereon) to replace or repair such equipment, fixed assets or real property.

“**Change in Control**” means the occurrence of any of the following: (a) the direct or indirect sale, lease, transfer, conveyance or other disposition (other than by way of merger or consolidation), in one or a series of related transactions, of all or substantially all of the assets of Holdings and its Subsidiaries taken as a whole to any “person” or “group” (as each such term is used in Section 13(d) of the Exchange Act) other than Holdings, one or more of its Restricted Subsidiaries, or one or more Permitted Holders; (b) the adoption of a plan relating to the liquidation or dissolution of Holdings; (c) the consummation of any transaction (including, without limitation, any merger or consolidation), the result of which is that any “person” or “group” (each as defined above) other than one or more Permitted Holders is or becomes the Beneficial Owner, directly or indirectly, of more than 50% of the Voting Stock of Holdings, measured by

voting power rather than number of shares, units or the like; (d) the failure of Holdings, directly or indirectly through wholly owned subsidiaries, to own all of the Equity Interests of the Borrower; or (e) the occurrence of a “Change of Control” (or similar event, however denominated), as defined in the documentation governing any Material Indebtedness that is Permitted First Priority Refinancing Debt, Permitted Junior Lien Refinancing Debt, Permitted Unsecured Refinancing Debt, Additional Notes or Junior Financing.

“**Change in Law**” means: (a) the adoption of any rule, regulation, treaty or other law after the Restatement Effective Date, (b) any change in any rule, regulation, treaty or other law or in the administration, interpretation or application thereof by any Governmental Authority or Regulatory Supervising Organization after the Restatement Effective Date or (c) the making or issuance of any request, guideline or directive (whether or not having the force of law) of any Governmental Authority or Regulatory Supervising Organization made or issued after the Restatement Effective Date.

“**Class**” when used in reference to (a) any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are Revolving Loans, Other Revolving Loans, ~~New~~ Term B-1 Loans, Other Term Loans, Incremental Term Loans (other than in the form of additional ~~New~~ Term B-1 Loans) or loans under an Incremental Revolving Facility, (b) any Commitment, refers to whether such Commitment is a Revolving Commitment, Other Revolving Commitment, Term Commitment, Other Term Commitment, Incremental Term Commitment or commitment in respect of an Incremental Revolving Facility and (c) any Lender, refers to whether such Lender has a Loan or Commitment with respect to a particular Class of Loans or Commitments. Other Term Commitments, Incremental Term Commitments, commitment in respect of an Incremental Revolving Facility, Other Term Loans, Incremental Term Loans (other than Incremental Term Loans in the form of ~~New~~ Term B-1 Loans), Other Revolving Commitments (and the Other Revolving Loans made pursuant thereto), loans under an Incremental Revolving Facility and Incremental Term Facilities that have different terms and conditions shall be construed to be in different Classes.

“**Closing Date**” means May 22, 2013.

“**Code**” means the Internal Revenue Code of 1986, as amended from time to time.

“**Collateral**” means any and all assets, whether real or personal, tangible or intangible, on which Liens are purported to be granted pursuant to the Security Documents as security for the Secured Obligations.

“**Collateral Agreement**” means the Collateral Agreement dated as of July 8, 2011 among the Borrower, each other Loan Party and the Administrative Agent (as assignee of the Former Agent), as supplemented, amended or otherwise modified from time to time.

“**Collateral and Guarantee Requirement**” means, at any time, the requirement that:

(a) the Administrative Agent shall have received from (i) Holdings, any Intermediate Parent, the Borrower and each of Holdings' other Restricted Subsidiaries (other than any Foreign Subsidiary, any Regulated Subsidiary, any Excluded Subsidiary or any Excluded Domestic Subsidiary) either (x) a counterpart of the Guarantee Agreement duly executed and delivered on behalf of such Person or (y) in the case of any Person that becomes a Loan Party after the Restatement Effective Date (including by ceasing to be an Excluded Subsidiary, an Immaterial Subsidiary, a Foreign Subsidiary, a Regulated Subsidiary or an Excluded Domestic Subsidiary), a supplement to the Guarantee Agreement, in the form specified therein, duly executed and delivered on behalf of such Person and (ii) Holdings, any Intermediate Parent, the Borrower and each Subsidiary Loan Party either (x) a counterpart of the Collateral Agreement duly executed and delivered on behalf of such Person or (y) in the case of any Person that becomes a Loan Party after the Restatement Effective Date (including by ceasing to be an Excluded Subsidiary, an Immaterial Subsidiary, a Foreign Subsidiary, a Regulated Subsidiary or an Excluded Domestic Subsidiary), a supplement to the Collateral Agreement, in the form specified therein, duly executed and delivered on behalf of such Person, in each case under this clause (a) together with, in the case of any such Loan Documents executed and delivered after the Restatement Effective Date, documents and opinions of the type referred to in Sections 4.01(b) and 4.01(c);

(b) all outstanding Equity Interests of any Intermediate Parent, the Borrower and each Restricted Subsidiary (other than any Equity Interests constituting Excluded Assets) owned by or on behalf of any Loan Party, shall have been pledged pursuant to the Collateral Agreement, and the Administrative Agent shall have received certificates or other instruments representing all such Equity Interests (if any), together with undated stock powers or other instruments of transfer with respect thereto endorsed in blank; *provided*, that with respect to the Equity Interests of any Regulated Subsidiary, such instruments shall be subject to customary enforcement limitations, including regulatory approvals at the time of enforcement;

(c) if any Indebtedness for borrowed money (including in respect of cash management arrangements) of Holdings, any Intermediate Parent, the Borrower or any Subsidiary in a principal amount of \$5,000,000 or more is owing by such obligor to any Loan Party, such Indebtedness shall be evidenced by a promissory note that shall have been pledged pursuant to the Collateral Agreement, and the Administrative Agent shall have received all such promissory notes, together with undated instruments of transfer with respect thereto endorsed in blank;

(d) all certificates, agreements, documents and instruments, including Uniform Commercial Code financing statements, required by the Security Documents, Requirements of Law and reasonably requested by the Administrative Agent to be filed, delivered, registered or recorded to create the Liens intended to be created by the Security Documents and perfect such Liens to the extent required by, and with the priority required by, the Security Documents and the other provisions of the term "Collateral and Guarantee Requirement," shall have been filed, registered or recorded or delivered to the Administrative Agent for filing, registration or recording; and

(e) the Administrative Agent shall have received (i) counterparts of a Mortgage with respect to each Mortgaged Property duly executed and delivered by the

record owner of such Mortgaged Property, (ii) a policy or policies of title insurance issued by a nationally recognized title insurance company insuring the Lien of each such Mortgage as a first priority Lien on the Mortgaged Property described therein, free of any other Liens except as expressly permitted by Section 6.02, together with such endorsements, coinsurance and reinsurance as the Administrative Agent may reasonably request, (iii) if any Mortgaged Property is located in an area determined by the Federal Emergency Management Agency to have special flood hazards, evidence of such flood insurance as may be required under applicable law, including Regulation H of the Board of Governors and (iv) such legal opinions as the Administrative Agent may reasonably request with respect to any such Mortgage or Mortgaged Property.

Notwithstanding the foregoing provisions of this definition or anything in this Agreement or any other Loan Document to the contrary, (a) the foregoing provisions of this definition shall not require the creation or perfection of pledges of or security interests in, or the obtaining of title insurance, legal opinions or other deliverables with respect to, particular assets of the Loan Parties, or the provision of Guarantees by any Subsidiary, if, and for so long as the Administrative Agent and the Borrower reasonably agree in writing that the cost of creating or perfecting such pledges or security interests in such assets, or obtaining such title insurance, legal opinions or other deliverables in respect of such assets, or providing such Guarantees (taking into account any adverse tax consequences to Holdings and its Affiliates (including the imposition of withholding or other material taxes)), shall be excessive in view of the benefits to be obtained by the Lenders therefrom, (b) Liens required to be granted from time to time pursuant to the term "Collateral and Guarantee Requirement" shall be subject to exceptions and limitations set forth in the Security Documents as in effect on the Restatement Effective Date, (c) in no event shall control agreements or other control or similar arrangements be required with respect to deposit accounts, securities accounts, commodities accounts, letter of credit rights or other assets requiring perfection by control (but not, for the avoidance of doubt, possession), (d) in no event shall any Loan Party be required to complete any filings or other action with respect to the perfection or creation of security interests in any jurisdiction outside of the United States (or otherwise enter into any security agreements, mortgages or pledge agreements governed by the laws of any jurisdiction outside of the United States), (e) in no event shall the Collateral include any Excluded Assets, (f) in no event shall landlord lien waivers, estoppels and collateral access letters be required. The Administrative Agent may grant extensions of time for the creation and perfection of security interests in or the obtaining of title insurance, legal opinions or other deliverables with respect to particular assets or the provision of any Guarantee by any Subsidiary (including extensions beyond the Restatement Effective Date or in connection with assets acquired, or Subsidiaries formed or acquired, after the Restatement Effective Date) where it determines that such action cannot be accomplished without undue effort or expense by the time or times at which it would otherwise be required to be accomplished by this Agreement or the Security Documents and (g) none of Virtu GW Comm LLC, Virtu Japan PTS Holdings LLC, Geodesic Networks, LLC, GETCO Investments, LLC, GETCO Strategic Investments, LLC or GETCO Trading, LLC shall be required to become a Guarantor until such time as it would no longer be required to be registered as an "investment company" under the Investment Company Act of 1940, as amended, and the rules and the regulations of the SEC thereunder, as a result of being a Guarantor (unless such Subsidiary would

otherwise be excluded pursuant to clause (a) above or the definition of “Excluded Subsidiary”).

“**Commitment**” means, with respect to any Lender, its Revolving Commitment, Other Revolving Commitment, Term Commitment, Other Term Commitment or commitment in respect of any Incremental Term Facility or Incremental Revolving Facility, in each case of any Class, or any combination thereof (as the context requires).

“**Company Income Amount**” means, for a Tax Estimation Period, an amount, if positive, equal to the estimated net taxable income of Holdings for such Tax Estimation Period. For purposes of calculating the Company Income Amount, items of income, gain, loss and deduction resulting from adjustments to the tax basis of Holdings' assets pursuant to Code Section 743(b) and adjustments pursuant to Code Section 704(c) shall not be taken into account.

“**Competitor**” means any Person (a) engaged in trading financial assets through the use of an electronically automated trading system that generates order sets (which, for purposes of clarity, can consist of a single order) with the intention of (i) creating profit by providing two-sided liquidity to the market, (ii) making a profit margin consistent with the business of making the bid-offer spread or less per unit of the financial asset(s) being traded (including by providing either one-sided or two sided liquidity to the market) or (iii) creating simultaneous (within 500 milliseconds) order sets that are generated with the intention of locking in an arbitrage profit and (b) identified as a “Potential Competitor” on Part B of Schedule 1.01; *provided*, that any such Person shall be deemed not to be a Competitor if the Loans or commitments in respect thereof will be held by or booked to any division or other identifiable unit or desk of such Person that, in the ordinary course of its business, holds commitments or extends credit of the type contemplated by this Agreement. Notwithstanding anything in this Agreement to the contrary, each Loan Party and the Lenders acknowledge and agree that the Administrative Agent will not have any responsibility or obligation to determine whether any Lender or potential Lender is a Competitor.

“**Compliance Certificate**” means a certificate in the form of Exhibit R required to be delivered pursuant to Section 5.01(d).

“**Consolidated EBITDA**” means, for any period, the Consolidated Net Income for such period, plus:

(a) without duplication and to the extent already deducted (and not added back or excluded) in arriving at such Consolidated Net Income, the sum of the following amounts for such period:

(i) total interest expense and, to the extent not reflected in such total interest expense, any losses on hedging obligations or other derivative instruments entered into for the purpose of hedging interest rate risk (other than in the ordinary course of the trading business of Holdings and its Restricted Subsidiaries), net of interest income and gains on such hedging obligations or such derivative instruments, and bank and letter of credit fees and costs of surety bonds in connection with financing activities;

(ii) without duplication among periods, provision for taxes based on income, profits or capital, including federal, foreign, state, franchise, excise and similar taxes paid or accrued during such period (including in respect of repatriated funds);

(iii) depreciation and amortization (including amortization of Capitalized Software Expenditures and amortization of deferred financing fees or costs);

(iv) Non-Cash Charges;

(v) extraordinary losses in accordance with GAAP;

(vi) non-recurring charges (including any unusual or non-recurring operating expenses directly attributable to the implementation of cost savings initiatives), severance, relocation costs, integration and facilities' opening costs, signing costs, retention or completion bonuses (other than bonuses paid in the ordinary course of business of Holdings and its Restricted Subsidiaries), transition costs, costs related to closure/consolidation of facilities and curtailments or modifications to pension and post-retirement employee benefit plans (including any settlement of pension liabilities);

(vii) restructuring charges, accruals or reserves (including restructuring costs related to acquisitions after the Closing Date and adjustments to existing reserves); *provided* that the aggregate amount included in Consolidated EBITDA pursuant to this clause (vii) for any Test Period shall not exceed 10% of Consolidated EBITDA for such Test Period (calculated prior to giving effect to any adjustment pursuant to this clause (vii));

(viii) the amount of any minority interest expense consisting of subsidiary income attributable to minority equity interests of third parties in any Non-Wholly Owned Subsidiary deducted (and not added back in such period to Consolidated Net Income);

(ix) the amount of expenses relating to payments made to option holders of Holdings or any of its direct or indirect parent companies in connection with, or as a result of, any distribution being made to shareholders of such Person or its direct or indirect parent companies, which payments are being made to compensate such option holders as though they were shareholders at the time of, and entitled to share in, such distribution, in each case to the extent permitted by the Loan Documents;

(x) losses on asset sales, disposals or abandonments (other than asset sales, disposals or abandonments in the ordinary course of business);

(xi) the amount of any net losses from discontinued operations in accordance with GAAP;

(xii) any non-cash loss attributable to the mark to market movement in the valuation of hedging obligations or other derivative instruments (to the extent the cash impact resulting from such loss has not been realized) (other than those entered into in the ordinary course of the trading business of the Borrower and its Restricted Subsidiaries) pursuant to Financial Accounting Standards Accounting Standards Codification No. 815—Derivatives and Hedging;

(xiii) any loss relating to amounts paid in cash prior to the stated settlement date of any hedging obligation (other than any hedging obligation entered into in the ordinary course of the trading business of Holdings and its Restricted Subsidiaries) that has been reflected in Consolidated Net Income for such period;

(xiv) any gain relating to hedging obligations (other than any hedging obligations entered into in the ordinary course of the trading business of Holdings and its Restricted Subsidiaries) associated with transactions realized in the current period that has been reflected in Consolidated Net Income in prior periods and excluded from Consolidated EBITDA pursuant to clauses (b)(v) and (b)(vi) below; and

(xv) any expenses or charges related to any issuance of Equity Interests, Investment, acquisition, Disposition, recapitalization or the incurrence, modification or repayment of Indebtedness permitted to be incurred by this Agreement (including a refinancing thereof) (whether or not successful), in each case, outside the ordinary course of business, including (x) such fees, expenses or charges related to this Agreement and (y) any amendment or other modification of the Loans or other obligations under the Loan Documents or other Indebtedness; *provided* that the amount added back pursuant to this clause (xv) in any Test Period shall not exceed \$10,000,000;

*less*

(b) without duplication and to the extent included in arriving at such Consolidated Net Income, the sum of the following amounts for such period:

(i) extraordinary gains and unusual or non-recurring gains;

(ii) non-cash gains (excluding any non-cash gain to the extent it represents the reversal of an accrual or reserve for a potential cash item that reduced Consolidated Net Income or Consolidated EBITDA in any prior period);

(iii) gains on asset sales, disposals or abandonments (other than asset sales, disposals or abandonments in the ordinary course of business);

(iv) the amount of any net income from discontinued operations in accordance with GAAP;

(v) any non-cash gain attributable to the mark to market movement in the valuation of hedging obligations or other derivative instruments (to the

extent the cash impact resulting from such gain has not been realized) (other than any hedging obligations or other derivative instruments entered into in the ordinary course of the trading business of Holdings and its Restricted Subsidiaries) pursuant to Financial Accounting Standards Accounting Standards Codification No. 815-Derivatives and Hedging;

(vi) any gain relating to amounts received in cash prior to the stated settlement date of any hedging obligation (other than any hedging obligation entered into in the ordinary course of the trading business of Holdings and its Restricted Subsidiaries) that has been reflected in Consolidated Net Income for such period;

(vii) any loss relating to hedging obligations (other than any hedging obligations entered into in the ordinary course of the trading business of Holdings and its Restricted Subsidiaries) associated with transactions realized in the current period that has been reflected in Consolidated Net Income in prior periods and excluded from Consolidated EBITDA pursuant to clauses (a)(xiii) and (a)(xiv) above; and

(viii) the amount of any minority interest income consisting of subsidiary loss attributable to minority equity interests of third parties in any Non-Wholly Owned Subsidiary added (and not deducted in such period in calculating Consolidated Net Income);

in each case, as determined on a consolidated basis for Holdings and the Restricted Subsidiaries in accordance with GAAP; *provided that*,

(I) to the extent included in Consolidated Net Income, there shall be excluded in determining Consolidated EBITDA currency translation gains and losses related to currency remeasurements of Indebtedness (including the net loss or gain resulting from hedging agreements for currency exchange risk and revaluations of intercompany balances), other than any gains or losses related to foreign currency trading and hedging in the ordinary course of the trading business of Holdings and its Restricted Subsidiaries,

(II) to the extent included in Consolidated Net Income, there shall be excluded in determining Consolidated EBITDA for any period any adjustments resulting from the application of Financial Accounting Standards Accounting Standards Codification No. 815-Derivatives and Hedging (other than with respect to any hedging obligations entered into in the ordinary course of the trading business of Holdings and its Restricted Subsidiaries),

(III) to the extent not included in Consolidated Net Income, there shall be included in determining Consolidated EBITDA for any period, without duplication, (A) the Acquired EBITDA of any Person, property, business or asset acquired by Holdings or any Restricted Subsidiary during such period (other than any Unrestricted Subsidiary) to the extent not subsequently sold, transferred or otherwise disposed of (but not including the Acquired EBITDA of any related Person, property, business or assets to the extent not so acquired) (each such



Person, property, business or asset acquired, including pursuant to a transaction consummated prior to the Restatement Effective Date, and not subsequently so disposed of, an “**Acquired Entity or Business**”), and the Acquired EBITDA of any Unrestricted Subsidiary that is converted into a Restricted Subsidiary during such period (each, a “**Converted Restricted Subsidiary**”), in each case based on the Acquired EBITDA of such Pro Forma Entity for such period (including the portion thereof occurring prior to such acquisition or conversion) determined on a historical Pro Forma Basis and (B) an adjustment in respect of each Pro Forma Entity equal to the amount of the Pro Forma Adjustment with respect to such Pro Forma Entity for such period (including the portion thereof occurring prior to such acquisition or conversion) as specified in a certificate from a Financial Officer delivered to the Administrative Agent (for further delivery to the Lenders); and

(IV) there shall be (A) to the extent included in Consolidated Net Income, excluded in determining Consolidated EBITDA for any period the Disposed EBITDA of any Person, property, business or asset (other than any Unrestricted Subsidiary) sold, transferred or otherwise disposed of, closed or classified as discontinued operations by Holdings or any Restricted Subsidiary during such period (each such Person, property, business or asset so sold, transferred or otherwise disposed of, closed or classified, a “**Sold Entity or Business**”), and the Disposed EBITDA of any Restricted Subsidiary that is converted into an Unrestricted Subsidiary during such period (each, a “**Converted Unrestricted Subsidiary**”), in each case based on the Disposed EBITDA of such Sold Entity or Business or Converted Unrestricted Subsidiary for such period (including the portion thereof occurring prior to such sale, transfer, disposition, closure, classification or conversion) determined on a historical pro forma basis and (B) to the extent not included in Consolidated Net Income, included in determining Consolidated EBITDA for any period in which a Sold Entity or Business is disposed or Converted Unrestricted Subsidiary is converted, an adjustment equal to the Pro Forma Disposal Adjustment with respect to such Sold Entity or Business or Converted Unrestricted Subsidiary (including the portion thereof occurring prior to such disposal or conversion) as specified in a certificate from a Financial Officer delivered to the Administrative Agent (for further delivery to the Lenders).

“**Consolidated Interest Expense**” means, for any period, the cash interest expense (including that attributable to Capitalized Leases), net of cash interest income (excluding cash interest income relating to any asset or property that secures any Trading Debt), of Holdings and the Restricted Subsidiaries, determined on a consolidated basis in accordance with GAAP, with respect to all outstanding Indebtedness of Holdings and the Restricted Subsidiaries (excluding Trading Debt), including all commissions, discounts and other fees and charges owed with respect to letters of credit and bankers’ acceptance financing and net costs under hedging agreements, but excluding, for the avoidance of doubt, (i) amortization of deferred financing costs, debt issuance costs, commissions, fees and expenses, pay-in-kind interest expense and any other amounts of non-cash interest (including as a result of the effects of acquisition method accounting), (ii) the accretion or accrual of discounted liabilities during such period, (iii) any interest in respect of items excluded from Indebtedness in the proviso to the definition thereof, (iv)

non-cash interest expense attributable to the movement of the mark-to-market valuation of obligations under hedging agreements or other derivative instruments pursuant to Financial Accounting Standards Accounting Standards Codification No. 815-Derivatives and Hedging, (v) any one-time cash costs associated with breakage in respect of hedging agreements for interest rates, and (vi) all non-recurring cash interest expense consisting of liquidated damages for failure to timely comply with registration rights obligations, all as calculated on a consolidated basis in accordance with GAAP.

**“Consolidated Net Income”** means, for any period, the net income (loss) of Holdings and the Restricted Subsidiaries for such period determined on a consolidated basis in accordance with GAAP, excluding, without duplication, (a) extraordinary items for such period, (b) the cumulative effect of a change in accounting principles during such period to the extent included in Consolidated Net Income, (c) [reserved], (d) any fees and expenses (including any transaction or retention bonus) incurred during such period, or any amortization thereof for such period, in connection with any acquisition, Investment, asset disposition, issuance or repayment of debt, issuance of equity securities, refinancing transaction or amendment or other modification of any debt instrument (in each case, including any such transaction consummated prior to the Restatement Effective Date and any such transaction undertaken but not completed) and any charges or non-recurring merger costs incurred during such period as a result of any such transaction, (e) any income (loss) for such period attributable to the early extinguishment of Indebtedness, hedging agreements or other derivative instruments (other than any income (loss) attributable to Trading Debt or hedging agreements or other derivative instruments entered into in the ordinary course of the trading business of Holdings and its Restricted Subsidiaries), (f) accruals and reserves that are established or adjusted as a result of the Transactions in accordance with GAAP (including any adjustment of estimated payouts on existing earn-outs) or changes as a result of the adoption or modification of accounting policies during such period, (g) non-cash stock-based award compensation expenses, (h) any income (loss) attributable to deferred compensation plans or trusts and (i) any income (loss) from Investments recorded using the equity method. There shall be excluded from Consolidated Net Income for any period the effects from applying acquisition method accounting, including applying acquisition method accounting to inventory, property and equipment, leases, software and other intangible assets and deferred revenue (including deferred costs related thereto and deferred rent) required or permitted by GAAP and related authoritative pronouncements (including the effects of such adjustments pushed down to Holdings and the Restricted Subsidiaries), as a result of any acquisition consummated prior to the Restatement Effective Date, the Merger and Contribution and any Permitted Acquisition or the amortization or write-off of any amounts thereof.

In addition, to the extent not already included in Consolidated Net Income, Consolidated Net Income shall include the amount of proceeds received or due from business interruption insurance or reimbursement of expenses and charges that are covered by indemnification and other reimbursement provisions in connection with any acquisition or other Investment or any disposition of any asset permitted hereunder.

**“Consolidated Total Assets”** means, as at any date of determination, the total assets of Holdings and its Restricted Subsidiaries on a consolidated basis in accordance with GAAP.

**“Consolidated Total Debt”** means, as of any date of determination, the aggregate amount of Indebtedness of Holdings and the Restricted Subsidiaries outstanding on such date, determined on a consolidated basis in accordance with GAAP (but excluding the effects of any discounting of Indebtedness resulting from the application of acquisition method accounting in connection with the Merger and Contribution or any Permitted Acquisition or other Investment permitted hereunder) consisting only of Indebtedness for borrowed money, unreimbursed obligations under letters of credit, obligations in respect of Capitalized Leases and debt obligations evidenced by promissory notes or similar instruments (and excluding, in any event, all Trading Debt).

**“Consolidated Total Net Debt”** means, as of any date of determination (a) the amount of Consolidated Total Debt as of such date, less (b) all cash and Permitted Investments on the balance sheet of Holdings and the Restricted Subsidiaries to the extent not subject to any Liens (other than Liens permitted under Section 6.02 but excluding any Liens permitted by Section 6.02(iii), Section 6.02(xv) and Section 6.02(xx)) and the use thereof for application to the payment of Indebtedness is not prohibited by law or contract binding on Holdings or the Restricted Subsidiaries (and excluding, in any event, the amount of regulatory capital required by applicable law to be held at any Regulated Subsidiary).

**“Control”** means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies, or the dismissal or appointment of the management, of a Person, whether through the ability to exercise voting power, by contract or otherwise. **“Controlling”** and **“Controlled”** have meanings correlative thereto.

**“Converted New Term Loans”** means, as to any Amendment No. 1 Consenting Lender that has indicated on its counterpart to Amendment No. 1 that it is requesting to convert its New Term Loans to a Term B-1 Loan, the entire aggregate principal amount of such Amendment No. 1 Consenting Lender’s Term B-1 Loan outstanding on the Amendment No. 1 Effective Date (or, if less, the amount notified to such Lender by the Administrative Agent prior to the Amendment No. 1 Effective Date).

**“Converted Restricted Subsidiary”** has the meaning given such term in the definition of “Consolidated EBITDA.”

**“Converted Unrestricted Subsidiary”** has the meaning given such term in the definition of “Consolidated EBITDA.”

**“Converting Term Lender”** means each Original Term Lender that has elected to convert its Original Term Loans to Initial Term Loans pursuant to the Restatement Agreement.

**“Converting Term Loan”** means each Original Term Loan held by a Term Lender that is a Converting Term Lender (or, if less, the portion of the principal amount of such Original Term Loan notified to such Converting Lender by the Administrative Agent prior to the Restatement Effective Date).

**“Credit Agreement Refinancing Indebtedness”** means (a) Permitted First Priority Refinancing Debt, (b) Permitted Junior Lien Refinancing Debt, (c) Permitted Unsecured Refinancing Debt or (d) Indebtedness incurred or Other Revolving Commitments obtained pursuant to a Refinancing Amendment, in each case, issued, incurred or otherwise obtained (including by means of the extension or renewal of existing Indebtedness) in exchange for, or to extend, renew, replace or refinance, in whole or part, existing Term Loans, outstanding Revolving Loans or (in the case of Other Revolving Commitments obtained pursuant to a Refinancing Amendment) Revolving Commitments, outstanding loans under any Incremental Revolving Facility or undrawn commitments under any Incremental Revolving Facility (**“Refinanced Debt”**); *provided* that (i) such extending, renewing, replacing or refinancing Indebtedness (including, if such Indebtedness includes any Other Revolving Commitments, the unused portion of such Other Revolving Commitments) is in an original aggregate principal amount not greater than the sum of the aggregate principal amount of the Refinanced Debt (and, in the case of Refinanced Debt consisting, in whole or in part, of unused commitments under any Incremental Revolving Facility or Other Revolving Commitments, the amount thereof) plus all accrued and unpaid interest and fees thereon and expenses incurred in connection with such extension, renewal, replacement or refinancing, (ii) such Indebtedness has a maturity that is equal to or later than and, except in the case of Other Revolving Commitments, a Weighted Average Life to Maturity equal to or greater than the Refinanced Debt, and (iii) such Refinanced Debt shall be repaid, defeased or satisfied and discharged, and all accrued interest, fees and premiums (if any) in connection therewith shall be paid, on the date such Credit Agreement Refinancing Indebtedness is issued, incurred or obtained; *provided* that to the extent that such Refinanced Debt consists, in whole or in part, of commitments under any Incremental Revolving Facility or Other Revolving Commitments (or loans incurred pursuant to any Incremental Revolving Facility or Other Revolving Loans), such commitments shall be terminated, and all accrued fees in connection therewith shall be paid, on the date such Credit Agreement Refinancing Indebtedness is issued, incurred or obtained.

**“Credit Party”** means the Administrative Agent, the Issuing Bank or any other Lender.

**“Cumulative Excess Cash Flow”** means (a) prior to the Escrow Assumption Date, the sum of (i) Excess Cash Flow (but not less than zero in any period) for each fiscal quarter of Holdings, commencing with the fiscal quarter ending June 30, 2017 plus (ii) the unused (i.e., not applied to any mandatory prepayment of loans or relied on as the basis for the taking of any action) amount of Cumulative Excess Cash Flow under the Existing Credit Agreement as of the date immediately preceding the Restatement Effective Date and (b) from and after the Escrow Assumption Date, Excess Cash Flow (but not less than zero in any period) for each completed fiscal quarter commencing with the first full fiscal quarter commencing after the Escrow Assumption Date; *provided* that Excess Cash Flow for any period shall not constitute Cumulative Excess Cash Flow until the date that (A) the corresponding Excess Cash Flow prepayment for such period is made pursuant to Section 2.09(c) or (B) if no Excess Cash Flow prepayment is required for such period pursuant to Section 2.09(c), the date that is five days after the date on which financial statements are delivered pursuant to Section 5.01(b) with respect to such

period or, in the case of the fourth fiscal quarter in any fiscal year, pursuant to Section 5.01(a) for such fiscal year.

“**Cure Amount**” has the meaning assigned to such term in Section 7.02(a).

“**Debtor Relief Laws**” means the Bankruptcy Code, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief laws of the United States or other applicable jurisdictions from time to time in effect and affecting the rights of creditors generally.

“**Default**” means any event or condition that constitutes an Event of Default or that upon notice, lapse of time or both would, unless cured or waived, become an Event of Default.

“**Defaulting Lender**” means any Revolving Lender that (a) has failed, within one Business Day of the date required to be funded or paid, to (i) fund any portion of its Revolving Loans, (ii) fund any portion of its participations in Letters of Credit or (iii) pay over to any Credit Party any other amount required to be paid by it hereunder, unless, in the case of clause (i) above, such Lender notifies the Administrative Agent in writing that such failure is the result of such Lender’s good faith determination that a condition precedent to funding a loan under this Agreement (specifically identified and including the particular default, if any) has not been satisfied, (b) has notified the Borrower or any Credit Party in writing, or has made a public statement to the effect, that it does not intend or expect to comply with any of its funding obligations under this Agreement (unless such writing or public statement indicates that such position is based on such Lender’s good faith determination that a condition precedent (specifically identified and including the particular default, if any) to funding a loan under this Agreement cannot be satisfied) or generally under agreements in which it commits to extend credit, (c) has failed, within three Business Days after request by the Administrative Agent or the Borrower, acting in good faith, to provide a certification in writing from an authorized officer of such Lender that it will comply with its obligations (and is financially able to meet such obligations) to fund prospective Revolving Loans and participations in then outstanding Letters of Credit under this Agreement; *provided* that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon the Administrative Agent’s or the Borrower’s receipt, as applicable, of such certification in form and substance satisfactory to it and the Administrative Agent, or (d) has, or has a Lender Parent that has, (i) become the subject of a Bankruptcy Event or (ii) become subject to a Bail-In Action. Any determination by the Administrative Agent made in writing to the Borrower and each Lender that a Lender is a Defaulting Lender under any one or more of clauses (a) through (d) above shall be conclusive and binding absent manifest error.

“**Designated Non-Cash Consideration**” means the fair market value of non-cash consideration received by Holdings, any Intermediate Parent, the Borrower or a Subsidiary in connection with a Disposition pursuant to Section 6.05(k) that is designated as Designated Non-Cash Consideration pursuant to a certificate of a Responsible Officer of Holdings, setting forth the basis of such valuation (which amount will be reduced by the fair market value of the portion of the non-cash consideration

converted to cash within 180 days following the consummation of the applicable Disposition).

**“Designation Date”** has the meaning assigned to such term in Section 5.13.

**“Discount Prepayment Accepting Lender”** has the meaning assigned to such term in Section 2.09(a)(ii)(B).

**“Discount Range”** has the meaning assigned to such term in Section 2.09(a)(ii)(C).

**“Discount Range Prepayment Amount”** has the meaning assigned to such term in Section 2.09(a)(ii)(C).

**“Discount Range Prepayment Notice”** means a written notice of a Borrower Solicitation of Discount Range Prepayment Offers made pursuant to Section 2.09(a)(ii)(C) substantially in the form of Exhibit K.

**“Discount Range Prepayment Offer”** means the irrevocable written offer by a Term Lender, substantially in the form of Exhibit L, submitted in response to an invitation to submit offers following the Auction Agent’s receipt of a Discount Range Prepayment Notice.

**“Discount Range Prepayment Response Date”** has the meaning assigned to such term in Section 2.09(a)(ii)(C).

**“Discount Range Proration”** has the meaning assigned to such term in Section 2.09(a)(ii)(C).

**“Discounted Prepayment Determination Date”** has the meaning assigned to such term in Section 2.09(a)(ii)(D).

**“Discounted Prepayment Effective Date”** means in the case of a Borrower Offer of Specified Discount Prepayment, Borrower Solicitation of Discount Range Prepayment Offer or Borrower Solicitation of Discounted Prepayment Offer, five (5) Business Days following the receipt by each relevant Term Lender of notice from the Auction Agent in accordance with Section 2.09(a)(ii)(B), Section 2.09(a)(ii)(C) or Section 2.09(a)(ii)(D), as applicable unless a shorter period is agreed to between the Borrower and the Auction Agent.

**“Discounted Term Loan Prepayment”** has the meaning assigned to such term in Section 2.09(a)(ii)(A).

**“Disposed EBITDA”** means, with respect to any Sold Entity or Business or Converted Unrestricted Subsidiary for any period, the amount for such period of Consolidated EBITDA of such Sold Entity or Business or Converted Unrestricted Subsidiary (determined as if references to Holdings and the Restricted Subsidiaries in the definition of the term “Consolidated EBITDA” (and in the component financial definitions used therein) were references to such Sold Entity or Business and its

subsidiaries or to such Converted Unrestricted Subsidiary and its subsidiaries), all as determined on a consolidated basis for such Sold Entity or Business or Converted Unrestricted Subsidiary.

“**Disposition**” has the meaning assigned to such term in Section 6.05.

“**Disqualified Equity Interest**” means, with respect to any Person, any Equity Interest in such Person that by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable, either mandatorily or at the option of the holder thereof), or upon the happening of any event or condition:

(a) matures or is mandatorily redeemable (other than solely for Equity Interests in such Person or in Virtu Financial, Inc. that do not constitute Disqualified Equity Interests and cash in lieu of fractional shares of such Equity Interests), whether pursuant to a sinking fund obligation or otherwise;

(b) is convertible or exchangeable, either mandatorily or at the option of the holder thereof, for Indebtedness or Equity Interests (other than solely for Equity Interests in such Person or in Virtu Financial, Inc. that do not constitute Disqualified Equity Interests and cash in lieu of fractional shares of such Equity Interests);

(c) provides for the scheduled payments of dividends in cash; or

(d) is redeemable (other than solely for Equity Interests in such Person or in Virtu Financial, Inc. that do not constitute Disqualified Equity Interests and cash in lieu of fractional shares of such Equity Interests) or is required to be repurchased by such Person or Virtu Financial, Inc. or any of its Affiliates, in whole or in part, at the option of the holder thereof;

in each case, on or prior to the date 91 days after the Latest Maturity Date; *provided, however*, that (i) an Equity Interest in any Person that would not constitute a Disqualified Equity Interest but for terms thereof giving holders thereof the right to require such Person to redeem or purchase such Equity Interest upon the occurrence of an “asset sale” or a “change of control” shall not constitute a Disqualified Equity Interest if any such requirement becomes operative only after repayment in full of all the Loans and all other Loan Document Obligations that are accrued and payable, the cancellation or expiration of all Letters of Credit and the termination of the Commitments and (ii) if an Equity Interest in any Person is issued pursuant to any plan for the benefit of employees of Holdings (or any direct or indirect parent thereof) or any of its subsidiaries or by any such plan to such employees, such Equity Interest shall not constitute a Disqualified Equity Interest solely because it may be required to be repurchased by Holdings (or any direct or indirect parent company thereof) or any of its subsidiaries in order to satisfy applicable statutory or regulatory obligations of such Person.

“**Disqualified Lender**” means each Person identified as a “Disqualified Lender” on Part A of Schedule 1.01, which Schedule may be provided to any Lender or prospective Lender upon request. Notwithstanding anything in this Agreement to the contrary, each Loan Party and the Lenders acknowledge and agree that the

Administrative Agent will not have any responsibility or obligation to determine whether any Lender or potential Lender is a Disqualified Lender and the Administrative Agent will not have any liability with respect to any assignment made to a Disqualified Lender. “dollars” or “\$” refers to lawful money of the United States of America.

“**Domestic Subsidiary**” means any Subsidiary that is not a Foreign Subsidiary.

“**EEA Financial Institution**” means (a) any institution established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“**EEA Member Country**” means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“**EEA Resolution Authority**” means any public administrative authority or any Person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“**ECF Percentage**” means, with respect to any prepayment required by Section 2.09(c) with respect to (I) any fiscal quarter (or other applicable period) of the Borrower ending prior to the Escrow Assumption Date, if the Total Leverage Ratio (prior to giving effect to the applicable prepayment pursuant to Section 2.09(c)) as of the end of such fiscal quarter (or other applicable period) is (a) greater than 2.00 to 1.00, 50% of Excess Cash Flow for such period and (b) equal to or less than 2.00 to 1.00, 0% of Excess Cash Flow for such period and (II) any fiscal quarter (or other applicable period) of the Borrower ending on or after the Escrow Assumption Date, if the Total Leverage Ratio (prior to giving effect to the applicable prepayment pursuant to Section 2.09(c)) as of the end of such fiscal quarter (or other applicable period) is (a) greater than 2.75 to 1.00, 50% of Excess Cash Flow for such period, (b) equal to or less than 2.75 to 1.00 but greater than 2.25 to 1.00, 25% of Excess Cash Flow for such period and (c) equal to or less than 2.25 to 1.00, 0% of Excess Cash Flow for such period.

“**Eligible Assignee**” means (a) a Lender, (b) an Affiliate of a Lender, (c) an Approved Fund and (d) any other Person (other than Holdings, any Intermediate Parent, the Borrower or any of their subsidiaries, any VV Holder, any Affiliate of Vincent Viola (including any trust established for the benefit of his spouse or children) or any Disqualified Lender), other than, in each case, a natural person.

“**Employee Holding Vehicles**” means, collectively, Virtu Employee Holdco LLC, a Delaware limited liability company, Virtu East MIP LLC, a Delaware limited liability company, and any other similar entity, the equityholders of which are current and former officers, directors and employees of Holdings (or any direct or indirect parent thereof), the Borrower and the Restricted Subsidiaries, or their permitted transferees (or their respective estates, executors, trustees, administrators, heirs, legatees or distributees), which entity is formed to hold Equity Interests of Holdings (or any of



Holdings' direct or indirect parent companies) on behalf of such officers, directors and employees.

**“Environmental Laws”** means all applicable treaties, rules, regulations, codes, ordinances, judgments, orders, decrees, Governmental Approvals and other applicable Requirements of Law, and all applicable injunctions or binding agreements issued, promulgated or entered into by or with any Governmental Authority, in each instance relating to the protection of the environment, to preservation or reclamation of natural resources, to Release or threatened Release of any Hazardous Material or to the extent relating to exposure to Hazardous Materials, to health or safety matters.

**“Environmental Liability”** means any liability, obligation, loss, claim, action, order or cost, contingent or otherwise (including any liability for damages, costs of medical monitoring, costs of environmental remediation or restoration, administrative oversight costs, consultants' fees, fines, penalties and indemnities), of Holdings, any Intermediate Parent, the Borrower or any Subsidiary directly or indirectly resulting from or based upon (a) any actual or alleged violation of any Environmental Law or permit, license or approval issued thereunder, (b) Environmental Laws and the generation, use, handling, transportation, storage, treatment or disposal of any Hazardous Materials, (c) exposure to any Hazardous Materials, (d) the Release or threatened Release of any Hazardous Materials or (e) any contract, agreement or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

**“Equity Interests”** means shares of capital stock, partnership interests, membership interests in a limited liability company, beneficial interests in a trust or other equity ownership interests in a Person.

**“ERISA”** means the Employee Retirement Income Security Act of 1974, as amended from time to time, [and the rules and regulations promulgated thereunder.](#)

**“ERISA Affiliate”** means any trade or business (whether or not incorporated) that, together with Borrower or any Subsidiary, is treated as a single employer under Section 414(b) or 414(c) of the Code or, solely for purposes of Section 302 of ERISA and Section 412 of the Code, is treated as a single employer under Section 414 of the Code.

**“ERISA Event”** means (a) any “reportable event,” as defined in Section 4043 of ERISA or the regulations issued thereunder with respect to a Plan (other than an event for which the 30 day notice period is waived); (b) any failure by any Plan to satisfy the minimum funding standard (within the meaning of Section 412 of the Code or Section 302 of ERISA) applicable to such Plan, in each case whether or not waived; (c) the filing pursuant to Section 412(c) of the Code or Section 302(c) of ERISA of an application for a waiver of the minimum funding standard with respect to any Plan; (d) a determination that any Plan is, or is expected to be, in “at-risk” status (as defined in Section 303(i)(4) of ERISA or Section 430(i)(4) of the Code); (e) the incurrence by the Borrower or any ERISA Affiliate of any liability under Title IV of ERISA with respect to the termination of any Plan; (f) the receipt by the Borrower or any ERISA Affiliate from the PBGC or a plan administrator of any notice relating to an intention to terminate any Plan or Plans or to appoint a trustee to administer any Plan; (g) the incurrence by the Borrower or any

ERISA Affiliate of any liability with respect to the withdrawal or partial withdrawal from any Plan or Multiemployer Plan; or (h) the receipt by the Borrower or any ERISA Affiliate of any notice, or the receipt by any Multiemployer Plan from the Borrower or any ERISA Affiliate of any notice, concerning the imposition of Withdrawal Liability or a determination that a Multiemployer Plan is, or is expected to be, insolvent or in reorganization, within the meaning of Title IV of ERISA or in endangered or critical status, within the meaning of Section 305 of ERISA.

“**Escrow Assumption**” means the assumption of the obligations of the Escrow Borrower under the Escrow Term Loans by the Borrower on the Escrow Assumption Date pursuant to an instrument in form reasonably satisfactory to the Administrative Agent.

“**Escrow Assumption Date**” means the date of the satisfaction of each of the conditions set forth in Section 4.03.

“**Escrow Borrower**” means Orchestra Borrower, LLC, a Delaware limited liability company.

“**Escrow Funding Date**” means the date of the initial funding of the Escrow Term Loans under the Escrow Term Loan Credit Agreement.

“**Escrow Term Loan Credit Agreement**” means the Credit Agreement, to be dated as of the Escrow Funding Date, by and among the Escrow Borrower, the lenders party thereto and JPMorgan Chase Bank, N.A., pursuant to which the Escrow Term Loans were originally borrowed.

“**Escrow Term Loans**” means \$610,000,000 aggregate principal amount of term loans incurred by the Escrow Borrower pursuant to the Escrow Term Loan Credit Agreement on the Escrow Funding Date.

“**EU Bail-in Legislation Schedule**” means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

“**Eurodollar**” when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Adjusted LIBO Rate.

“**Event of Default**” has the meaning assigned to such term in Section 7.01. “**Excess Cash Flow**” means, for any period, an amount equal to the excess of:

(a) the sum, without duplication, of:

(i) Consolidated Net Income for such period,

(ii) an amount equal to the amount of all Non-Cash Charges (including in respect of depreciation and amortization) to the extent deducted in arriving at such Consolidated Net Income,

(iii) an amount equal to the aggregate net non-cash loss on dispositions by Holdings and the Restricted Subsidiaries during such period (other than dispositions in the ordinary course of business) to the extent deducted in arriving at such Consolidated Net Income;

(iv) the amount of tax expenses deducted in determining Consolidated Net Income for such period to the extent they exceed the amount of cash taxes paid in such period; and

(v) extraordinary cash gains during such period; over

(b) the sum, without duplication, of:

(i) an amount equal to the amount of all non-cash credits included in arriving at such Consolidated Net Income (including any amounts included in Consolidated Net Income pursuant to the last sentence of the definition of Consolidated Net Income to the extent such amounts are due but not received during such period) and cash charges included in clauses (a) through (i) of the definition of Consolidated Net Income to the extent financed with internally generated funds of Holdings and the Restricted Subsidiaries,

(ii) without duplication of amounts deducted pursuant to clause (x) below in prior fiscal periods, the amount of capital expenditures made in cash during such period to the extent financed with internally generated funds of Holdings and the Restricted Subsidiaries (other than asset sale proceeds, casualty proceeds, condemnation proceeds or other funds that would not be included in Consolidated Net Income),

(iii) the aggregate amount of all principal payments of Indebtedness (other than the payment prior to its stated maturity of (x) any Indebtedness that is subordinated in right of payment to the Loan Document Obligations, (y) any Indebtedness that is secured by a junior Lien on the Collateral and (z) unsecured Indebtedness of the Borrower and its Restricted Subsidiaries) of the Borrower and the Restricted Subsidiaries (including (A) the principal component of payments in respect of Capitalized Leases and (B) the amount of any mandatory prepayment of Term Loans pursuant to Section 2.09(b) with the Net Proceeds from an event of the type specified in clause (a) of the definition of "Prepayment Event" to the extent required due to a disposition that resulted in an increase to Consolidated Net Income and not in excess of the amount of such increase but excluding (X) all other prepayments of Term Loans, (Y) all prepayments of revolving loans (including any Revolving Loans) and any Trading Debt unless accompanied by a permanent reduction of commitments or termination of a credit line in respect of such revolving loans or such Trading Debt and (Z) the

Refinancing) made during such period, to the extent financed with internally generated funds of Holdings and the Restricted Subsidiaries (other than to the extent such payments were made using any portion of the Cumulative Excess Cash Flow) (it being agreed that any amount not permitted to be deducted pursuant to this clause (b)(iii) may not be deducted pursuant to any other provision of this clause (b)),

(iv) an amount equal to the aggregate net non-cash gain on dispositions by Holdings and the Restricted Subsidiaries during such period (other than dispositions in the ordinary course of business) to the extent included in arriving at such Consolidated Net Income,

(v) cash payments by Holdings and the Restricted Subsidiaries during such period in respect of long-term liabilities of Holdings and the Restricted Subsidiaries other than Indebtedness and that were made with internally generated funds of Holdings and the Restricted Subsidiaries, to the extent that such payments were not expensed in arriving at such Consolidated Net Income,

(vi) without duplication of amounts deducted pursuant to clause (x) below in prior fiscal periods, the amount of Investments and acquisitions made in cash during such period pursuant to Section 6.04 (other than (1) Section 6.04(a), (2) to the extent made with Cumulative Excess Cash Flow and (3) any Investment by Holdings or any Restricted Subsidiary in Holdings or any Restricted Subsidiary) to the extent that such Investments and acquisitions were financed with internally generated funds of Holdings and the Restricted Subsidiaries and were not expensed in arriving at such Consolidated Net Income,

(vii) the amount of dividends, distributions and other restricted payments paid in cash during such period by the Borrower pursuant to Section 6.08 (including any permitted quarterly tax distribution but excluding any such payments pursuant to clause (z) of Section 6.08(a)(viii) and clause (z) of Section 6.08(b)(iv)) to the extent such payments were financed with internally generated funds of Holdings and the Restricted Subsidiaries,

(viii) the aggregate amount of expenditures actually made by Holdings and the Restricted Subsidiaries in cash during such period (including expenditures for the payment of financing fees) to the extent that such expenditures are not expensed during such period and were financed with internally generated funds of Holdings and the Restricted Subsidiaries (other than to the extent such expenditures were made using any portion of the Cumulative Excess Cash Flow),

(ix) the aggregate amount of any premium, make-whole or penalty payments actually paid in cash by Holdings and the Restricted Subsidiaries during such period that are required to be made in connection with any prepayment of Indebtedness to the extent that such payments are not expensed during such period or any previous period and were financed with internally generated funds of Holdings and the Restricted Subsidiaries (other than to the

extent such payments were made using any portion of the Cumulative Excess Cash Flow),

(x) without duplication of amounts deducted from Excess Cash Flow in prior periods, the aggregate consideration required to be paid in cash by Holdings or any of the Restricted Subsidiaries pursuant to binding contracts (which may include, among other things, letters of intent or purchase orders) (the “Contract Consideration”) entered into prior to or during such period relating to Permitted Acquisitions, other Investments or capital expenditures (including Capitalized Software Expenses or other purchases of intellectual property but excluding any contracts where the counterparty is Holdings or any of the Restricted Subsidiaries) to be consummated or made during the period of four consecutive fiscal quarters of Holdings following the end of such period, provided that to the extent the aggregate amount of internally generated funds actually utilized to finance such Permitted Acquisitions, Investments or capital expenditures during such period of four consecutive fiscal quarters is less than the Contract Consideration, the amount of such shortfall shall be added to the calculation of Excess Cash Flow at the earliest to occur of the (A) abandonment of such planned expenditure, (B) making of such planned expenditure and (C) end of such period of four consecutive fiscal quarters,

(xi) the amount of cash taxes paid in such period to the extent they exceed the amount of tax expense deducted in determining Consolidated Net Income for such period, and

(xii) extraordinary cash losses for such period.

“**Exchange Act**” means the United States Securities Exchange Act of 1934, as amended from time to time.

“**Excluded Assets**” means (a) any fee-owned real property with a fair market value of less than \$5,000,000 and all leasehold interests in real property, (b) motor vehicles and other assets subject to certificates of title or ownership (but only to the extent that a security interest in any such asset cannot be perfected by filing of a financing statement), (c) any commercial tort claims or letter of credit rights having a value of less than \$5,000,000 (but only to the extent that a security interest in any such asset cannot be perfected by filing of a financing statement), (d) Equity Interests in any Person (other than the Borrower or any Wholly Owned Restricted Subsidiaries) to the extent not permitted by the terms of such Person’s organizational or joint venture documents, (e) voting Equity Interests constituting an amount greater than 65% of the voting Equity Interests of any Foreign Subsidiary, (f) any lease, license or other agreement with any Person if, to the extent and for so long as the grant of a Lien thereon to secure the Secured Obligations constitutes a breach of or a default under, or creates an enforceable right of termination in favor of any party (other than Holdings or any Restricted Subsidiary) to, such lease, license or other agreement (but only to the extent any of the foregoing is not rendered ineffective by, or is otherwise unenforceable under, the Uniform Commercial Code or any Requirements of Law), (g) any asset subject to a Lien of the type permitted by Section 6.02(iv) (whether or not incurred pursuant to such Section) or a Lien permitted by Section 6.02(xi) or Section 6.02(xx), in each case if, to

the extent and for so long as the grant of a Lien thereon to secure the Secured Obligations constitutes a breach of or a default under, or creates a right of termination in favor of any party (other than Holdings or any Restricted Subsidiary) to, any agreement pursuant to which such Lien has been created (but only to the extent any of the foregoing is not rendered ineffective by, or is otherwise unenforceable under, the Uniform Commercial Code or any Requirements of Law), (h) any intent-to-use trademark applications filed in the United States Patent and Trademark Office, (i) any asset with respect to which Holdings with the written consent of the Administrative Agent (not to be unreasonably withheld or delayed) shall have provided to the Administrative Agent a certificate of a Financial Officer to the effect that, based on the advice of outside counsel or tax advisors of national recognition, the grant of a Lien thereon to secure the Secured Obligations would result in adverse tax consequences (including as a result of the operation of Section 956 of the Code or any similar law or regulation in any applicable jurisdiction) to Holdings and its Restricted Subsidiaries (other than on account of any Taxes payable in connection with filings, recordings, registrations, stampings and any similar acts in connection with the creation or perfection of Liens) that shall have been reasonably determined by Holdings to be material to Holdings and its Restricted Subsidiaries and (j) any asset if, to the extent and for so long as the grant of a Lien thereon to secure the Secured Obligations is prohibited by any Requirements of Law (other than to the extent that any such prohibition would be rendered ineffective pursuant to the Uniform Commercial Code or any other applicable Requirements of Law).

**“Excluded Domestic Subsidiary”** means any direct or indirect Domestic Subsidiary of a direct or indirect Foreign Subsidiary of Holdings that is a “controlled foreign corporation” within the meaning of Section 957 of the Code.

**“Excluded Subsidiary”** means (a) any Subsidiary that is not a Wholly Owned Subsidiary of Holdings on the Restatement Effective Date (or, if later, the date it first becomes a Subsidiary), (b) any Subsidiary that is prohibited by any contractual obligation existing on the Restatement Effective Date (or, if later, the date it first becomes a Subsidiary, so long as such prohibition was not incurred in connection with or in contemplation of the acquisition of such Subsidiary), from guaranteeing the Secured Obligations, (c) any Subsidiary that is prohibited by any Requirement of Law from guaranteeing the Secured Obligations or that would require the consent, approval, license or authorization of any Governmental Authority or any Regulatory Supervising Organization to guarantee the Secured Obligations (unless such consent, approval, license or authorization has been received), (d) any Subsidiary to the extent such Subsidiary guaranteeing the Secured Obligations would result in a material adverse tax consequence to the Borrower and its Subsidiaries (including as a result of the operation of Section 956 of the Code or any similar law or regulation in any applicable jurisdiction) as reasonably determined by the Borrower with the consent of the Administrative Agent (such consent not to be unreasonably withheld or delayed) and (e) any other Subsidiary excused from becoming a Loan Party pursuant to the last paragraph of the definition of the term “Collateral and Guarantee Requirement.”

**“Excluded Taxes”** means, with respect to the Administrative Agent, any Lender, any Issuing Bank or any other recipient of any payment to be made by or on account of any obligation of any Loan Party hereunder or under any other Loan Document, (a) Taxes imposed on (or measured by) its net income (however denominated) and franchise

Taxes imposed on it (in lieu of net income Taxes) by (i) the United States of America, or the jurisdiction under the laws of which such recipient is organized or in which its principal office is located or, in the case of any Lender, in which its applicable lending office is located, or (ii) any other jurisdiction as a result of a present or former connection between such recipient and the jurisdiction imposing such Tax (other than a connection arising solely from such recipient having executed, delivered, or become a party to, performed its obligations or received payments under, received or perfected a security interest under, sold or assigned an interest in, engaged in any other transaction pursuant to, or enforced, any Loan Documents), (b) any branch profits Tax imposed by the United States of America or any similar Tax imposed by any other jurisdiction described in clause (a) above, (c) any withholding Tax that is attributable to a Lender's failure to comply with Section 2.15(e) and (d) except in the case of an assignee pursuant to a request by the Borrower under Section 2.17 hereto, any U.S. federal withholding Taxes (including any deduction or withholding pursuant to FATCA) imposed due to a Requirement of Law in effect at the time a Lender becomes a party hereto (or designates a new lending office), except to the extent that such Lender (or its assignor, if any) was entitled, at the time of designation of a new lending office (or assignment), to receive additional amounts with respect to such withholding Tax under Section 2.15(a).

“**Existing Credit Agreement**” has the meaning set forth in the preamble hereto.

“**Existing Yen Bonds**” means the VFH Parent LLC Japanese Yen Bonds issued on July 25, 2016 in the aggregate principal amount of JPY3,500,000,000 in favor of SBI Life Insurance Co., Ltd. and SBI Insurance Col., Ltd., and guaranteed by Virtu Financial LLC.

“**Extension Notice**” has the meaning assigned to such term in Section 2.19(b). “**Facility**” means any series of Loans.

“**FATCA**” means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof and any agreements entered into pursuant to Section 1471 (b)(1) of the Code, as of the date of this Agreement (or any amended or successor version described above).

“**Federal Funds Effective Rate**” means, for any day, the rate calculated by the NYFRB based on such day's federal funds transactions by depository institutions, as determined in such manner as the NYFRB shall set forth on its public website from time to time, as published on the next succeeding Business Day by the NYFRB as the federal funds effective rate; *provided, however*, that notwithstanding the foregoing, the Federal Funds Effective Rate will be deemed to be 0.00% per annum if the Federal Funds Effective Rate determined pursuant to this definition would otherwise be less than 0.00% per annum.

“**Financial Officer**” means the chief financial officer, chief operating officer, principal accounting officer, treasurer or controller of Holdings.

**“Financial Performance Covenants”** means the covenants set forth in Sections 6.12 and 6.13.

**“Financing Transactions”** means the execution, delivery and performance by each Loan Party of the Loan Documents entered into on the Restatement Effective Date to which it is to be a party, the funding of (and conversion to) of Initial Term Loans hereunder and the use of the proceeds thereof.

**“First Lien Intercreditor Agreement”** means the First Lien Intercreditor Agreement substantially in the form of Exhibit F-1 among the Administrative Agent and one or more Senior Representatives for holders of Permitted First Priority Refinancing Debt, any secured Indebtedness incurred pursuant to Section 6.01(a)(viii) or any secured Additional Notes issued pursuant to Section 6.01(a)(xxii), with such modifications thereto as the Administrative Agent may reasonably agree.

**“Flow-Through Entity”** has the meaning assigned to such term in Section 6.08(a)(vi).

**“Foreign Subsidiary”** means (a) any Subsidiary that is organized under the laws of a jurisdiction other than the United States of America, any State thereof or the District of Columbia and (b) any Subsidiary organized under the laws of the United States of America, any State thereof or the District of Columbia that is disregarded for U.S. federal income tax purposes if substantially all of its assets consist of the equity interests of one or more direct or indirect Foreign Subsidiaries.

**“Former Agent”** means Credit Suisse AG, Cayman Islands Branch, in its former capacity as administrative and collateral agent under the Existing Credit Agreement (as defined in the Existing Credit Agreement).

**“GAAP”** means generally accepted accounting principles in the United States of America, as in effect from time to time but subject to Section 1.04.

**“Governmental Approvals”** means all authorizations, consents, approvals, permits, licenses and exemptions of, registrations and filings with, and reports to, Governmental Authorities or Regulatory Supervising Organizations.

**“Governmental Authority”** means the government of the United States of America or any other nation, or any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank).

**“Guarantee”** of or by any Person (the **“guarantor”**) means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Indebtedness of any other Person (the **“primary obligor”**) in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or to purchase (or to advance or supply funds for the



purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Indebtedness of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Indebtedness; *provided* that the term Guarantee shall not include endorsements for collection or deposit in the ordinary course of business or customary and reasonable indemnity obligations in effect on the Restatement Effective Date or entered into in connection with any acquisition or disposition of assets permitted under this Agreement (other than such obligations with respect to Indebtedness). The amount of any Guarantee shall be deemed to be an amount equal to the stated or determinable amount of the related primary obligation, or portion thereof, in respect of which such Guarantee is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined in good faith by a Financial Officer. The term “Guarantee” as a verb has a corresponding meaning.

“**Guarantee Agreement**” means the Master Guarantee Agreement dated as of July 8, 2011 among the Loan Parties and the Administrative Agent (as assignee of the Former Agent).

“**Hazardous Materials**” means all explosive, radioactive, hazardous or toxic substances, wastes or other pollutants, including petroleum or petroleum by-products or distillates, asbestos or asbestos-containing materials, polychlorinated biphenyls, radon gas, infectious or medical wastes and all other substances or wastes of any nature regulated as hazardous or toxic, or any other term of similar import, pursuant to any Environmental Law.

“**Holdings**” has the meaning given to such term in the preliminary statements hereto.

“**Holdings LLC Agreement**” means the Limited Liability Company Agreement of Holdings pursuant to which the members of Holdings hold limited liability interests of Holdings, together with all exhibits and schedules thereto as in effect on the Restatement Effective Date.

“**Identified Participating Lenders**” has the meaning assigned to such term in Section 2.09(a)(ii)(C).

“**Identified Qualifying Lenders**” has the meaning specified in Section 2.09(a)(ii)(D).

“**Immaterial Subsidiary**” means any Subsidiary other than a Material Subsidiary.

“**Impacted Interest Period**” has the meaning assigned to such term in the definition of “LIBO Rate.”

“**Incremental Cap**” has the meaning assigned to such term in Section 2.18(a)(iii).

**“Incremental Revolving Commitment”** means the commitment of the Additional Revolving Lenders to make loans pursuant to an Incremental Revolving Facility in accordance with Section 2.18.

**“Incremental Revolving Facility”** has the meaning assigned to such term in Section 2.18(a)(i).

**“Incremental Revolving Facility Amendment”** has the meaning assigned to such term in Section 2.18(b).

**“Incremental Revolving Facility Closing Date”** has the meaning assigned to such term in Section 2.18(b).

**“Incremental Term Commitment”** means the commitment of the Additional Term Lenders to make Incremental Term Loans pursuant to Section 2.18.

**“Incremental Term Facility”** has the meaning assigned to such term in Section 2.18(ii).

**“Incremental Term Facility Amendment”** has the meaning assigned to such term in Section 2.18(b).

**“Incremental Term Facility Closing Date”** has the meaning assigned to such term in Section 2.18(b).

**“Incremental Term Loans”** means term loans established pursuant to Section 2.18(b).

**“Indebtedness”** of any Person means, without duplication, (a) all obligations of such Person for borrowed money or with respect to deposits or advances of any kind, (b) all obligations of such Person evidenced by bonds, debentures, notes or similar instruments, (c) all obligations of such Person under conditional sale or other title retention agreements relating to property acquired by such Person, (d) all obligations of such Person in respect of the deferred purchase price of property or services (excluding trade accounts payable in the ordinary course of business and any earn-out obligation until such obligation becomes a liability on the balance sheet of such Person in accordance with GAAP), (e) all Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on property owned or acquired by such Person, whether or not the Indebtedness secured thereby has been assumed, (f) all Guarantees by such Person of Indebtedness of others, (g) all Capital Lease Obligations of such Person, (h) all obligations, contingent or otherwise, of such Person as an account party in respect of letters of credit and letters of guaranty and (i) all obligations, contingent or otherwise, of such Person in respect of bankers’ acceptances; *provided* that the term “Indebtedness” shall not include (x) deferred or prepaid revenue and (y) purchase price holdbacks in respect of a portion of the purchase price of an asset to satisfy warranty or other unperformed obligations of the seller. The Indebtedness of any Person shall include the Indebtedness of any other entity (including any partnership in which such Person is a general partner) to the extent such Person is liable therefor as a result of such Person’s

ownership interest in or other relationship with such entity, except to the extent the terms of such Indebtedness provide that such Person is not liable therefor. The amount of Indebtedness of any Person for purposes of clause (e) above shall (unless such Indebtedness has been assumed by such Person) be deemed to be equal to the lesser of (A) the aggregate unpaid amount of such Indebtedness and (B) the fair market value of the property encumbered thereby as determined by such Person in good faith.

“**Indemnified Taxes**” means Taxes other than Excluded Taxes.

“**Indemnitee**” has the meaning assigned to such term in Section 9.03(b). “**Information**” has the meaning assigned to such term in 9.12.

“**Information Materials**” means the presentation to the Lenders dated May 2017.

“**Initial Term Loan**” means a Loan made by a Lender ~~pursuant to Section 2.0-1(a) or (b)~~ on the Restatement Effective Date, including, for the avoidance of doubt, a Converting Term Loan converted to an Initial Term Loan on the Restatement Effective Date.

“**Insolvent**” means, with respect to any Person, that (i) the fair value of assets is less than the amount that will be required to pay the total liability on existing debts as they become absolute and matured, (ii) the present fair saleable value of assets is less than the amount that will be required to pay the probable liability on existing debts as they become absolute and matured, (iii) it is unable to pay its debts or other obligations as they generally become due, (iv) it ceases to pay its current obligations in the ordinary course of business as they generally become absolute and matured, or (v) its aggregate property is not, at a fair valuation, sufficient, or if disposed of at a fairly conducted sale under legal process, would not be, sufficient to enable payment of all obligations, due and accruing due. The term “debts” as used in this definition includes any legal liability, whether matured or unmatured, liquidated or unliquidated, absolute, fixed or contingent and “values of assets” shall mean the amount of which the assets (both tangible and intangible) in their entirety would change hands between a willing buyer and a willing seller, with a commercially reasonable period of time, each having reasonable knowledge of the relevant facts, with neither being under compulsion to act.

“**Intellectual Property**” has the meaning assigned to such term in the Collateral Agreement.

“**Interest Coverage Ratio**” means, the ratio of (a) Consolidated EBITDA for any Test Period to (b) Consolidated Interest Expense for such Test Period.

“**Interest Election Request**” means a request by the Borrower to convert or continue a borrowing under an Incremental Revolving Facility, a Revolving Borrowing or a Term Borrowing in accordance with Section 2.05.

“**Interest Payment Date**” means (a) with respect to any ABR Loan, the last Business Day of each March, June, September and December and (b) with respect to any

Eurodollar Loan, the last day of the Interest Period applicable to the Borrowing of which such Loan is a part and, in the case of a Eurodollar Borrowing with an Interest Period of more than three months' duration, each day prior to the last day of such Interest Period that occurs at intervals of three months' duration after the first day of such Interest Period; provided that the Amendment No. 1 Effective Date shall be an Interest Payment Date with respect to all New Term Loans outstanding on such date immediately prior to the Amendment No. 1 Effective Date.

**"Interest Period"** means, with respect to any Eurodollar Borrowing, the period commencing on the date such Borrowing is disbursed or converted to or continued as a Eurodollar Borrowing and ending on the date that is one, two, three or six months thereafter as selected by the Borrower in its Borrowing Request (or, if to the extent set forth in Section 2.01(b) or otherwise agreed to by each Lender participating therein, twelve months or such other period less than one month thereafter as the Borrower may elect); *provided* that (a) if any Interest Period would end on a day other than a Business Day, such Interest Period shall be extended to the next succeeding Business Day unless such next succeeding Business Day would fall in the next calendar month, in which case such Interest Period shall end on the next preceding Business Day, (b) any Interest Period that commences on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the last calendar month of such Interest Period) shall end on the last Business Day of the last calendar month at the end of such Interest Period, and (c) no Interest Period shall extend beyond (i) in the case of ~~New~~ Term B-1 Loans, the Term Maturity Date, and (ii) in the case of Revolving Loans, the Revolving Maturity Date (or other applicable maturity date). For purposes hereof, the date of a Borrowing initially shall be the date on which such Borrowing is made and thereafter shall be the effective date of the most recent conversion or continuation of such Borrowing.

**"Intermediate Parent"** means any Subsidiary of Holdings and of which the Borrower is a Subsidiary.

**"Interpolated Rate"** means, at any time, for any Interest Period, the rate per annum (rounded to the same number of decimal places as the LIBO Screen Rate) determined by the Administrative Agent (which determination shall be conclusive and binding absent manifest error) to be equal to the rate that results from interpolating on a linear basis between (a) the LIBO Screen Rate for the longest period for which the LIBO Screen Rate is available that is shorter than the Impacted Interest Period and (b) the LIBO Screen Rate for the shortest period for which the LIBO Screen Rate is available that exceeds the Impacted Interest Period, in each case, at such time.

**"Investment"** means, as to any Person, any direct or indirect acquisition or investment by such Person, whether by means of (a) the purchase or other acquisition of Equity Interests or debt or other securities of another Person, (b) a loan, advance or capital contribution to, Guarantee or assumption of Indebtedness of, or purchase or other acquisition of any other debt or equity participation or interest in, another Person, including any partnership or joint venture interest in such other Person or (c) the purchase or other acquisition (in one transaction or a series of transactions) of all or substantially all of the property and assets or business of another Person or assets constituting a business unit, line of business or division of such Person. The amount, as

of any date of determination, of (a) any Investment in the form of a loan or an advance shall be the principal amount thereof outstanding on such date, minus any cash payments actually received by such investor representing interest in respect of such Investment (to the extent any such payment to be deducted does not exceed the remaining principal amount of such Investment), but without any adjustment for write-downs or write-offs (including as a result of forgiveness of any portion thereof) with respect to such loan or advance after the date thereof, (b) any Investment in the form of a Guarantee shall be equal to the stated or determinable amount of the related primary obligation, or portion thereof, in respect of which such Guarantee is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof, as determined in good faith by a Financial Officer, (c) any Investment in the form of a transfer of Equity Interests or other non-cash property by the investor to the investee, including any such transfer in the form of a capital contribution, shall be the fair market value (as determined in good faith by a Financial Officer) of such Equity Interests or other property as of the time of the transfer, *minus* any payments actually received by such investor representing a return of capital of, or dividends or other distributions in respect of, such Investment (to the extent such payments do not exceed, in the aggregate, the original amount of such Investment), but without any other adjustment for increases or decreases in value of, or write-ups, write-downs or write-offs with respect to, such Investment after the date of such Investment, and (d) any Investment (other than any Investment referred to in clause (a), (b) or (c) above) by the specified Person in the form of a purchase or other acquisition for value of any Equity Interests, evidences of Indebtedness or other securities of any other Person shall be the original cost of such Investment (including any Indebtedness assumed in connection therewith), *plus* (i) the cost of all additions thereto and *minus* (ii) the amount of any portion of such Investment that has been repaid to the investor in cash as a repayment of principal or a return of capital, and of any cash payments actually received by such investor representing interest, dividends or other distributions in respect of such Investment (to the extent the amounts referred to in clause (ii) do not, in the aggregate, exceed the original cost of such Investment plus the costs of additions thereto), but without any other adjustment for increases or decreases in value of, or write-ups, write-downs or write-offs with respect to, such Investment after the date of such Investment. For purposes of Section 6.04, if an Investment involves the acquisition of more than one Person, the amount of such Investment shall be allocated among the acquired Persons in accordance with GAAP; *provided* that pending the final determination of the amounts to be so allocated in accordance with GAAP, such allocation shall be as reasonably determined by a Financial Officer.

**“Issuing Bank”** means each of (a) JPMorgan Chase Bank, N.A. and (b) each Revolving Lender that shall have become an Issuing Bank hereunder as provided in Section 2.22(i) (other than any Person that shall have ceased to be an Issuing Bank as provided in Section 2.22(j)), in each case in its capacity as an issuer of Letters of Credit hereunder. Each reference herein to the “Issuing Bank” shall be deemed to be a reference to the relevant Issuing Bank. Each Issuing Bank may, in its discretion, arrange for one or more Letters of Credit to be issued by Affiliates of such Issuing Bank, in which case the term “Issuing Bank” shall include any such Affiliate with respect to Letters of Credit issued by such Affiliate.

**“Junior Financing”** means the Second Lien Notes, any Subordinated Indebtedness and any Permitted Refinancing in respect of any of the foregoing owing by

Holdings or a Restricted Subsidiary (other than intercompany Indebtedness owing to Holdings or a Restricted Subsidiary).

“**Junior Lien Intercreditor Agreement**” means the Junior Lien Intercreditor Agreement substantially in the form of Exhibit F-2 among the Administrative Agent and one or more Senior Representatives for holders of Second Lien Notes, Permitted Junior Lien Refinancing Debt, any junior Lien secured Indebtedness incurred pursuant to Section 6.01(a)(viii) or any junior Lien secured Additional Notes issued pursuant to Section 6.01(a)(xxii), with such modifications thereto as the Administrative Agent may reasonably agree.

“**KCG**” means (a) KCG Holdings, Inc., a Delaware corporation, and (b) following the merger contemplated by Merger and Contribution pursuant to which KCG shall be the surviving Person, and its conversion into a Delaware limited liability company, KCG Holdings LLC, a Delaware limited liability company.

“**KCG Refinancing**” means the repayment in full of all outstanding amounts under (i) that certain Indenture, dated as of March 31, 2015, among KCG, certain of its subsidiaries and The Bank of New York Mellon and (ii) that certain Credit Agreement, dated as of June 5, 2015, among KCG Americas LLC, certain of its subsidiaries and BMO Harris Bank N.A., the termination of all commitments thereunder and the release of all security interests with respect thereto.

“**Latest Maturity Date**” means, at any date of determination, the latest maturity or expiration date applicable to any Loan or Commitment hereunder at such time, including the latest maturity or expiration date of any Other Term Loan, any Other Term Commitment, any Other Revolving Loan or any Other Revolving Commitment, in each case as extended in accordance with this Agreement from time to time.

“**LC Cash Collateral Account**” has the meaning assigned to such term in Section 2.22.

“**LC Commitment**” means \$5,000,000.

“**LC Disbursement**” means a payment made by an Issuing Bank pursuant to a Letter of Credit.

“**LC Exposure**” means, at any time, the total LC Obligations. The LC Exposure of any Revolving Lender at any time shall be its Applicable Percentage of the aggregate LC Exposure at such time.

“**LC Obligations**” means, at any time, an amount equal to the sum of (a) the aggregate then undrawn and unexpired amount of the then outstanding Letters of Credit and (b) the aggregate amount of drawings under Letters of Credit that have not then been reimbursed pursuant to Section 2.22. For all purposes of this Agreement, if on any date of determination a Letter of Credit has expired by its terms but any amount may still be drawn thereunder by reason of the operation of Rule 3.14 of the International Standby Practices (ISP98), such Letter of Credit shall be deemed to be “outstanding” in the amount so remaining available to be drawn. Unless otherwise specified herein, the

amount of a Letter of Credit at any time shall be deemed to be the stated amount of such Letter of Credit in effect at such time; provided that with respect to any Letter of Credit that, by its terms or the terms of any document related thereto, provides for one or more automatic increases in the stated amount thereof, the amount of such Letter of Credit shall be deemed to be the maximum stated amount of such Letter of Credit after giving effect to all such increases, whether or not such maximum stated amount is in effect at such time.

“**LC Participants**” means the collective reference to all the Revolving Lenders other than the Issuing Bank.

“**Lead Arranger**” means JPMorgan Chase Bank, N.A.

“**Lender Parent**” means, with respect to any Lender, any Person as to which such Lender is, directly or indirectly, a Subsidiary.

“**Lenders**” means the Persons listed on Schedule 2.01, each Converting Term Lender and any other Person that shall have become a party hereto (as a lender) pursuant to an Assignment and Assumption, an Incremental Revolving Facility Amendment, an Incremental Term Facility Amendment, a Refinancing Amendment or the Escrow Assumption, in each case, other than any such Person that ceases to be a party hereto pursuant to an Assignment and Assumption.

“**Letters of Credit**” has the meaning assigned to such term in Section 2.22(a).

“**LIBO Rate**” means, with respect to any Eurodollar Borrowing for any Interest Period, the rate *per annum* equal to the London interbank offered rate as administered by ICE Benchmark Administration (or any other Person that takes over the administration of such rate) for Dollars for a period equal in length to such Interest Period as displayed on pages LIBOR01 or LIBOR02 of the Reuters screen that displays such rate (or, in the event such rate does not appear on a Reuters page or screen, on any successor or substitute page on such screen that displays such rate, or on the appropriate page of such other information service that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion; in each case, the “**LIBOR Screen Rate**”; provided that if the LIBO Screen Rate determined pursuant to this definition would be less than zero, such rate shall be deemed to be zero for the purposes of this Agreement) at approximately 11:00 a.m., London time, two Business Days prior to the commencement of such Interest Period; *provided, further*, that if the LIBO Screen Rate shall not be available at such time for such Interest Period (an “**Impacted Interest Period**”), then the LIBO Rate shall be the Interpolated Rate comparable to such period as of approximately 11:00 a.m., London time, on such date.

Notwithstanding the foregoing, (i) solely with respect to the ~~New~~ Term B-1 Loans, the LIBO Rate with respect to any applicable Interest Period will be deemed to be 1.00% per annum if the LIBO Rate for such Interest Period determined pursuant to this definition would otherwise be less than 1.00% per annum and (ii) solely with respect to Revolving Loans, the LIBO Rate with respect to any applicable Interest Period will be deemed to be zero if the LIBO Rate for such Interest Period determined pursuant to this definition would otherwise be less than zero.

“**LIBOR Screen Rate**” shall have the meaning set forth in the definition of “LIBO Rate.”

“**Lien**” means, with respect to any asset, (a) any mortgage, deed of trust, lien, pledge, hypothecation, encumbrance, charge or security interest in, on or of such asset and (b) the interest of a vendor or a lessor under any conditional sale agreement, capital lease or title retention agreement (or any financing lease having substantially the same economic effect as any of the foregoing) relating to such asset.

“**Loan Document Obligations**” has the meaning assigned to such term in the Collateral Agreement.

“**Loan Documents**” means the Restatement Agreement, the Agency Transfer Agreement, this Agreement, any Refinancing Amendment, the Guarantee Agreement, the Collateral Agreement, the other Security Documents, any Reaffirmation Agreement, the First Lien Intercreditor Agreement, the Junior Lien Intercreditor Agreement, any promissory notes delivered pursuant to Section 2.07(e) (except for purposes of Section 9.02), [Amendment No. 1](#) and any other agreement, document or instrument to which any Loan Party is a party and which is designated as a Loan Document.

“**Loan Parties**” means Holdings, any Intermediate Parent, the Borrower and the Subsidiary Loan Parties.

“**Loans**” means the loans made by the Lenders to the Borrower pursuant to this Agreement.

“**Majority in Interest,**” when used in reference to Lenders of any Class, means, at any time, (a) in the case of the Revolving Lenders, Lenders having Revolving Exposures and unused Revolving Commitments representing more than 50% of the sum of the aggregate Revolving Exposures and the aggregate unused Revolving Commitments at such time and (b) in the case of the Term Lenders of any Class, Lenders holding outstanding Term Loans of such Class representing more than 50% of all Term Loans of such Class outstanding at such time, *provided* that (a) the Loans, Revolving Exposures and unused Commitments of the Borrower or any Affiliate thereof and (b) whenever there are one or more Defaulting Lenders, the total outstanding Revolving Exposures of, and the unused Revolving Commitments of, each Defaulting Lender shall in each case be excluded for purposes of making a determination of the Majority in Interest.

“**Material Adverse Effect**” means any event, circumstance or condition that has had, or would reasonably be expected to have, a materially adverse effect on (a) the business, financial condition or results of operations of Holdings and its Restricted Subsidiaries, taken as a whole, (b) the ability of the Borrower and the other Loan Parties, taken as a whole, to perform their payment obligations under the Loan Documents or (c) the rights and remedies of the Administrative Agent and the Lenders under the Loan Documents.

“**Material Indebtedness**” means Indebtedness (other than the Loan Document Obligations), or obligations in respect of one or more Swap Agreements, of any one or



more of Holdings and the Restricted Subsidiaries in an aggregate principal amount exceeding \$40,000,000. For purposes of determining Material Indebtedness, the “principal amount” of the obligations in respect of any Swap Agreement at any time shall be the maximum aggregate amount (giving effect to any netting agreements) that Holdings or such Restricted Subsidiary would be required to pay if such Swap Agreement were terminated at such time.

“**Material Subsidiary**” means (i) each Wholly Owned Restricted Subsidiary that, as of the last day of the fiscal quarter of Holdings most recently ended, had revenues or total assets for such quarter in excess of 2.5% of the consolidated revenues or total assets, as applicable, of Holdings for such quarter and (ii) any group comprising Wholly Owned Restricted Subsidiaries that each would not have been a Material Subsidiary under clause (i) but that, taken together, as of the last day of the fiscal quarter of Holdings most recently ended, had revenues or total assets for such quarter in excess of 5% of the consolidated revenues or total assets, as applicable, of Holdings for such quarter; *provided* that solely for purposes of Sections 7.01(h) and (i) each such Subsidiary forming part of such group is subject to an Event of Default under one or more of such Sections.

“**Maximum Rate**” has the meaning assigned to such term in Section 9.16.

“**Merger Agreement**” means that certain Agreement and Plan of Merger and Contribution, dated as of April 20, 2017, among Virtu Financial, Inc., Merger Sub and KCG.

“**Merger and Contribution**” means the merger of Merger Sub with and into KCG, with KCG surviving such merger, followed by the immediate series of contributions of the Escrow Borrower and its Subsidiaries (including KCG) to Holdings and then to the Borrower and then to Virtu Financial Operating LLC, resulting in KCG becoming an indirect, wholly owned subsidiary of the Borrower.

“**Merger Sub**” means Orchestra Merger Sub, Inc., a Delaware corporation.

“**Moody’s**” means Moody’s Investors Service, Inc. and any successor to its rating agency business.

“**Mortgage**” means a mortgage, deed of trust, assignment of leases and rents, leasehold mortgage or other security document granting a Lien on any Mortgaged Property to secure the Secured Obligations. Each Mortgage shall be in form and substance reasonably satisfactory to the Administrative Agent and the Borrower.

“**Mortgaged Property**” means each parcel of real property and the improvements thereto owned by a Loan Party with respect to which a Mortgage is granted pursuant to Section 5.11 or Section 5.12.

“**Multiemployer Plan**” means a multiemployer plan as defined in Section 4001(a)(3) of ERISA.

“**Net Proceeds**” means, with respect to any event, (a) the proceeds received in respect of such event in cash or Permitted Investments, including (i) any cash or Permitted Investments received in respect of any non-cash proceeds (including any cash payments received by way of deferred payment of principal pursuant to a note or installment receivable or purchase price adjustment or earn-out, but excluding any interest payments), but only as and when received, (ii) in the case of a casualty, insurance proceeds, and (iii) in the case of a condemnation or similar event, condemnation awards and similar payments, *minus* (b) the sum of (i) all fees and out-of-pocket expenses paid by Holdings, any Intermediate Parent, the Borrower and its Restricted Subsidiaries in connection with such event (including attorney’s fees, investment banking fees, survey costs, title insurance premiums, and related search and recording charges, transfer taxes, deed or mortgage recording taxes, underwriting discounts and commissions, other customary expenses and brokerage, consultant, accountant and other customary fees), (ii) in the case of a sale, transfer or other disposition of an asset (including pursuant to a sale and leaseback transaction or a casualty or a condemnation or similar proceeding), (x) the amount of all payments that are permitted hereunder and are made by Holdings, any Intermediate Parent, the Borrower and its Restricted Subsidiaries as a result of such event to repay Indebtedness (other than the Loans, any Permitted First Priority Refinancing Debt, any Permitted Junior Lien Refinancing Debt, any Second Lien Notes, any secured Indebtedness incurred pursuant to Section 6.01(a)(viii) or any secured Additional Notes issued pursuant to Section 6.01(a)(xxii)) secured by such asset or otherwise subject to mandatory prepayment as a result of such event, (y) the pro rata portion of net cash proceeds thereof (calculated without regard to this clause (y)) attributable to minority interests and not available for distribution to or for the account of Holdings, any Intermediate Parent, the Borrower its Restricted Subsidiaries as a result thereof and (z) the amount of any liabilities directly associated with such asset and retained by the Borrower or any Restricted Subsidiary and (iii) the amount of all taxes paid (or reasonably estimated to be payable), and the amount of any reserves established by Holdings, any Intermediate Parent, the Borrower and its Restricted Subsidiaries to fund contingent liabilities reasonably estimated to be payable, that are directly attributable to such event, *provided* that (x) if the amount of any such estimated taxes exceeds the amount of taxes actually required to be paid in cash in respect of such event, the aggregate amount of such excess shall constitute Net Proceeds at the time such taxes are actually paid and (y) any reduction at any time in the amount of any such reserves (other than as a result of payments made in respect thereof) shall be deemed to constitute the receipt by the Borrower at such time of Net Proceeds in the amount of such reduction.

“**New Term Loans**” means all term loans (including the Initial Term Loans and, ~~following the Escrow Assumption, the Escrow Term Loans, and any Incremental Term Facilities that are incurred in the form of New Term Loans:~~ the Escrow Term Loans) that are outstanding under this Agreement immediately prior to the Amendment No. 1 Effective Date.

“**Non-Cash Charges**” means (a) any non-cash impairment charge or asset write-off or write-down related to intangible assets (including goodwill), long-lived assets, and Investments in debt and equity securities pursuant to GAAP, (b) all non-cash losses from Investments recorded using the equity method, (c) all Non-Cash Compensation Expenses, (d) the non-cash impact of acquisition method accounting, and

(e) other non-cash charges (*provided*, in each case, that if any non-cash charges represent an accrual or reserve for potential cash items in any future period, the cash payment in respect thereof in such future period shall be subtracted from Consolidated EBITDA to such extent, and excluding amortization of a prepaid cash item that was paid in a prior period).

“**Non-Cash Compensation Expense**” means any non-cash expenses and costs that result from the issuance of stock-based awards, partnership interest-based awards and similar incentive based compensation awards or arrangements.

“**Non-Consenting Lender**” has the meaning assigned to such term in Section 9.02(c).

“**Non-Converted New Term Loans**” means each New Term Loan (or portion thereof) other than a Converted New Term Loan.

“**Non-Converting Term Loan**” means each Original Term Loan other than a Converting Term Loan.

“**Non-Loan Party Investment Amount**” means, at any time, the sum of (a) the greater of \$100,000,000 and 40% of Consolidated EBITDA for the most recently ended Test Period, (b) the aggregate amount of the Net Proceeds of the issuance of, or contribution in respect of existing, Qualified Equity Interests, in each case to the extent contributed to Holdings as cash common equity after (I) prior to the Escrow Assumption Date, the Closing Date and (II) if the Escrow Assumption Date shall have occurred, the Escrow Assumption Date (other than, in each case, any such issuance or contribution made pursuant to Section 7.02 or any issuance to or contribution from a Restricted Subsidiary) that are Not Otherwise Applied and (c) Cumulative Excess Cash Flow that is Not Otherwise Applied; *provided* that amounts under clause (b) or (c) may only be utilized to make an Investment or acquisition if (i) no Default has occurred and is continuing at the time of the applicable Investment or acquisition or would result therefrom and (ii) at the time of the applicable Investment or acquisition and immediately after giving effect thereto, the Borrower would be in compliance with the Financial Performance Covenants on a Pro Forma Basis as of the end of the most recent Test Period for which financial statements are available.

“**Non-Wholly Owned Subsidiary**” of any Person means any Subsidiary of such Person other than a Wholly Owned Subsidiary.

“**Not Otherwise Applied**” means, with reference to any amount of Net Proceeds of any transaction or event or of Excess Cash Flow, that such amount (a) was not or was not required to be applied to prepay the Loans pursuant to Section 2.09(c) (or, prior to the Restatement Effective Date, to prepay the Original Term Loans pursuant to Section 2.09(c) of the Existing Credit Agreement) (*provided* that (I) if such Excess Cash Flow was not required to be applied to prepay the Loans pursuant to Section 2.09(f), such Excess Cash Flow shall only be deemed “Not Otherwise Applied” to the extent the Borrower has made a payment of Term Loans pursuant to clause (B) of Section 2.09(f) and such amounts represent the amount of additional taxes that would have been payable or reserved against if such Excess Cash Flow had been repatriated and (II) with respect

to any fiscal quarter ending on or after June 30, 2017 and prior to the earlier of (x) the Escrow Assumption Date and (y) the termination of the Merger Agreement, an amount of Excess Cash Flow equal to 50% (or, if the Total Leverage Ratio as of the last day of such fiscal quarter was less than or equal to 2.0 to 1.0, 0%) of such Excess Cash Flow for such fiscal quarter shall be deemed for purposes of this definition to have been applied to prepay Loans pursuant to Section 2.09(c), and (b) was not previously applied pursuant to any of Sections 6.04(c)(iii)(A), 6.04(h), 6.04(m), 6.08(a)(iii), 6.08(a)(viii), 6.08(a)(ix) or 6.08(b)(iv) (or, prior to the Restatement Effective Date, any such Section of the Existing Credit Agreement).

“**Notes Co-Issuer**” means Orchestra Co-Issuer, Inc., a Delaware corporation.

“**NYFRB**” means the Federal Reserve Bank of New York.

“**NYFRB Rate**” means, for any day, the greater of (a) the Federal Funds Effective Rate in effect on such day and (b) the Overnight Bank Funding Rate in effect on such date (or for any day that is not a Business Day, for the immediately preceding Business); *provided* that if none of such rates for published for any day that is a Business Day, the term “**NYFRB Rate**” means the rate for a federal funds transaction quoted at 11:00 a.m. on such day received to the Administrative Agent from a Federal funds broker of recognized standing selected by it; *provided, further*, that if any of the aforesaid rates shall be less than zero, such rate shall be deemed to be zero for purposes of this Agreement.

“**OFAC**” has the meaning assigned to such term in Section 3.19(c). “**OID**” has the meaning assigned to such term in Section 2.18(a)(ii).

“**Offered Amount**” has the meaning assigned to such term in Section 2.09(a)(ii)(D).

“**Offered Discount**” has the meaning assigned to such term in Section 2.09(a)(ii)(D).

“**Organizational Documents**” means, with respect to any Person, the charter, articles or certificate of organization or incorporation and bylaws or other organizational or governing documents of such Person.

“**Original Term Lender**” means a Lender that holds Original Term Loans immediately prior to the Restatement Effective Date.

“**Original Term Loan**” means each “Term Loan” as defined in the Existing Credit Agreement that is outstanding immediately prior to the Restatement Effective Date.

“**Other Revolving Commitments**” means one or more Classes of revolving credit commitments hereunder or extended Revolving Commitments that result from a Refinancing Amendment.

“**Other Revolving Loans**” means the Revolving Loans made pursuant to any Other Revolving Commitment.

“**Other Taxes**” means any and all present or future recording, stamp, documentary, excise, transfer, sales, property or similar Taxes, charges or levies arising from any payment made under any Loan Document or from the execution, delivery or enforcement of, or otherwise with respect to, any Loan Document.

“**Other Term Commitments**” means one or more Classes of term loan commitments hereunder that result from a Refinancing Amendment.

“**Other Term Loans**” means one or more Classes of Term Loans that result from a Refinancing Amendment.

“**Overnight Bank Funding Rate**” means, for any day, the rate comprised of both overnight federal funds and overnight Eurodollar borrowings by U.S.-managed banking offices of depository institutions, as such composite rate shall be determined by the NYFRB as set forth on its public website from time to time, and published on the next succeeding Business Day by the NYFRB as an overnight bank funding rate.

“**Participant**” has the meaning assigned to such term in Section 9.04(c).

“**Participant Register**” has the meaning assigned to such term in Section 9.04(c)(ii).

“**Participating Lender**” has the meaning assigned to such term in Section 2.09(a)(ii)(C).

“**PBGC**” means the Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

“**Perfection Certificate**” means a certificate substantially in the form of Exhibit C.

“**Permitted Acquisition**” means the purchase or other acquisition, by merger or otherwise, by Holdings or any Restricted Subsidiary of Equity Interests in, or all or substantially all the assets of (or all or substantially all the assets constituting a business unit, division, product line or line of business of), any Person; *provided* that (a) in the case of any purchase or other acquisition of Equity Interests in a Person, such Person, upon the consummation of such acquisition, will be a Restricted Subsidiary (including as a result of a merger or consolidation between any Restricted Subsidiary and such Person), (b) all transactions related thereto are consummated in accordance with all Requirements of Law, (c) the business of such Person, or such assets, as the case may be, constitute a business permitted by Section 6.03(b), (d) with respect to each such purchase or other acquisition, all actions required to be taken with respect to such newly created or acquired Restricted Subsidiary (including each subsidiary thereof) or assets in order to satisfy the requirements set forth in clauses (a), (b), (c) and (d) of the definition of the term “Collateral and Guarantee Requirement” to the extent applicable shall have been taken (or arrangements for the taking of such actions reasonably satisfactory to the

Administrative Agent shall have been made), (e) after giving effect to any such purchase or other acquisition and any incurrence or assumption of Indebtedness in connection therewith, (A) no Event of Default shall have occurred and be continuing and (B) the Borrower shall be in compliance with the Financial Performance Covenants on a Pro Forma Basis as of the end of the most recent Test Period for which financial statements are available and (f) Holdings shall have delivered to the Administrative Agent a certificate of a Financial Officer certifying that all the requirements set forth in this definition have been satisfied with respect to such purchase or other acquisition, together with reasonably detailed calculations demonstrating satisfaction of the requirement set forth in clause (e) above.

**“Permitted Encumbrances”** means:

(a) Liens for taxes, assessments or governmental charges that are not overdue for a period of more than 30 days or that are being contested in good faith and by appropriate proceedings diligently conducted, if adequate reserves with respect thereto are maintained on the books of the applicable Person in accordance with GAAP;

(b) Liens imposed by law, such as carriers’, warehousemen’s, mechanics’, materialmen’s, repairmen’s or construction contractors’ Liens and other similar Liens, in each case arising in the ordinary course of business that secure amounts not overdue for a period of more than 30 days or, if more than 30 days overdue, are unfiled and no other action has been taken to enforce such Lien or that are being contested in good faith and by appropriate proceedings diligently conducted, if adequate reserves with respect thereto are maintained on the books of the applicable Person in accordance with GAAP, in each case so long as such Liens do not individually or in the aggregate have a Material Adverse Effect;

(c) Liens incurred or deposits made in the ordinary course of business (i) in connection with workers’ compensation, unemployment insurance and other social security legislation and (ii) securing liability for reimbursement or indemnification obligations of (including obligations in respect of letters of credit or bank guarantees for the benefit of) insurance carriers providing property, casualty or liability insurance to Holdings or any Restricted Subsidiary;

(d) Liens incurred or deposits made to secure the performance of bids, trade contracts, governmental contracts and leases, statutory obligations, surety, stay, customs and appeal bonds, performance bonds and other obligations of a like nature (including those to secure health, safety and environmental obligations), in each case incurred in the ordinary course of business;

(e) easements, rights-of-way, restrictions, encroachments, protrusions and other similar encumbrances and minor title defects affecting real property that, in the aggregate, do not in any case materially interfere with the ordinary conduct of the business of Holdings and its Restricted Subsidiaries, taken as a whole;

(f) Liens securing, or otherwise arising from, judgments not constituting an Event of Default under Section 7.01(j);

(g) Liens on goods the purchase price of which is financed by a documentary letter of credit issued for the account of Holdings or any of its Restricted Subsidiaries; *provided* that such Lien secures only the obligations of Holdings or such Restricted Subsidiaries in respect of such letter of credit to the extent such obligations are permitted by Section 6.01; and

(h) Liens arising from precautionary Uniform Commercial Code financing statements or similar filings made in respect of operating leases entered into by Holdings or any of its Restricted Subsidiaries;

*provided* that the term “Permitted Encumbrances” shall not include any Lien securing Indebtedness other than Liens referred to in clause (c) above securing obligations under letters of credit or bank guarantees and in clause (g) above.

“**Permitted First Priority Refinancing Debt**” means any secured Indebtedness incurred by the Borrower in the form of one or more series of senior secured notes; *provided* that (i) such Indebtedness is secured by the Collateral on a pari passu basis (but without regard to the control of remedies) with the Loan Document Obligations and is not secured by any property or assets of Holdings, any Intermediate Parent, the Borrower or any Subsidiary other than the Collateral, (ii) such Indebtedness constitutes Credit Agreement Refinancing Indebtedness, (iii) such Indebtedness does not mature or have scheduled amortization or payments of principal and is not subject to mandatory redemption, repurchase, prepayment or sinking fund obligation (except customary asset sale or change of control provisions), in each case prior to the date that is 91 days after the Latest Maturity Date at the time such Indebtedness is incurred, (iv) the security agreements relating to such Indebtedness are substantially the same as the Security Documents (with such differences as are reasonably satisfactory to the Administrative Agent), (v) such Indebtedness is not at any time guaranteed by any Subsidiaries other than the Subsidiary Loan Parties and (vi) a Senior Representative acting on behalf of the holders of such Indebtedness shall have become party to the First Lien Intercreditor Agreement; *provided* that if such Indebtedness is the initial Permitted First Priority Refinancing Debt incurred by the Borrower, then the Loan Parties, the Administrative Agent and the Senior Representative for such Indebtedness shall have executed and delivered the First Lien Intercreditor Agreement. Permitted First Priority Refinancing Debt will include any Registered Equivalent Notes issued in exchange therefor.

“**Permitted Holders**” means (i) the VV Holders, (ii) North Island Holdings I, LP and any Affiliate thereof, (iii) Aranda Investments Pte. Ltd. and any Affiliate thereof, (iv) any group (within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act or any successor provision) the members of which include any of the foregoing, so long as no Person or other “group” (other than Permitted Holders specified in clauses (i) through (iii) above) beneficially owns more than 50% on a fully diluted basis of the voting power held by such Permitted Holder group and (v) Virtu Financial, Inc. and its Subsidiaries, so long as no “person” or “group” (as each such term is used in Section 13(d) of the Exchange Act) other than one or more Permitted Holders specified in clauses (i) through (iv) above is or becomes the Beneficial Owner, directly or indirectly, of more than 50% of the Voting Stock of Virtu Financial, Inc. or any such Subsidiary, measured by voting power rather than number of shares, units or the like.

“**Permitted Investments**” means any of the following, to the extent owned by Holdings or any Restricted Subsidiary:

(a) dollars, euro or such other currencies held by it from time to time in the ordinary course of business;

(b) readily marketable obligations issued or directly and fully guaranteed or insured by the government or any agency or instrumentality of (i) the United States or (ii) any member nation of the European Union, having average maturities of not more than 12 months from the date of acquisition thereof; *provided* that the full faith and credit of the United States or a member nation of the European Union is pledged in support thereof;

(c) time deposits with, or insured certificates of deposit or bankers’ acceptances of, any commercial bank that (i) is a Lender or (ii) has combined capital and surplus of at least \$250,000,000 (any such bank in the foregoing clauses (i) or (ii) being an “**Approved Bank**”), in each case with average maturities of not more than 12 months from the date of acquisition thereof;

(d) commercial paper and variable or fixed rate notes issued by an Approved Bank (or by the parent company thereof) or any variable or fixed rate note issued by, or guaranteed by, a corporation rated A-2 (or the equivalent thereof) or better by S&P or P-2 (or the equivalent thereof) or better by Moody’s, in each case with average maturities of not more than 12 months from the date of acquisition thereof;

(e) repurchase agreements entered into by any Person with an Approved Bank, a bank or trust company (including any of the Lenders) or recognized securities dealer, in each case, having capital and surplus in excess of \$250,000,000 for direct obligations issued by or fully guaranteed or insured by the government or any agency or instrumentality of (i) the United States or (ii) any member nation of the European Union (other than Greece), in which such Person shall have a perfected first priority security interest (subject to no other Liens) and having, on the date of purchase thereof, a fair market value of at least 100% of the amount of the repurchase obligations;

(f) marketable short-term money market and similar highly liquid funds either (i) having assets in excess of \$250,000,000 or (ii) having a rating of at least A-2 or P-2 from either S&P or Moody’s (or, if at any time neither S&P nor Moody’s shall be rating such obligations, an equivalent rating from another nationally recognized rating service);

(g) securities with average maturities of 12 months or less from the date of acquisition issued or fully guaranteed by any state, commonwealth or territory of the United States or by any political subdivision or taxing authority of any such state, commonwealth or territory, in each case having an investment grade rating from either S&P or Moody’s (or the equivalent thereof);

(h) investments with average maturities of 12 months or less from the date of acquisition in mutual funds rated AAA- (or the equivalent thereof) or better by S&P or Aaa3 (or the equivalent thereof) or better by Moody’s;



(i) instruments equivalent to those referred to in clauses (a) through (h) above denominated in euros or any other foreign currency comparable in credit quality and tenor to those referred to above and customarily used by corporations for cash management purposes in any jurisdiction outside the United States to the extent reasonably required in connection with any business conducted by any Restricted Subsidiary organized in such jurisdiction; and

(j) investments, classified in accordance with GAAP as current assets of Holdings or any Restricted Subsidiary, in money market investment programs that are registered under the Investment Company Act of 1940 or that are administered by financial institutions having capital of at least \$250,000,000, and, in either case, the portfolios of which are limited such that substantially all of such investments are of the character, quality and maturity described in clauses (a) through (i) of this definition.

**“Permitted Junior Lien Refinancing Debt”** means secured Indebtedness incurred by the Borrower in the form of one or more series of junior lien secured notes or junior lien secured loans; *provided* that (i) such Indebtedness is secured by the Collateral and the obligations in respect of any Permitted First Priority Refinancing Debt and is not secured by any property or assets of Holdings, any Intermediate Parent, the Borrower or any Restricted Subsidiary other than the Collateral, (ii) such Indebtedness constitutes Credit Agreement Refinancing Indebtedness, (iii) such Indebtedness does not mature or have scheduled amortization or payments of principal and is not subject to mandatory redemption, repurchase, prepayment or sinking fund obligation (except customary asset sale or change of control provisions), in each case prior to the date that is 91 days after the Latest Maturity Date at the time such Indebtedness is incurred, (iv) the security agreements relating to such Indebtedness reflect the “silent” junior lien nature of the security interests securing such Indebtedness consistent with the terms of the Junior Lien Intercreditor Agreement and are otherwise substantially the same as the Security Documents (with such differences as are reasonably satisfactory to the Administrative Agent), (v) such Indebtedness is not at any time guaranteed by any Subsidiaries other than the Subsidiary Loan Parties and (vi) a Senior Representative acting on behalf of the holders of such Indebtedness shall have become party to the Junior Lien Intercreditor Agreement; *provided* that if such Indebtedness is the initial Permitted Junior Lien Refinancing Debt incurred by the Borrower, then the Loan Parties, the Administrative Agent and the Senior Representatives for such Indebtedness shall have executed and delivered the Junior Lien Intercreditor Agreement. Permitted Junior Lien Refinancing Debt will include any Registered Equivalent Notes issued in exchange therefor.

**“Permitted Refinancing”** means, with respect to any Person, any modification, refinancing, refunding, renewal or extension of any Indebtedness of such Person; *provided* that (a) the principal amount (or accreted value, if applicable) thereof does not exceed the principal amount (or accreted value, if applicable) of the Indebtedness so modified, refinanced, refunded, renewed or extended except by an amount equal to unpaid accrued interest and premium thereon plus other amounts paid, and fees and expenses incurred, in connection with such modification, refinancing, refunding, renewal or extension and by an amount equal to any existing commitments unutilized thereunder, (b) other than with respect to a Permitted Refinancing in respect of Indebtedness permitted pursuant to Section 6.01(a)(v), Indebtedness resulting from such modification, refinancing, refunding, renewal or extension has a final maturity date equal to or later

than the final maturity date of, and has a Weighted Average Life to Maturity equal to or greater than the Weighted Average Life to Maturity of, the Indebtedness being modified, refinanced, refunded, renewed or extended, (c) immediately after giving effect thereto, no Event of Default shall have occurred and be continuing, (d) if the Indebtedness being modified, refinanced, refunded, renewed or extended is subordinated in right of payment or lien priority to the Loan Document Obligations, Indebtedness resulting from such modification, refinancing, refunding, renewal or extension is subordinated in right of payment or lien priority, as applicable, to the Loan Document Obligations on terms at least as favorable to the Lenders as those contained in the documentation governing the Indebtedness being modified, refinanced, refunded, renewed or extended and (e) if the Indebtedness being modified, refinanced, refunded, renewed or extended is the Second Lien Notes or Indebtedness permitted pursuant to Section 6.01(a)(ii), (a)(xx) or (a)(xxi) or is otherwise a Junior Financing, (i) the terms and conditions (including, if applicable, as to collateral but excluding as to subordination, interest rate (including whether such interest is payable in cash or in kind) and redemption premium) of Indebtedness resulting from such modification, refinancing, refunding, renewal or extension are not, taken as a whole, materially less favorable to the Loan Parties or the Lenders than the terms and conditions of the Indebtedness being modified, refinanced, refunded, renewed or extended; *provided* that a certificate of a Responsible Officer shall be delivered to the Administrative Agent at least five Business Days prior to such modification, refinancing, refunding, renewal or extension, together with a reasonably detailed description of the material terms and conditions of such resulting Indebtedness or drafts of the documentation relating thereto, stating that the Borrower has determined in good faith that such terms and conditions satisfy the foregoing requirements and (ii) the primary obligor in respect of, and the Persons (if any) that Guarantee, Indebtedness resulting from such modification, refinancing, refunding, renewal or extension are the primary obligor in respect of, and Persons (if any) that Guaranteed, respectively, the Indebtedness being modified, refinanced, refunded, renewed or extended. For the avoidance of doubt, it is understood that a Permitted Refinancing may constitute a portion of an issuance of Indebtedness in excess of the amount of such Permitted Refinancing; *provided* that such excess amount is otherwise permitted to be incurred under Section 6.01.

**“Permitted Tax Distributions”** means, collectively distributions to the members of Holdings in cash in an amount up to (i) in the case of payments in respect of a Tax Estimation Period, the excess of (A)(I) the Company Income Amount for the Tax Estimation Period in question and for all preceding Tax Estimation Periods, if any, within the Taxable Year containing such Tax Estimation Period multiplied by (II) the Assumed Tax Rate over (B) the aggregate amount of any distributions made with respect to any previous Tax Estimation Period falling in the Taxable Year containing the applicable Tax Estimation Period referred to in (A)(I), and (ii) after the end of a Taxable Year, the excess, if any, of (A)(I) the Taxable Year Income Amount for the Taxable Year in question multiplied by (II) the Assumed Tax Rate over (B) the aggregate amount of any Permitted Tax Distributions under clause (i) made with respect to the Tax Estimation Periods in such Taxable Year; *provided* that if the amount payable in connection with a Tax Estimation Period under clause (i) is less than the aggregate required annualized installment for all members of Holdings for the estimated payment date for such Tax Estimation Period under Section 6655(e) of the Code (calculated assuming (x) all such members are corporations (other than with respect to the Assumed Tax Rate) and Section 6655(e)(2)(C)(ii) is in effect, (y) such members’ only income is from Holdings

(determined without regard to any adjustments under Code Sections 743(b) or 704(c)) and (z) the Assumed Tax Rate applies), Holdings shall be permitted to pay an additional amount with respect to such estimated payment date equal to the excess of such aggregate required annualized installment over the amount permitted under clause (i).

**“Permitted Unsecured Refinancing Debt”** means unsecured Indebtedness incurred by any Loan Party in the form of one or more series of senior unsecured notes or loans; *provided* that (i) such Indebtedness constitutes Credit Agreement Refinancing Indebtedness, (ii) such Indebtedness does not mature or have scheduled amortization or payments of principal and is not subject to mandatory redemption, repurchase, prepayment or sinking fund obligation (except customary asset sale or change of control provisions), in each case prior to the date that is 91 days after the Latest Maturity Date at the time such Indebtedness is incurred, (iii) such Indebtedness is not at any time guaranteed by any Subsidiaries other than Loan Parties and (iv) such Indebtedness (including any Guarantee thereof) is not secured by any Lien on any property or assets of Holdings or any Restricted Subsidiary. Permitted Unsecured Refinancing Debt will include any Registered Equivalent Notes issued in exchange therefor.

**“Person”** means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

**“Plan”** means any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA, and in respect of which the Borrower or any ERISA Affiliate is (or, if such plan were terminated, would under Section 4069 of ERISA be deemed to be) an “employer” as defined in Section 3(5) of ERISA.

**“Platform”** has the meaning assigned to such term in Section 5.01.

**“Post-Transaction Period”** has the meaning assigned to such term in the definition of “Pro Forma Adjustment.”

**“Prepayment Event”** means:

(a) any sale, transfer or other disposition (including (x) pursuant to a sale and leaseback transaction, (y) by way of merger or consolidation and (z) any casualty or other insured damage to, or any taking under power of eminent domain or by condemnation or similar proceeding) of any property or asset of Holdings or any of its Restricted Subsidiaries permitted by Section 6.05(f), (j), (k), (m) or (n) other than dispositions resulting in aggregate Net Proceeds not exceeding (A) \$5,000,000 in the case of any single transaction or series of related transactions and (B) \$10,000,000 for all such transactions during any fiscal year of Holdings; or

(b) the incurrence by the Borrower or any of its Restricted Subsidiaries of any Indebtedness, other than Indebtedness permitted under Section 6.01 (other than Permitted Unsecured Refinancing Debt, Permitted First Priority Refinancing Debt, Permitted Junior Lien Refinancing Debt and Other Term Loans which shall constitute a Prepayment Event to the extent required by the definition of “Credit Agreement

Refinancing Indebtedness”) or permitted by the Required Lenders pursuant to Section 9.02.

“**Prime Rate**” means the rate of interest per annum determined by the Administrative Agent as its prime rate in effect at its principal office in New York City and notified to the Borrower, as in effect from time to time. The Prime Rate is a reference rate and does not necessarily represent the lowest or best rate actually charged to any customer. The Administrative Agent or any Lender may make commercial loans or other loans at rates of interest at, above or below the Prime Rate.

“**Pro Forma Adjustment**” means, for any Test Period, the amount of “run rate” net cost savings, synergies and operating expense reductions projected by Holdings in good faith to result from the Transactions or other acquisitions or dispositions, in each case no later than 18 months after the Escrow Assumption Date or the date of such other acquisition or disposition (the “**Post-Transaction Period**”) (calculated on a Pro Forma Basis as though such cost savings, operating expense reductions and synergies had been realized on the first day of the period for which Consolidated EBITDA is being determined and if such cost savings, operating expense reductions and synergies were realized during the entirety of such period), net of the amount of actual benefits realized during such period from such actions (and reflected in Consolidated Net Income for such period); *provided* that such cost savings, operating expense reductions and synergies (a) are reasonably identifiable and factually supportable and described in reasonable detail by a Financial Officer in an officer’s certificate delivered to the Administrative Agent (it being understood and agreed that “run rate” means the full recurring benefit for a period that is associated with any action taken, committed to be taken or with respect to which substantial steps have been taken or are expected to be taken), (b) in the case of the Transactions, shall not exceed for any four quarter period (which aggregated with any such “run rate” cost savings pursuant to clause (c) below) \$185 million (provided that for any four quarter period ending after (w) the six month anniversary of the Escrow Assumption Date, no more than 75% of such maximum amount may be attributable to cost savings expected to be realized based on actions that have not yet been taken, (x) the nine month anniversary of the Escrow Assumption Date, no more than 50% of such maximum amount may be attributable to cost savings expected to be realized based on actions that have not yet been taken, (y) the one year anniversary of the Escrow Assumption Date, no more than 25% of such maximum amount may be attributable to cost savings expected to be realized based on actions that have not yet been taken and (z) the fifteen month anniversary of the Escrow Assumption Date, none of such amount may be attributable to cost savings expected to be realized based on actions that have not yet been taken) and (c) in the case of acquisitions and dispositions other than in connection with the Transactions, shall not exceed an amount for any four quarter period greater than 15% of Consolidated EBITDA for such four quarter period (calculated prior to giving effect to such add-backs).

“**Pro Forma Basis**,” “**Pro Forma Compliance**” and “**Pro Forma Effect**” means, with respect to compliance with any test or covenant hereunder required by the terms of this Agreement to be made on a Pro Forma Basis, that (a) to the extent applicable, the Pro Forma Adjustment shall have been made and (b) all Specified Transactions and the following transactions in connection therewith shall be deemed to have occurred as of the first day of the applicable period of measurement in such test or

covenant: (i) income statement items (whether positive or negative) attributable to the property or Person subject to such Specified Transaction, (A) in the case of a Disposition of all or substantially all Equity Interests in any subsidiary of Holdings or any division, product line, or facility used for operations of Holdings or any of its Restricted Subsidiaries, shall be excluded and (B) in the case of a Permitted Acquisition or Investment described in the definition of “Specified Transaction,” shall be included, (ii) any retirement of Indebtedness, and (iii) any Indebtedness incurred or assumed by Holdings, the Borrower or any of its Subsidiaries in connection therewith and if such Indebtedness has a floating or formula rate, shall have an implied rate of interest for the applicable period for purposes of this definition determined by utilizing the rate that is or would be in effect with respect to such Indebtedness as at the relevant date of determination; *provided that*, without limiting the application of the Pro Forma Adjustment pursuant to clause (a) above, the foregoing pro forma adjustments may be applied to any such test or covenant solely to the extent that such adjustments are consistent with the definition of Consolidated EBITDA and give effect to operating expense reductions that are (i) (x) directly attributable to such transaction, (y) expected to have a continuing impact on Holdings or any of its Restricted Subsidiaries and (z) factually supportable or (ii) otherwise consistent with the definition of Pro Forma Adjustment, *provided further* that all pro forma adjustments made pursuant to this definition (including the Pro Forma Adjustment) with respect to the Transactions shall be consistent in character and amount with the adjustments reflected in the Pro Forma Financial Statements.

“**Pro Forma Disposal Adjustment**” means, for any Test Period that includes all or a portion of a fiscal quarter included in any Post-Transaction Period with respect to any Sold Entity or Business or Converted Unrestricted Subsidiary, the pro forma increase or decrease in Consolidated EBITDA projected by Holdings in good faith as a result of contractual arrangements between Holdings or any Restricted Subsidiary entered into with such Sold Entity or Business or Converted Unrestricted Subsidiary at the time of its disposal or conversion within the Post-Transaction Period and which represent an increase or decrease in Consolidated EBITDA which is incremental to the Disposed EBITDA of such Sold Entity or Business or Converted Unrestricted Subsidiary for the most recent four quarter period prior to its disposal or conversion.

“**Pro Forma Entity**” has the meaning given to such term in the definition of “Acquired EBITDA.”

“**Pro Forma Financial Statements**” shall have the meaning set forth in Section [4.03\(m\)](#).

“**Proposed Change**” has the meaning assigned to such term in Section 9.02(c).

[“PTE” means a prohibited transaction class exemption issued by the U.S. Department of Labor, as any such exemption may be amended from time to time.](#)

“**Public Lender**” has the meaning assigned to such term in Section 5.01.

“**Qualified Equity Interests**” means Equity Interests of a Person other than Disqualified Equity Interests of such Person.

**“Qualifying Lender”** has the meaning assigned to such term in Section 2.09(a)(ii)(D)

**“Reaffirmation Agreement”** means an agreement substantially in the form of Exhibit B.

**“Refinanced Debt”** has the meaning assigned to such term in the definition of “Credit Agreement Refinancing Indebtedness.”

**“Refinancing Amendment”** means an amendment to this Agreement in form and substance reasonably satisfactory to the Administrative Agent and the Borrower executed by each of (a) the Borrower and Holdings, (b) the Administrative Agent and (c) each Additional Lender and Lender that agrees to provide any portion of the Credit Agreement Refinancing Indebtedness being incurred pursuant thereto, in accordance with Section 2.19.

**“Register”** has the meaning assigned to such term in Section 9.04(b).

**“Registered Equivalent Notes”** means, with respect to any notes originally issued in a Rule 144A or other private placement transaction under the Securities Act of 1933, substantially identical notes (having the same Guarantees) issued in a dollar-for-dollar exchange therefor pursuant to an exchange offer registered with the SEC.

**“Regulated Subsidiary”** means any Broker-Dealer Subsidiary, any subsidiary of a Broker-Dealer Subsidiary or other Subsidiary subject to regulation of capital adequacy.

**“Regulatory Supervising Organization”** means any of (a) the SEC, (b) the Financial Industry Regulatory Authority, (c) the Chicago Stock Exchange, (d) the Commodity Futures Trading Commission, (e) state securities commissions, (f) the Irish Financial Regulator and (g) any other U.S. or foreign governmental or self-regulatory organization, exchange, clearing house or financial regulatory authority of which any Subsidiary is a member or to whose rules it is subject.

**“Reimbursement Obligation”** means the obligation of the Borrower to reimburse the Issuing Bank pursuant to Section 2.22(d) for amounts drawn under Letters of Credit.

**“Related Parties”** means, with respect to any specified Person, such Person’s Affiliates and the partners, directors, officers, employees, trustees, agents, controlling persons, advisors and other representatives of such Person and of each of such Person’s Affiliates and permitted successors and assigns.

**“Release”** means any release, spill, emission, leaking, dumping, injection, pouring, deposit, disposal, discharge, dispersal, leaching or migration into or through the environment (including ambient air, surface water, groundwater, land surface or subsurface strata) and including the environment within any building, or any occupied structure, facility or fixture.

“**Released Subsidiary**” has the meaning assigned to such term in Section 6.14(b).

“**Repo Agreement**” means any of the following: repurchase agreements, reverse repurchase agreements, sell buy backs and buy sell backs agreements, securities lending and borrowing agreements and any other agreement or transaction similar to those referred to above in this definition.

“**Repricing Transaction**” means the prepayment or refinancing of all or a portion of the **New Term B-1** Loans with the incurrence by any Loan Party of any long term bank debt financing incurred for the primary purpose of repaying, refinancing, substituting or replacing the **New Term B-1** Loans and having an effective interest cost or weighted average yield (as determined by the Administrative Agent consistent with generally accepted financial practice and, in any event, excluding any arrangement or commitment fees in connection therewith) that is less than the interest rate for or weighted average yield (as determined by the Administrative Agent on the same basis) of the **New Term B-1** Loans, including without limitation, as may be effected through any amendment to this Agreement relating to the interest rate for, or weighted average yield of, the **New Term B-1** Loans.

“**Required Lenders**” means, at any time, Lenders having Revolving Exposures, Term Loans and unused Commitments representing more than 50% of the aggregate Revolving Exposures, outstanding Term Loans and unused Commitments at such time; *provided* that to the extent set forth in Section 9.02, (a) the Revolving Exposures, Term Loans and unused Commitments of the Borrower or any Affiliate thereof and (b) whenever there are one or more Defaulting Lenders, the total outstanding Revolving Exposures of, and the unused Revolving Commitments of, each Defaulting Lender shall in each case be excluded for purposes of making a determination of Required Lenders.

“**Requirements of Law**” means, with respect to any Person, any statutes, laws (common, statutory or otherwise), treaties, rules, regulations (including any official interpretations thereof), orders, decrees, writs, injunctions or determinations of any arbitrator or court or other Governmental Authority or Regulatory Supervising Organization, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

“**Responsible Officer**” means the chief executive officer, chief operating officer, president, vice president, chief financial officer, treasurer or assistant treasurer, or other similar officer, manager or a director of a Loan Party and with respect to certain limited liability companies or partnerships that do not have officers, any manager, sole member, managing member or general partner thereof, and as to any document delivered on the Restatement Effective Date or thereafter pursuant to paragraph (a)(i) of the definition of the term “Collateral and Guarantee Requirement,” any secretary or assistant secretary of a Loan Party. Any document delivered hereunder that is signed by a Responsible Officer of a Loan Party shall be conclusively presumed to have been authorized by all necessary corporate, partnership and/or other action on the part of such Loan Party and such Responsible Officer shall be conclusively presumed to have acted on behalf of such Loan Party.

**“Restatement Agreement”** means the Restatement Agreement to the Existing Credit Agreement dated as of June 30, 2017 by and among each of the Loan Parties party thereto, the Administrative Agent and the Lenders party thereto.

**“Restatement Effective Date”** has the meaning given to such term in the Restatement Agreement.

**“Restatement Effective Date Certificate”** means a Restatement Effective Date Certificate substantially in the form of Exhibit G.

**“Restatement Effective Date Refinancing”** means the repayment of the Non-Converting Term Loans.

**“Restricted Payment”** means any dividend or other distribution (whether in cash, securities or other property) with respect to any Equity Interests in Holdings, the Borrower or any Restricted Subsidiary or any Intermediate Parent, or any payment (whether in cash, securities or other property), including any sinking fund or similar deposit, on account of the purchase, redemption, retirement, acquisition, cancellation or termination of any Equity Interests in Holdings, any Intermediate Parent, the Borrower or any Restricted Subsidiary or any option, warrant or other right to acquire any such Equity Interests in Holdings, any Intermediate Parent, the Borrower or any Restricted Subsidiary.

**“Restricted Subsidiary”** means any Subsidiary other than an Unrestricted Subsidiary.

**“Revolving Availability Date”** means April 21, 2015.

**“Revolving Availability Period”** means the period from and including the Revolving Availability Date to but excluding the earlier of (a) the Revolving Maturity Date and (b) the date of the termination of the Revolving Commitments.

**“Revolving Commitment”** means, with respect to each Lender, the commitment, if any, of such Lender to make Revolving Loans and to acquire participations in Letters of Credit hereunder, expressed as an amount representing the maximum possible aggregate amount of such Lender’s Revolving Exposure hereunder, as such commitment may be (a) reduced from time to time pursuant to Section 2.06 and (b) reduced or increased from time to time pursuant to (i) assignments by or to such Lender pursuant to an Assignment and Assumption or (ii) a Refinancing Amendment. The initial amount of each Lender’s Revolving Commitment is set forth on Schedule 2.01, in the Assignment and Assumption or in the Refinancing Amendment pursuant to which such Lender shall have assumed its Revolving Commitment, as the case may be. The initial aggregate amount of the Lenders’ Revolving Commitments is was \$100,000,000-; it being understood that such Revolving Commitments terminated in full on the Escrow Assumption Date.

**“Revolving Commitment Increase”** has the meaning assigned to such term in Section 2.18(c).



“**Revolving Commitment Letter**” means, with respect to the Revolving Lenders party to Amendment No. 1 to the Existing Credit Agreement, the Commitment Letter dated on or about February 19, 2015 among Holdings and the Revolving Lenders.

“**Revolving Commitment Termination Date**” means the Revolving Maturity Date.

“**Revolving Exposure**” means, with respect to any Revolving Lender at any time, the sum of the outstanding principal amount of such Revolving Lender’s Revolving Loans and its LC Exposure at such time.

“**Revolving Lender**” means a Lender with a Revolving Commitment or, if the Revolving Commitments have terminated or expired, a Lender with Revolving Exposure.

“**Revolving Loan**” means a Loan made pursuant to clause (b)(c) of Section 2.01.

“**Revolving Maturity Date**” means the earlier of (x) April 15, 2018 (or, with respect to any Revolving Lender that has extended its Revolving Commitment pursuant to Section 2.19(b), the extended maturity date set forth in the Extension Notice delivered by the Borrower and such Revolving Lender to the Administrative Agent pursuant to Section 2.19(b)) and (y) the Escrow Assumption Date.

“**S&P**” means Standard & Poor’s Ratings Services, a division of The McGraw-Hill Companies, Inc., and any successor to its rating agency business.

“**Sanctions**” means economic sanctions administered or enforced by the United States Government (including without limitation, sanctions enforced by OFAC), the United Nations Security Council, the European Union or Her Majesty’s Treasury.

“**SDN List**” has the meaning assigned to such term in Section 3.19(d).

“**SEC**” means the Securities and Exchange Commission or any Governmental Authority succeeding to any of its principal functions.

“**Second Lien Notes**” means up to \$500,000,000 in aggregate principal amount of Senior Secured Second Lien Notes due 2022 to be initially issued by the Escrow Borrower and the Notes Co-Issuer on or prior to the Escrow Assumption Date and the Escrow Borrower’s obligations with respect to which shall be assumed by the Borrower on the Escrow Assumption Date.

“**Secured Obligations**” has the meaning assigned to such term in the Collateral Agreement.

“**Secured Parties**” has the meaning assigned to such term in the Collateral Agreement.

“**Security Documents**” means the Collateral Agreement, the Mortgages and each other security agreement or pledge agreement executed and delivered pursuant to

the Collateral and Guarantee Requirement, Section 5.11 or 5.12 to secure any of the Secured Obligations.

**“Senior Representative”** means, with respect to the Second Lien Notes or any series of Permitted First Priority Refinancing Debt, Permitted Junior Lien Refinancing Debt, secured Indebtedness incurred pursuant to Section 6.01(a) (viii) or secured Additional Notes issued pursuant to Section 6.01(a)(xxii), the trustee, administrative agent, collateral agent, security agent or similar agent under the indenture or agreement pursuant to which such Indebtedness is issued, incurred or otherwise obtained, as the case may be, and each of their successors in such capacities.

**“Sold Entity or Business”** has the meaning assigned to such term in the definition of the term “Consolidated EBITDA.”

**“Solicited Discount Proration”** has the meaning assigned to such term in Section 2.09(a)(ii)(D).

**“Solicited Discounted Prepayment Amount”** has the meaning assigned to such term in Section 2.09(a)(ii)(D).

**“Solicited Discounted Prepayment Notice”** means an irrevocable written notice of a Borrower Solicitation of Discounted Prepayment Offers made pursuant to Section 2.09(a)(ii)(D) substantially in the form of Exhibit M.

**“Solicited Discounted Prepayment Offer”** means the irrevocable written offer by each Term Lender, substantially in the form of Exhibit N, submitted following the Administrative Agent’s receipt of a Solicited Discounted Prepayment Notice.

**“Solicited Discounted Prepayment Response Date”** has the meaning assigned to such term in Section 2.09(a)(ii) (D).

**“Specified Discount”** has the meaning assigned to such term in Section 2.09(a)(ii)(B).

**“Specified Discount Prepayment Amount”** has the meaning assigned to such term in Section 2.09(a)(ii)(B).

**“Specified Discount Prepayment Notice”** means an irrevocable written notice of a Borrower Offer of Specified Discount Prepayment made pursuant to Section 2.09(a)(ii)(B) substantially in the form of Exhibit I.

**“Specified Discount Prepayment Response”** means the irrevocable written response by each Term Lender, substantially in the form of Exhibit J, to a Specified Discount Prepayment Notice.

**“Specified Discount Prepayment Response Date”** has the meaning assigned to such term in Section 2.09(a)(ii) (B).

**“Specified Discount Proration”** has the meaning assigned to such term in Section 2.09(a)(ii)(B).

**“Specified Transaction”** means, with respect to any period, the Merger and Contribution, any Investment, sale, transfer or other disposition of assets, incurrence or repayment of Indebtedness, Restricted Payment, subsidiary designation or other event that by the terms of the Loan Documents requires “Pro Forma Compliance” with a test or covenant hereunder or requires such test or covenant to be calculated on a “Pro Forma Basis”.

**“Statutory Reserve Rate”** means a fraction (expressed as a decimal), the numerator of which is the number one and the denominator of which is the number one minus the aggregate of the maximum reserve percentages (including any marginal, special, emergency or supplemental reserves) expressed as a decimal established by the Board and any other banking authority, domestic or foreign, to which the Administrative Agent or any Lender (including any branch, Affiliate or other fronting office making or holding a Loan) is subject for Eurocurrency Liabilities (as defined in Regulation D of the Board). Eurodollar Loans shall be deemed to constitute Eurocurrency Liabilities (as defined in Regulation D of the Board) and to be subject to such reserve requirements without benefit of or credit for proration, exemptions or offsets that may be available from time to time to any Lender under such Regulation D. Statutory Reserve Rates shall be adjusted automatically on and as of the effective date of any change in any reserve percentage.

**“Submitted Amount”** has the meaning assigned to such term in Section 2.09(a)(ii)(C).

**“Submitted Discount”** has the meaning assigned to such term in Section 2.09(a)(ii)(C).

**“Subordinated Indebtedness”** means any Indebtedness that is subordinated in right of payment to the Loan Document Obligations.

**“subsidiary”** means, with respect to any Person (the **“parent”**) at any date, any corporation, limited liability company, partnership, association or other entity the accounts of which would be consolidated with those of the parent in the parent’s consolidated financial statements if such financial statements were prepared in accordance with GAAP, as well as any other corporation, limited liability company, partnership, association or other entity (a) of which securities or other ownership interests representing more than 50% of the equity or more than 50% of the ordinary voting power or, in the case of a partnership, more than 50% of the general partnership interests are, as of such date, owned, controlled or held, or (b) that is, as of such date, otherwise Controlled, by the parent or one or more subsidiaries of the parent or by the parent and one or more subsidiaries of the parent.

**“Subsidiary”** means, unless otherwise specified, any subsidiary of Holdings.

**“Subsidiary Loan Party”** means each Subsidiary of Holdings that is a party to the Guarantee Agreement (other than any Intermediate Parent, the Borrower or VFGM).

“**Successor Borrower**” has the meaning assigned to such term in Section 6.03(a)(iv).

“**Successor Holdings**” has the meaning assigned to such term in Section 6.03(a)(v).

“**Swap Agreement**” means any agreement with respect to any swap, forward, future or derivative transaction or option or similar agreement or contract involving, or settled by reference to, one or more rates, currencies, commodities, equity or debt instruments or securities, or economic, financial or pricing indices or measures of economic, financial or pricing risk or value or any similar transaction or any combination of these transactions; *provided* that no phantom stock or similar plan providing for payments only on account of services provided by current or former directors, officers, employees or consultants of Holdings, any Intermediate Parent, the Borrower or the other Subsidiaries shall be a Swap Agreement.

“**Tax Estimation Period**” means each period (determined without regard to any prior periods) for which an estimate of corporate federal income tax liability is required to be made under the Code.

“**Taxable Year**” means Holdings' taxable year ending on the last day of each calendar year (or part thereof, in the case of Holdings' last taxable year), or such other year as is (i) required by Section 706 of the Code or (ii) determined by the Board of Managers of Holdings.

“**Taxable Year Income Amount**” means, for a Taxable Year, an amount equal to the net taxable income of Holdings for such Taxable Year. For purposes of calculating the Taxable Year Income Amount, items of income, gain, loss and deduction resulting from adjustments to the tax basis of Holdings' assets pursuant to Code Section 743(b) and adjustments pursuant to Code Section 704(c) shall not be taken into account.

“**Taxes**” means any and all present or future taxes, levies, imposts, duties, deductions, charges or withholdings imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

“**Term B-1 Commitment**” means the obligation of the Term B-1 Lender to make a Term B-1 Loan on the Amendment No. 1 Effective Date in an aggregate principal amount equal to the excess of \$650,000,000 over the aggregate principal amount of Converted New Term Loans.

“**Term B-1 Lender**” means the Lender identified as such in Amendment No. 1.

“**Term B-1 Loan**” has the meaning assigned to such term in Section 2.01(b).

“**Term Commitment**” means, ~~with respect to each Lender, the commitment, if any, of such Lender to make an Initial Term Loan hereunder on the Restatement Effective Date, expressed as an amount representing the maximum principal amount of the Initial Term Loan to be made by such Lender hereunder, as such commitment may be (a) reduced from time to time pursuant to Section 2.06 and (b) reduced or increased from~~

~~time to time pursuant to assignments by or to such Lender pursuant to an Assignment and Assumption. The amount of each Lender's Term Commitment as of the Restatement Effective Date is set forth on Schedule 2.01(b) or in the Assignment and Assumption pursuant to which such Lender shall have assumed its Term Commitment, as the case may be. the Term B-1 Commitment and the obligation of any other Term Lender with respect to any other series of Term Loans to make a Term Loan of such series.~~

**"Term Lender"** means a, at any time, the Term B-1 Lender, each Amendment No. 1 Consenting Lender, and any other Lender with a Term Commitment or ~~an outstanding~~ Term Loan at such time.

**"Term Loans"** means the Initial Term B-1 Loans, ~~the Escrow Term Loans (provided that no Escrow Term Loans shall be Term Loans hereunder until the Escrow Assumption shall have occurred),~~ Other Term Loans and loans made pursuant to an Incremental Term Facility, as the context requires.

**"Term Maturity Date"** means December 30, 2021 (or, with respect to any Term Lender that has extended the maturity date of its Term Loans pursuant to Section 2.19(b), the extended maturity date set forth in the Extension Notice delivered by the Borrower and such Term Lender to the Administrative Agent pursuant to Section 2.19(b)).

**"Test Period"** means, as of any date of determination, the period of four consecutive fiscal quarters of the Borrower then most recently ended.

**"Total Net Leverage Ratio"** means, on any date, the ratio of (a) Consolidated Total Net Debt as of such date to (b) Consolidated EBITDA for the Test Period most recently ended.

**"Total Leverage Ratio"** means, on any date, the ratio of (a) Consolidated Total Debt as of such date to (b) Consolidated EBITDA for the Test Period most recently ended.

**"Total Revolving Commitments"** means, at any time, the aggregate amount of the Revolving Commitments then in effect.

**"Trading Debt"** means any margin facility or other margin-related Indebtedness or any other Indebtedness incurred exclusively to finance the securities, derivatives, commodities or futures trading positions and related assets and liabilities of Holdings and its Restricted Subsidiaries, including, without limitation, any collateralized loan, any obligations under any securities lending and/or borrowing facility and any day loans and overnight loans with settlement banks and prime brokers to finance securities, derivatives, commodities or futures trading positions and margin loans.

**"Transaction Costs"** means all fees, costs and expenses incurred or payable by Holdings, the Borrower or any other Subsidiary in connection with the Transactions.

**"Transactions"** means, collectively, (i) the Financing Transactions, (iii) the Restatement Effective Date Refinancing, (iv) the consummation of the Merger and

Contribution pursuant to the terms of the Merger Agreement, (v) the KCG Refinancing, (vi) the assumption by the Borrower of the Escrow Borrower's obligations in respect of the Second Lien Notes, and (vii) the payment of the Transaction Costs in connection with the foregoing.

“**Type**,” when used in reference to any Loan or Borrowing, refers to whether the rate of interest on such Loan, or on the Loans comprising such Borrowing, is determined by reference to the Adjusted LIBO Rate or the Alternate Base Rate.

“**Unrestricted Subsidiary**” means any Subsidiary (other than an Intermediate Parent or the Borrower) designated by the Borrower as an Unrestricted Subsidiary pursuant to Section 5.13 subsequent to the Restatement Effective Date.

“**USA Patriot Act**” means the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, as amended from time to time.

“**VFGM**” means Virtu Financial Global Markets LLC, a Delaware limited liability company.

“**Voting Stock**” of any specified Person as of any date means the Equity Interests of such Person that is at the time entitled to vote in an election of the Board of Directors of Holdings or such Person.

“**VV Holders**” means (i) Vincent Viola, (ii) TJMT Holdings LLC (f/k/a Virtu Holdings LLC), (iii) any immediate family member of Vincent Viola, a trust, family-partnership or estate-planning vehicle solely for the benefit of Vincent Viola and/or any of his immediate family members (including siblings of Vincent Viola and Teresa Viola), (iv) Virtu Employee Holdco LLC and (v) any other Affiliate of any of the foregoing.

“**Weighted Average Life to Maturity**” means, when applied to any Indebtedness at any date, the number of years obtained by dividing: (a) the sum of the products obtained by multiplying (i) the amount of each then remaining installment, sinking fund, serial maturity or other required payments of principal, including payment at final maturity, in respect thereof, by (ii) the number of years (calculated to the nearest one-twelfth) that will elapse between such date and the making of such payment; by (b) the then outstanding principal amount of such Indebtedness.

“**Wholly Owned Restricted Subsidiary**” means any Restricted Subsidiary that is a Wholly Owned Subsidiary of Holdings.

“**Wholly Owned Subsidiary**” means, with respect to any Person at any date, a subsidiary of such Person of which securities or other ownership interests representing 100% of the Equity Interests (other than (a) directors' qualifying shares and (b) nominal shares issued to foreign nationals to the extent required by applicable Requirements of Law) are, as of such date, owned, controlled or held by such Person or one or more Wholly Owned Subsidiaries of such Person or by such Person and one or more Wholly Owned Subsidiaries of such Person.

“**Withdrawal Liability**” means liability to a Multiemployer Plan as a result of a complete or partial withdrawal from such Multiemployer Plan, as such terms are defined in Part I of Subtitle E of Title IV of ERISA.

“**Write-Down and Conversion Powers**” means, with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule.

Section 1.02. *Classification of Loans and Borrowings.* For purposes of this Agreement, Loans and Borrowings may be classified and referred to by Class (e.g., a “**Term Loan**” or “**Revolving Loan**”) or by Type (e.g., a “**Eurodollar Loan**”) or by Class and Type (e.g., a “**Eurodollar Term Loan**” or “**ABR Revolving Loan**”). Borrowings also may be classified and referred to by Class (e.g., a “**Term Borrowing**” or “**Revolving Borrowing**”) or by Type (e.g., a “**Eurodollar Borrowing**”) or by Class and Type (e.g., a “**Eurodollar Term Borrowing**” or “**ABR Revolving Borrowing**”).

Section 1.03. *Terms Generally.* The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words “include,” “includes” and “including” shall be deemed to be followed by the phrase “without limitation.” The word “will” shall be construed to have the same meaning and effect as the word “shall.” Unless the context requires otherwise, (a) any definition of or reference to any agreement (including this Agreement and the other Loan Documents), instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, amended and restated, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein), (b) any reference herein to any Person shall be construed to include such Person’s successors and assigns (subject to any restrictions on assignment set forth herein) and, in the case of any Governmental Authority or Regulatory Supervising Organization, any other Governmental Authority or Regulatory Supervising Organization that shall have succeeded to any or all functions thereof, (c) the words “herein,” “hereof” and “hereunder,” and words of similar import, shall be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (d) all references herein to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, this Agreement and (e) the words “asset” and “property” shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights.

Section 1.04. *Accounting Terms; GAAP.* Except as otherwise expressly provided herein, all terms of an accounting or financial nature shall be construed in accordance with GAAP, as in effect from time to time; *provided, however,* that if the Borrower notifies the Administrative Agent that the Borrower requests an amendment to any provision (including any definitions) hereof to eliminate the effect of any change occurring after the Restatement Effective Date in GAAP or in the application thereof on the operation of such provision (or if the Administrative Agent notifies the Borrower that the Required Lenders request an amendment to any provision hereof for such purpose),

regardless of whether any such notice is given before or after such change in GAAP or in the application thereof, then such provision shall be interpreted on the basis of GAAP as in effect and applied immediately before such change shall have become effective until such notice shall have been withdrawn or such provision amended in accordance herewith. Notwithstanding any other provision contained herein, all terms of an accounting or financial nature used herein shall be construed, and all computations of amounts and ratios referred to herein shall be made, without giving effect to any election under Financial Accounting Standards Accounting Standards Codification No. 825, "Financial Instruments", or any successor thereto (including pursuant to the Accounting Standards Codification), to value any Indebtedness of Holdings, the Borrower or any Subsidiary at "fair value", as defined therein.

Section 1.05. *Effectuation of Transactions.* All references herein to Holdings, the Borrower and the other Subsidiaries shall be deemed to be references to such Persons, and all the representations and warranties of Holdings, the Borrower and the other Loan Parties contained in this Agreement and the other Loan Documents shall be deemed made, in each case, after giving effect to the portion of the Transactions to occur on the Restatement Effective Date, unless the context otherwise requires.

Section 1.06. *Currency Translation.* Notwithstanding the foregoing, for purposes of any determination under Article 5, Article 6 (other than the Financial Performance Covenants) or Article 7 or any determination under any other provision of this Agreement expressly requiring the use of a current exchange rate, all amounts incurred, outstanding or proposed to be incurred or outstanding in currencies other than dollars shall be translated into dollars at currency exchange rates in effect on the date of such determination; *provided, however*, that for purposes of determining compliance with Article 6 with respect to the amount of any Indebtedness, Investment, Disposition or Restricted Payment in a currency other than dollars, no Default or Event of Default shall be deemed to have occurred solely as a result of changes in rates of exchange occurring after the time such Indebtedness or Investment is incurred or Disposition or Restricted Payment made; *provided that*, for the avoidance of doubt, the foregoing provisions of this Section 1.06 shall otherwise apply to such Sections, including with respect to determining whether any Indebtedness or Investment may be incurred or Disposition or Restricted Payment made at any time under such Sections. For purposes of the Financial Performance Covenants, amounts in currencies other than dollars shall be translated into dollars at the currency exchange rates used in preparing the most recently delivered financial statements pursuant to Section 5.01(a) or (b).

Section 1.07. *Effect of this Agreement on the Existing Credit Agreement and the Other Existing Loan Documents.* Upon satisfaction of the conditions precedent to the effectiveness of this Agreement set forth in the Restatement Agreement, this Agreement shall be binding on Borrower, the other Loan Parties, the Administrative Agent, the Lenders and the other parties party hereto, and the Existing Credit Agreement and the provisions thereof shall be replaced in their entirety by this Agreement and the provisions hereof; *provided that* for the avoidance of doubt (a) the Obligations (as defined in the Existing Credit Agreement) of Borrower and the other Loan Parties under the Existing Credit Agreement that remain unpaid and outstanding as of the date of this Agreement shall continue to exist under and be evidenced by this Agreement and the other Loan Documents and (b) the Loan Documents shall continue to secure, guarantee,



support and otherwise benefit the Obligations on the same terms as prior to the effectiveness hereof. Upon the effectiveness of this Agreement, each Loan Document (other than the Existing Credit Agreement) that was in effect immediately prior to the date of this Agreement shall continue to be effective in accordance with its terms unless otherwise expressly stated herein or therein. Each Loan Party hereby reaffirms and confirms that as of the date hereof (i) the covenants, guarantees, pledges, grants of Liens and agreements or other commitments contained in each Loan Document to which it is a party, including, in each case, such covenants, guarantees, pledges, grants of Liens and agreements or other commitments as in effect immediately after giving effect to this Agreement and the transactions contemplated hereby, (ii) its guarantee of the Loan Document Obligations pursuant to the Guarantee Agreement, as applicable, and (iii) its grant of Liens on the Collateral to secure the Secured Obligations pursuant to the Security Documents and the effectiveness of this Agreement does not impair the validity, effectiveness or priority of Liens granted pursuant to any Security Document, and such Liens continue unimpaired with the same priority to secure repayment of all Secured Obligations, whether heretofore or hereafter incurred.

## ARTICLE 2 THE CREDITS

Section 2.01. *Commitments.* Subject to the terms and conditions set forth herein and in Amendment No. 1:

(a) Each Amendment No. 1 ~~Converting Term Loan of each Converting Term Lender shall automatically be~~ Lender severally agrees that its Converted New Term Loans are hereby converted to a like principal amount of ~~Initial~~ Term B-1 Loans on the ~~Restatement~~ Amendment No. 1 Effective Date. All accrued and unpaid interest on the ~~Converting~~ New Term Loans to, but not including, the ~~Restatement~~ Amendment No. 1 Effective Date shall be payable on the ~~Restatement~~ Amendment No. 1 Effective Date, but no amounts under Section 2.14 ~~of the Existing Credit Agreement~~ shall be payable in connection with such conversion.

(b) ~~Each~~ The Term B-1 Lender ~~severally agrees to make Initial Term Loans~~ agrees to make a Loan (a “Term B-1 Loan”, which term shall include each Loan converted from a Converted New Term Loan pursuant to clause (a) above) to the Borrower on the ~~Restatement~~ Amendment No. 1 Effective Date in an aggregate principal amount equal to the ~~amount of such~~ Term Lender’s Term B-1 Commitment. The Borrower shall prepay the aggregate principal amount of the ~~Non-Converting~~ Converted New Term Loans substantially concurrently with the receipt of the proceeds of the ~~Initial~~ Term B-1 Loans. All accrued and unpaid interest on the ~~Non-Converting~~ Converted New Term Loans to, but not including, the ~~Restatement~~ Amendment No. 1 Effective Date shall be payable on the ~~Restatement~~ Amendment No. 1 Effective Date, and the Borrower will make any payments required under Section 2.14 ~~of the Existing Credit Agreement~~ with respect to ~~Non-Converting~~ Converted New Term Loans in accordance therewith. ~~On and as of the Restatement Effective Date, upon the repayment of the Non-Converting Term Loans of such Original Term Lender, accrued and unpaid interest thereon and any other amounts due and owing thereto pursuant to the Existing Credit Agreement, such Original Lender shall cease to be a Lender hereunder for all purposes.~~

(c) Each Revolving Lender agrees to make Revolving Loans to the Borrower from time to time during the Revolving Availability Period in an aggregate principal amount which will not result in such Lender's Revolving Exposure exceeding such Lender's Revolving Commitment.

~~(d) Subject to the terms and conditions set forth in Section 4.03 and Section 2.23, effective as of the Escrow Assumption Date, the Borrower hereby assumes all obligations of the Escrow Borrower with respect to the Escrow Term Loans outstanding under the Escrow Term Loan Credit Agreement on the Escrow Assumption Date and each such Escrow Term Loan shall thereafter be deemed to be outstanding under this Agreement as a New Term Loan. If the Escrow Assumption Date occurs, the New Term Loans assumed on the Escrow Assumption Date shall initially take the form of a pro rata increase in each then outstanding Borrowing of New Term Loans on the Escrow Assumption Date.~~

Within the foregoing limits and subject to the terms and conditions set forth herein, the Borrower may borrow, prepay and reborrow Revolving Loans. Amounts repaid or prepaid in respect of Term Loans may not be reborrowed.

Section 2.02. *Loans and Borrowings.* (a) Each Loan shall be made as part of a Borrowing consisting of Loans of the same Class and Type made by the Lenders ratably in accordance with their respective Commitments of the applicable Class. The failure of any Lender to make any Loan required to be made by it shall not relieve any other Lender of its obligations hereunder, *provided* that the Commitments of the Lenders are several and no Lender shall be responsible for any other Lender's failure to make Loans as required hereby.

(b) Subject to Section 2.12, each Borrowing shall be comprised entirely of ABR Loans or Eurodollar Loans as the Borrower may request in accordance herewith. Each Lender at its option may make any Loan by causing any domestic or foreign branch or Affiliate of such Lender to make such Loan; *provided* that any exercise of such option shall not affect the obligation of the Borrower to repay such Loan in accordance with the terms of this Agreement.

(c) At the commencement of each Interest Period for any Eurodollar Borrowing, such Borrowing shall be in an aggregate amount that is an integral multiple of \$1,000,000 and not less than \$5,000,000; *provided* that a Eurodollar Borrowing that results from a continuation of an outstanding Eurodollar Borrowing may be in an aggregate amount that is equal to such outstanding Borrowing. At the time that each ABR Borrowing is made, such Borrowing shall be in an aggregate amount that is an integral multiple of \$1,000,000 and not less than \$5,000,000. Borrowings of more than one Type and Class may be outstanding at the same time; *provided* that there shall not at any time be more than a total of six Eurodollar Borrowings outstanding. Notwithstanding anything to the contrary herein, an ABR Revolving Borrowing may be in an aggregate amount which is equal to the entire unused balance of the Total Revolving Commitments or that is required to finance the reimbursement of an LC Disbursement as contemplated by Section 2.22.

Section 2.03. *Requests for Borrowings.* To request a Borrowing, the Borrower shall notify the Administrative Agent of such request by telephone (a) in the case of a Eurodollar Borrowing, not later than 2:00 p.m., New York City time, three Business Days before the date of the proposed Borrowing (or, in the case of any Eurodollar Borrowing to be made on the ~~Restatement~~Amendment No. 1 Effective Date, such shorter period of time as may be agreed to by the Administrative Agent) or (b) (i) in the case of an ABR Term Borrowing, not later than 2:00 p.m., New York City time, one Business Day before the date of the proposed Borrowing and (ii) in the case of an ABR Revolving Borrowing, not later than 2:00 p.m., New York City time, on the date of the proposed Borrowing. Each such telephonic Borrowing Request shall be irrevocable and shall be confirmed promptly by hand delivery or facsimile to the Administrative Agent of a written Borrowing Request signed by the Borrower. Each such telephonic and written Borrowing Request shall specify the following information:

- (i) the Class of such Borrowing;
- (ii) the aggregate amount of such Borrowing;
- (iii) the date of such Borrowing, which shall be a Business Day;
- (iv) whether such Borrowing is to be an ABR Borrowing or a Eurodollar Borrowing;
- (v) in the case of a Eurodollar Borrowing, the initial Interest Period to be applicable thereto, which shall be a period contemplated by the definition of the term “Interest Period”;
- (vi) the location and number of the Borrower’s account to which funds are to be disbursed, which shall comply with the requirements of Section 2.04, or, in the case of any ABR Revolving Borrowing requested to finance the reimbursement of an LC Disbursement as provided in Section 2.22, the identity of the Issuing Bank that made such LC Disbursement; and
- (vii) that as of the date of such Borrowing, all applicable conditions set forth in Section 4.02(a), Section 4.02(b) and, if applicable, Section 4.02(c) are satisfied.

If no election as to the Type of Borrowing is specified as to any Borrowing, then the requested Borrowing shall be an ABR Borrowing. If no Interest Period is specified with respect to any requested Eurodollar Borrowing, then the Borrower shall be deemed to have selected an Interest Period of one month’s duration. Promptly following receipt of a Borrowing Request in accordance with this Section, the Administrative Agent shall advise each Lender of the applicable Class of the details thereof and of the amount of such Lender’s Loan to be made as part of the requested Borrowing.

Section 2.04. *Funding of Borrowings.* (a) Each Lender shall make each Loan to be made by it hereunder on the proposed date thereof by wire transfer of immediately available funds in dollars by 12:00 p.m., New York City time or, solely in the case of an ABR Revolving Borrowing with respect to which the Borrowing Request is made on the

date of the proposed Borrowing, 4:00 p.m., New York City time, to the Applicable Account of the Administrative Agent most recently designated by it for such purpose by notice to the Lenders. The Administrative Agent will make such Loans available to the Borrower by promptly crediting the amounts so received, in like funds, to an account of the Borrower maintained with the Administrative Agent in New York City and designated by the Borrower in the applicable Borrowing Request; *provided* that ABR Revolving Loans made to finance the reimbursement of an LC Disbursement as provided in Section 2.22 shall be remitted by the Administrative Agent to the applicable Issuing Bank or, to the extent that Revolving Lenders have made payments pursuant to Section 2.22 to reimburse such Issuing Bank, then to such Lenders and such Issuing Bank as their interests may appear.

(b) Unless the Administrative Agent shall have received notice from a Lender prior to the proposed date of any Borrowing that such Lender will not make available to the Administrative Agent such Lender's share of such Borrowing, the Administrative Agent may assume that such Lender has made such share available on such date in accordance with paragraph (a) of this Section and may, in reliance on such assumption and in its sole discretion, make available to the Borrower a corresponding amount. In such event, if a Lender has not in fact made its share of the applicable Borrowing available to the Administrative Agent, then the applicable Lender agrees to pay to the Administrative Agent an amount equal to such share on demand of the Administrative Agent. If such Lender does not pay such corresponding amount forthwith upon demand of the Administrative Agent therefor, the Administrative Agent shall promptly notify the Borrower, and the Borrower agrees to pay such corresponding amount to the Administrative Agent forthwith on demand. The Administrative Agent shall also be entitled to recover from such Lender or Borrower interest on such corresponding amount, for each day from and including the date such amount is made available to the Borrower to but excluding the date of payment to the Administrative Agent, at (i) in the case of such Lender, the greater of the Federal Funds Effective Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation or (ii) in the case of the Borrower, the interest rate applicable to such Borrowing in accordance with Section 2.11. If such Lender pays such amount to the Administrative Agent, then such amount shall constitute such Lender's Loan included in such Borrowing.

(c) The obligations of the Lenders hereunder to make Loans, to fund participations in Letters of Credit and to make payments pursuant to Section 9.03(c) are several and not joint. The failure of any Lender to make any Loan, to fund any such participation or to make any payment under Section 9.03(c) on any date required hereunder shall not relieve any other Lender of its corresponding obligation to do so on such date, and no Lender shall be responsible for the failure of any other Lender to so make its Loan, to purchase its participation or to make its payment under Section 9.03(c).

(d) Notwithstanding any other provision contained herein, the obligations of the Term Lenders to make Initial Term Loans to the Borrower on the Restatement Effective Date and the obligations of the Administrative Agent to make such Initial Term Loans available to the Borrower shall be subject to the terms and conditions set forth in the Restatement Agreement.

Section 2.05. *Interest Elections.* (a) Each Borrowing initially shall be of the Type specified in the applicable Borrowing Request or designated by Section 2.03 and, in the case of a Eurodollar Borrowing, shall have an initial Interest Period as specified in such Borrowing Request or designated by Section 2.03. Thereafter, the Borrower may elect to convert such Borrowing to a different Type or to continue such Borrowing and, in the case of a Eurodollar Borrowing, may elect Interest Periods therefor, all as provided in this Section. The Borrower may elect different options with respect to different portions of the affected Borrowing, in which case each such portion shall be allocated ratably among the Lenders holding the Loans comprising such Borrowing, and the Loans comprising each such portion shall be considered a separate Borrowing.

(b) To make an election pursuant to this Section, the Borrower shall notify the Administrative Agent of such election by telephone by the time that a Borrowing Request would be required under Section 2.03 if the Borrower were requesting a Borrowing of the Type resulting from such election to be made on the effective date of such election. Each such telephonic Interest Election Request shall be irrevocable and shall be confirmed promptly by hand delivery, facsimile or other electronic transmission to the Administrative Agent of a written Interest Election Request signed by the Borrower.

(c) Each telephonic and written Interest Election Request shall specify the following information in compliance with Section 2.03:

(i) the Borrowing to which such Interest Election Request applies and, if different options are being elected with respect to different portions thereof, the portions thereof to be allocated to each resulting Borrowing (in which case the information to be specified pursuant to clauses (iii) and (iv) below shall be specified for each resulting Borrowing);

(ii) the effective date of the election made pursuant to such Interest Election Request, which shall be a Business Day;

(iii) whether the resulting Borrowing is to be an ABR Borrowing or a Eurodollar Borrowing; and

(iv) if the resulting Borrowing is to be a Eurodollar Borrowing, the Interest Period to be applicable thereto after giving effect to such election, which shall be a period contemplated by the definition of the term "Interest Period."

If any such Interest Election Request requests a Eurodollar Borrowing but does not specify an Interest Period, then the Borrower shall be deemed to have selected an Interest Period of one month's duration.

(d) Promptly following receipt of an Interest Election Request in accordance with this Section, the Administrative Agent shall advise each Lender of the applicable Class of the details thereof and of such Lender's portion of each resulting Borrowing.

(e) If the Borrower fails to deliver a timely Interest Election Request with respect to a Eurodollar Borrowing prior to the end of the Interest Period applicable

thereto, then, unless such Borrowing is repaid as provided herein, at the end of such Interest Period such Borrowing shall be converted to an ABR Borrowing. Notwithstanding any contrary provision hereof, if an Event of Default has occurred and is continuing and the Administrative Agent, at the request of the Required Lenders, so notifies the Borrower, then, so long as an Event of Default is continuing (i) no outstanding Borrowing may be converted to or continued as a Eurodollar Borrowing and (ii) unless repaid, each Eurodollar Borrowing shall be converted to an ABR Borrowing at the end of the Interest Period applicable thereto.

Section 2.06. *Termination and Reduction of Commitments.* (a) Unless previously terminated, (i) the Term B-1 Commitments shall terminate at 5:00 p.m., New York City time, on the Restatement Amendment No. 1 Effective Date and (ii) the Revolving Commitments shall automatically terminate on the Revolving Commitment Termination Date.

(b) The Borrower may at any time terminate, or from time to time reduce, the Commitments of any Class, *provided* that (i) each reduction of the Commitments of any Class shall be in an amount that is an integral multiple of \$500,000 and not less than \$1,000,000 and (ii) the Borrower shall not terminate or reduce the Revolving Commitments if, after giving effect to any concurrent prepayment of the Revolving Loans in accordance with Section 2.11, the aggregate Revolving Exposures would exceed the Total Revolving Commitments.

(c) The Borrower shall notify the Administrative Agent of any election to terminate or reduce the Commitments under paragraph (b) of this Section at least three Business Days prior to the effective date of such termination or reduction, specifying such election and the effective date thereof. Promptly following receipt of any such notice, the Administrative Agent shall advise the Lenders of the contents thereof. Each notice delivered by the Borrower pursuant to this Section shall be irrevocable; *provided* that a notice of termination of the Revolving Commitments delivered by the Borrower may state that such notice is conditioned upon the effectiveness of other credit facilities or the receipt of the proceeds from the issuance of other Indebtedness or the occurrence of some other identifiable event or condition, in which case such notice may be revoked by the Borrower (by notice to the Administrative Agent on or prior to the specified effective date of termination) if such condition is not satisfied. Any termination or reduction of the Commitments of any Class shall be permanent. Each reduction of the Commitments of any Class shall be made ratably among the Lenders in accordance with their respective Commitments of such Class.

Section 2.07. *Repayment of Loans; Evidence of Debt.* (a) The Borrower hereby unconditionally promises to pay (i) to the Administrative Agent for the account of each Lender the then unpaid principal amount of each Revolving Loan of such Lender on the Revolving Maturity Date and (ii) to the Administrative Agent for the account of each Lender the then unpaid principal amount of each Term Loan of such Lender as provided in Section 2.08.

(b) Each Lender shall maintain in accordance with its usual practice an account or accounts evidencing the indebtedness of the Borrower to such Lender

resulting from each Loan made by such Lender, including the amounts of principal and interest payable and paid to such Lender from time to time hereunder.

(c) The Administrative Agent shall maintain accounts in which it shall record (i) the amount of each Loan made hereunder, the Class and Type thereof and the Interest Period applicable thereto, (ii) the amount of any principal or interest due and payable or to become due and payable from the Borrower to each Lender hereunder and (iii) the amount of any sum received by the Administrative Agent hereunder for the account of the Lenders and each Lender's share thereof.

(d) The entries made in the accounts maintained pursuant to paragraph (b) or (c) of this Section shall be prima facie evidence of the existence and amounts of the obligations recorded therein, *provided* that the failure of any Lender or the Administrative Agent to maintain such accounts or any error therein shall not in any manner affect the obligation of the Borrower to pay any amounts due hereunder in accordance with the terms of this Agreement. In the event of any inconsistency between the entries made pursuant to paragraphs (b) and (c) of this Section, the accounts maintained by the Administrative Agent pursuant to paragraph (c) of this Section shall control.

(e) Any Lender may request through the Administrative Agent that Loans of any Class made by it be evidenced by a promissory note. In such event, the Borrower shall execute and deliver to such Lender a promissory note payable to the order of such Lender (or, if requested by such Lender, to such Lender and its registered assigns) and in a form provided by the Administrative Agent and approved by the Borrower.

(f) The Borrower shall repay to the Administrative Agent for the ratable account of each Term Lender with Non-Converted New Term Loans the full amount of Non-Converted New Term Loans substantially concurrently with the receipt of the proceeds of the Term B-1 Loans on the Amendment No. 1 Effective Date.

Section 2.08. *Amortization of Term Loans.*

~~(a)(i) Prior to the Escrow Assumption Date, subject to adjustment pursuant to paragraph (c) of this Section, the Borrower shall repay the Initial Term Loans on the last day of each September, December, March and June (commencing on December 31, 2017) in an aggregate principal amount equal to (i) the aggregate outstanding principal amount of Initial Term Loans immediately after closing on the Restatement Effective Date multiplied by (ii) 0.25%; provided that if any such date is not a Business Day, such payment shall be due on the next preceding Business Day.~~(ii) If the Escrow Assumption Date shall have occurred, subject Subject to adjustment pursuant to paragraph (c) of this Section, the Borrower shall repay the New Term B-1 Loans on each anniversary of the Escrow Assumption Amendment No. 1 Effective Date in an aggregate principal amount equal to the sum of (i) the aggregate outstanding principal amount of Initial Term B-1 Loans immediately after closing on the Restatement Effective Date multiplied by 7.50% and (ii) the aggregate outstanding principal amount of the Escrow Term Loans on the Escrow Assumption Amendment No. 1 Effective Date multiplied by 7.50%; provided that if any such date is not a Business Day, such payment shall be due on the next preceding Business Day.

(b) To the extent not previously paid, all ~~New~~ Term B-1 Loans shall be due and payable on the Term Maturity Date.

(c) Any prepayment of a Term Borrowing of any Class (i) pursuant to Section 2.09(a)(i) shall be applied to reduce the subsequent scheduled and outstanding repayments of the Term Borrowing of such Class to be made pursuant to this Section as directed by the Borrower (and absent such direction in direct order of maturity), (ii) pursuant to Section 2.09(a)(ii) shall be applied as set forth in Section 2.09(a)(ii)(F) and (iii) pursuant to Section 2.09(b) or 2.09(c) shall be applied to reduce the subsequent scheduled and outstanding repayments of the Term Borrowings of such Class to be made pursuant to this Section, or, except as otherwise provided in any Refinancing Amendment, pursuant to the corresponding section of such Refinancing Amendment, in direct order of maturity; provided that any such prepayments of New Term Loans made prior to the Amendment No. 1 Effective Date shall be applied to reduce the scheduled and outstanding repayments of the Term Borrowings of Term B-1 Loans to be made pursuant to this Section (x) as directed by the Borrower (and absent such direction in direct order of maturity), in the case of clause (i) and (y) in direct order of maturity, in the case of clause (iii).

(d) Prior to any repayment of any Term Borrowings of any Class hereunder, the Borrower shall select the Borrowing or Borrowings of the applicable Class to be repaid and shall notify the Administrative Agent by telephone (confirmed by hand delivery or facsimile) of such election not later than 2:00 p.m., New York City time, three Business Day before the scheduled date of such repayment. In the absence of a designation by the Borrower as described in the preceding sentence, the Administrative Agent shall make such designation in its reasonable discretion with a view, but no obligation, to minimize breakage costs owing under Section 2.14. Each repayment of a Borrowing shall be applied ratably to the Loans included in the repaid Borrowing. Repayments of Term Borrowings shall be accompanied by accrued interest on the amount repaid.

Section 2.09. *Prepayment of Loans.* (a) (i) The Borrower shall have the right at any time and from time to time to prepay any Borrowing in whole or in part, subject to the requirements of this Section; *provided* that in the event that, on or prior to the six-month anniversary of the ~~Restatement~~Amendment No. 1 Effective Date, the Borrower (x) makes any prepayment of ~~New~~ Term B-1 Loans in connection with any Repricing Transaction, or (y) effects any amendment of this Agreement resulting in a Repricing Transaction, the Borrower shall pay to the Administrative Agent, for the ratable account of each of the applicable Term Lenders, (I) in the case of clause (x), a prepayment premium of 1% of the amount of the ~~New~~ Term B-1 Loans being prepaid and (II) in the case of clause (y), a payment equal to 1% of the aggregate principal amount of the applicable ~~New~~ Term B-1 Loans outstanding immediately prior to such amendment.

(ii) Notwithstanding anything in any Loan Document to the contrary, so long as no Default or Event of Default has occurred and is continuing, the Borrower may prepay the outstanding Term Loans on the following basis:



(A) The Borrower shall have the right to make a voluntary prepayment of Term Loans at a discount to par (such prepayment, the “**Discounted Term Loan Prepayment**”) pursuant to a Borrower Offer of Specified Discount Prepayment, Borrower Solicitation of Discount Range Prepayment Offers or Borrower Solicitation of Discounted Prepayment Offers, in each case made in accordance with this Section 2.09(a) (ii); *provided* that (x) the Borrower shall not make any Borrowing of Revolving Loans or borrowing of loans under any Incremental Revolving Facility to fund any Discounted Term Loan Prepayment and (y) the Borrower shall not initiate any action under this Section 2.09(a)(ii) in order to make a Discounted Term Loan Prepayment unless (I) at least ten (10) Business Days shall have passed since the consummation of the most recent Discounted Term Loan Prepayment as a result of a prepayment made by the Borrower on the applicable Discounted Prepayment Effective Date; or (II) at least three (3) Business Days shall have passed since the date the Borrower was notified that no Term Lender was willing to accept any prepayment of any Term Loan and/or Other Term Loan at the Specified Discount, within the Discount Range or at any discount to par value, as applicable, or in the case of Borrower Solicitation of Discounted Prepayment Offers, the date of the Borrower’s election not to accept any Solicited Discounted Prepayment Offers.

(B) (1) Subject to the proviso to subsection (A) above, the Borrower may from time to time offer to make a Discounted Term Loan Prepayment by providing the Auction Agent with four (4) Business Days’ notice in the form of a Specified Discount Prepayment Notice; *provided* that (I) any such offer shall be made available, at the sole discretion of the Borrower, to each Term Lender and/or each Lender with respect to any Class of Term Loans on an individual tranche basis, (II) any such offer shall specify the aggregate principal amount offered to be prepaid (the “**Specified Discount Prepayment Amount**”) with respect to each applicable tranche, the tranche or tranches of Term Loans subject to such offer and the specific percentage discount to par (the “**Specified Discount**”) of such Term Loans to be prepaid (it being understood that different Specified Discounts and/or Specified Discount Prepayment Amounts may be offered with respect to different tranches of Term Loans and, in such an event, each such offer will be treated as a separate offer pursuant to the terms of this Section), (III) the Specified Discount Prepayment Amount shall be in an aggregate amount not less than \$1,000,000 and whole increments of \$500,000 in excess thereof and (IV) each such offer shall remain outstanding through the Specified Discount Prepayment Response Date. The Auction Agent will promptly provide each relevant Term Lender with a copy of such Specified Discount Prepayment Notice and a form of the Specified Discount Prepayment Response to be completed and returned by each such Lender to the Auction Agent (or its delegate) by no later than 5:00 p.m., New York time, on the third Business Day after the date of

delivery of such notice to the relevant Term Lenders (the “**Specified Discount Prepayment Response Date**”).

(2) Each relevant Term Lender receiving such offer shall notify the Auction Agent (or its delegate) by the Specified Discount Prepayment Response Date whether or not it agrees to accept a prepayment of any of its relevant then outstanding Term Loans at the Specified Discount and, if so (such accepting Term Lender, a “**Discount Prepayment Accepting Lender**”), the amount and the tranches of such Lender’s Term Loans to be prepaid at such offered discount. Each acceptance of a Discounted Term Loan Prepayment by a Discount Prepayment Accepting Lender shall be irrevocable. Any Term Lender whose Specified Discount Prepayment Response is not received by the Auction Agent by the Specified Discount Prepayment Response Date shall be deemed to have declined to accept the applicable Borrower Offer of Specified Discount Prepayment.

(3) If there is at least one Discount Prepayment Accepting Lender, the Borrower will make prepayment of outstanding Term Loans pursuant to this paragraph (B) to each Discount Prepayment Accepting Lender in accordance with the respective outstanding amount and tranches of Term Loans specified in such Lender’s Specified Discount Prepayment Response given pursuant to subsection (2); *provided* that, if the aggregate principal amount of Term Loans accepted for prepayment by all Discount Prepayment Accepting Lenders exceeds the Specified Discount Prepayment Amount, such prepayment shall be made pro-rata among the Discount Prepayment Accepting Lenders in accordance with the respective principal amounts accepted to be prepaid by each such Discount Prepayment Accepting Lender and the Auction Agent (in consultation with the Borrower and subject to rounding requirements of the Auction Agent made in its reasonable discretion) will calculate such proration (the “**Specified Discount Proration**”). The Auction Agent shall promptly, and in any case within three (3) Business Days following the Specified Discount Prepayment Response Date, notify (I) the Borrower of the respective Term Lenders’ responses to such offer, the Discounted Prepayment Effective Date and the aggregate principal amount of the Discounted Term Loan Prepayment and the tranches to be prepaid, (II) each Term Lender of the Discounted Prepayment Effective Date, and the aggregate principal amount and the tranches of Term Loans to be prepaid at the Specified Discount on such date and (III) each Discount Prepayment Accepting Lender of the Specified Discount Proration, if any, and confirmation of the principal amount, tranche and Type of Loans of such

Lender to be prepaid at the Specified Discount on such date. Each determination by the Auction Agent of the amounts stated in the foregoing notices to the Borrower and Lenders shall be conclusive and binding for all purposes absent manifest error. The payment amount specified in such notice to the Borrower shall be due and payable by the Borrower on the Discounted Prepayment Effective Date in accordance with subsection (F) below (subject to subsection (J) below).

(C) (1) Subject to the proviso to subsection (A) above, the Borrower may from time to time solicit Discount Range Prepayment Offers by providing the Auction Agent with three (3) Business Days' notice in the form of a Discount Range Prepayment Notice; *provided* that (I) any such solicitation shall be extended, at the sole discretion of the Borrower, to each Term Lender and/or each Lender with respect to any Class of Loans on an individual tranche basis, (II) any such notice shall specify the maximum aggregate principal amount of the relevant Term Loans (the "**Discount Range Prepayment Amount**"), the tranche or tranches of Term Loans subject to such offer and the maximum and minimum percentage discounts to par (the "**Discount Range**") of the principal amount of such Term Loans with respect to each relevant tranche of Term Loans willing to be prepaid by the Borrower (it being understood that different Discount Ranges and/or Discount Range Prepayment Amounts may be offered with respect to different tranches of Term Loans and, in such an event, each such offer will be treated as a separate offer pursuant to the terms of this Section), (III) the Discount Range Prepayment Amount shall be in an aggregate amount not less than \$1,000,000 and whole increments of \$500,000 in excess thereof and (IV) each such solicitation by the Borrower shall remain outstanding through the Discount Range Prepayment Response Date. The Auction Agent will promptly provide each relevant Term Lender with a copy of such Discount Range Prepayment Notice and a form of the Discount Range Prepayment Offer to be submitted by a responding relevant Term Lender to the Auction Agent (or its delegate) by no later than 5:00 p.m., New York time, on the third Business Day after the date of delivery of such notice to the relevant Term Lenders (the "**Discount Range Prepayment Response Date**"). Each relevant Term Lender's Discount Range Prepayment Offer shall be irrevocable and shall specify a discount to par within the Discount Range (the "**Submitted Discount**") at which such Term Lender is willing to allow prepayment of any or all of its then outstanding Term Loans of the applicable tranche or tranches and the maximum aggregate principal amount and tranches of such Lender's Term Loans (the "**Submitted Amount**") such Lender is willing to have prepaid at the Submitted Discount. Any Term Lender whose Discount Range Prepayment Offer is not received by the Auction Agent by the Discount Range Prepayment Response Date shall be deemed to have declined to accept a Discounted Term Loan Prepayment of any of its Term Loans at any discount to their par value within the Discount Range.

(2) The Auction Agent shall review all Discount Range Prepayment Offers received on or before the applicable Discount Range Prepayment Response Date and shall determine (in consultation with the Borrower and subject to rounding requirements of the Auction Agent made in its sole reasonable discretion) the Applicable Discount and Term Loans to be prepaid at such Applicable Discount in accordance with this subsection (C). The Borrower agrees to accept on the Discount Range Prepayment Response Date all Discount Range Prepayment Offers received by the Auction Agent by the Discount Range Prepayment Response Date, in the order from the Submitted Discount that is the largest discount to par to the Submitted Discount that is the smallest discount to par, up to and including the Submitted Discount that is the smallest discount to par within the Discount Range (such Submitted Discount that is the smallest discount to par within the Discount Range being referred to as the “**Applicable Discount**”) which yields a Discounted Term Loan Prepayment in an aggregate principal amount equal to the lower of (I) the Discount Range Prepayment Amount and (II) the sum of all Submitted Amounts. Each Lender that has submitted a Discount Range Prepayment Offer to accept prepayment at a discount to par that is larger than or equal to the Applicable Discount shall be deemed to have irrevocably consented to prepayment of Term Loans equal to its Submitted Amount (subject to any required proration pursuant to the following subsection (3)) at the Applicable Discount (each such Lender, a “**Participating Lender**”).

(3) If there is at least one Participating Lender, the Borrower will prepay the respective outstanding Term Loans of each Participating Lender in the aggregate principal amount and of the tranches specified in such Lender’s Discount Range Prepayment Offer at the Applicable Discount; *provided* that if the Submitted Amount by all Participating Lenders offered at a discount to par greater than the Applicable Discount exceeds the Discounted Range Prepayment Amount, prepayment of the principal amount of the relevant Term Loans for those Participating Lenders whose Submitted Discount is a discount to par greater than or equal to the Applicable Discount (the “**Identified Participating Lenders**”) shall be made pro-rata among the Identified Participating Lenders in accordance with the Submitted Amount of each such Identified Participating Lender and the Auction Agent (in consultation with the Borrower and subject to rounding requirements of the Auction Agent made in its sole reasonable discretion) will calculate such proration (the “**Discount Range Proration**”). The Auction Agent shall promptly, and in any case within five (5) Business Days following the Discount

Range Prepayment Response Date, notify (I) the Borrower of the respective Term Lenders' responses to such solicitation, the Discounted Prepayment Effective Date, the Applicable Discount, and the aggregate principal amount of the Discounted Term Loan Prepayment and the tranches to be prepaid, (II) each Term Lender of the Discounted Prepayment Effective Date, the Applicable Discount, and the aggregate principal amount and tranches of Term Loans to be prepaid at the Applicable Discount on such date, (III) each Participating Lender of the aggregate principal amount and tranches of such Lender to be prepaid at the Applicable Discount on such date, and (IV) if applicable, each Identified Participating Lender of the Discount Range Proration. Each determination by the Auction Agent of the amounts stated in the foregoing notices to the Borrower and Lenders shall be conclusive and binding for all purposes absent manifest error. The payment amount specified in such notice to the Borrower shall be due and payable by such Borrower on the Discounted Prepayment Effective Date in accordance with subsection (F) below (subject to subsection (J) below).

(D) (1) Subject to the proviso to subsection (A) above, the Borrower may from time to time solicit Solicited Discounted Prepayment Offers by providing the Auction Agent with three (3) Business Days' notice in the form of a Solicited Discounted Prepayment Notice; *provided* that (I) any such solicitation shall be extended, at the sole discretion of the Borrower, to each Term Lender and/or each Lender with respect to any Class of Term Loans on an individual tranche basis, (II) any such notice shall specify the maximum aggregate dollar amount of the Term Loans (the "**Solicited Discounted Prepayment Amount**") and the tranche or tranches of Term Loans the Borrower is willing to prepay at a discount (it being understood that different Solicited Discount Prepayment Amounts may be offered with respect to different tranches of Term Loans and, in such an event, each such offer will be treated as a separate offer pursuant to the terms of this Section), (III) the Solicited Discounted Prepayment Amount shall be in an aggregate amount not less than \$1,000,000 and whole increments of \$500,000 in excess thereof and (IV) each such solicitation by the Borrower shall remain outstanding through the Solicited Discounted Prepayment Response Date. The Auction Agent will promptly provide each relevant Term Lender with a copy of such Solicited Discounted Prepayment Notice and a form of the Solicited Discounted Prepayment Offer to be submitted by a responding Term Lender to the Auction Agent (or its delegate) by no later than 5:00 p.m., New York time on the third Business Day after the date of delivery of such notice to the relevant Term Lenders (the "**Solicited Discounted Prepayment Response Date**"). Each Term Lender's Solicited Discounted Prepayment Offer shall (x) be irrevocable, (y) remain outstanding until the Acceptance Date, and (z) specify both a discount

to par (the “**Offered Discount**”) at which such Term Lender is willing to allow prepayment of its then outstanding Term Loan and the maximum aggregate principal amount and tranches of such Term Loans (the “**Offered Amount**”) such Lender is willing to have prepaid at the Offered Discount. Any Term Lender whose Solicited Discounted Prepayment Offer is not received by the Auction Agent by the Solicited Discounted Prepayment Response Date shall be deemed to have declined prepayment of any of its Term Loans at any discount.

(2) The Auction Agent shall promptly provide the Borrower with a copy of all Solicited Discounted Prepayment Offers received on or before the Solicited Discounted Prepayment Response Date. The Borrower shall review all such Solicited Discounted Prepayment Offers and select the largest of the Offered Discounts specified by the relevant responding Term Lenders in the Solicited Discounted Prepayment Offers that is acceptable to the Borrower (the “**Acceptable Discount**”), if any. If the Borrower elects to accept any Offered Discount as the Acceptable Discount, then as soon as practicable after the determination of the Acceptable Discount, but in no event later than the third Business Day after the date of receipt by the Borrower from the Auction Agent of a copy of all Solicited Discounted Prepayment Offers pursuant to the first sentence of this subsection (2) (the “**Acceptance Date**”), the Borrower shall submit an Acceptance and Prepayment Notice to the Auction Agent setting forth the Acceptable Discount. If the Auction Agent shall fail to receive an Acceptance and Prepayment Notice from the Borrower by the Acceptance Date, the Borrower shall be deemed to have rejected all Solicited Discounted Prepayment Offers.

(3) Based upon the Acceptable Discount and the Solicited Discounted Prepayment Offers received by the Auction Agent by the Solicited Discounted Prepayment Response Date, within three (3) Business Days after receipt of an Acceptance and Prepayment Notice (the “**Discounted Prepayment Determination Date**”), the Auction Agent will determine (in consultation with the Borrower and subject to rounding requirements of the Auction Agent made in its sole reasonable discretion) the aggregate principal amount and the tranches of Term Loans (the “**Acceptable Prepayment Amount**”) to be prepaid by the Borrower at the Acceptable Discount in accordance with this Section 2.09(a)(ii)(D). If the Borrower elects to accept any Acceptable Discount, then the Borrower agrees to accept all Solicited Discounted Prepayment Offers received by Auction Agent by the Solicited Discounted Prepayment Response Date, in the order from largest Offered Discount to smallest Offered Discount, up to and including the

Acceptable Discount. Each Lender that has submitted a Solicited Discounted Prepayment Offer with an Offered Discount that is greater than or equal to the Acceptable Discount shall be deemed to have irrevocably consented to prepayment of Term Loans equal to its Offered Amount (subject to any required pro-rata reduction pursuant to the following sentence) at the Acceptable Discount (each such Lender, a **“Qualifying Lender”**). The Borrower will prepay outstanding Term Loans pursuant to this subsection (D) to each Qualifying Lender in the aggregate principal amount and of the tranches specified in such Lender’s Solicited Discounted Prepayment Offer at the Acceptable Discount; *provided* that if the aggregate Offered Amount by all Qualifying Lenders whose Offered Discount is greater than or equal to the Acceptable Discount exceeds the Solicited Discounted Prepayment Amount, prepayment of the principal amount of the Term Loans for those Qualifying Lenders whose Offered Discount is greater than or equal to the Acceptable Discount (the **“Identified Qualifying Lenders”**) shall be made pro-rata among the Identified Qualifying Lenders in accordance with the Offered Amount of each such Identified Qualifying Lender and the Auction Agent (in consultation with the Borrower and subject to rounding requirements of the Auction Agent made in its sole reasonable discretion) will calculate such proration (the **“Solicited Discount Proration”**). On or prior to the Discounted Prepayment Determination Date, the Auction Agent shall promptly notify (I) the Borrower of the Discounted Prepayment Effective Date and Acceptable Prepayment Amount comprising the Discounted Term Loan Prepayment and the tranches to be prepaid, (II) each Term Lender of the Discounted Prepayment Effective Date, the Acceptable Discount, and the Acceptable Prepayment Amount of all Term Loans and the tranches to be prepaid at the Applicable Discount on such date, (III) each Qualifying Lender of the aggregate principal amount and the tranches of such Lender to be prepaid at the Acceptable Discount on such date, and (IV) if applicable, each Identified Qualifying Lender of the Solicited Discount Proration. Each determination by the Auction Agent of the amounts stated in the foregoing notices to such Borrower and Lenders shall be conclusive and binding for all purposes absent manifest error. The payment amount specified in such notice to such Borrower shall be due and payable by such Borrower on the Discounted Prepayment Effective Date in accordance with subsection (F) below (subject to subsection (J) below).

(E) In connection with any Discounted Term Loan Prepayment, the Borrower and the Lenders acknowledge and agree that the Auction Agent may require as a condition to any Discounted Term

Loan Prepayment, the payment of customary fees and expenses from the Borrower in connection therewith.

(F) If any Term Loan is to be prepaid in accordance with paragraphs (B) through (D) above, the Borrower shall prepay such Term Loans on the Discounted Prepayment Effective Date. The Borrower shall make such prepayment to the Auction Agent, for the account of the Discount Prepayment Accepting Lenders, Participating Lenders, or Qualifying Lenders, as applicable, at the Administrative Agent's Office in immediately available funds not later than 11:00 a.m. (New York time) on the Discounted Prepayment Effective Date and all such prepayments shall be applied to the remaining principal installments of the relevant tranche of Term Loans on a pro rata basis across such installments. The Term Loans so prepaid shall be accompanied by all accrued and unpaid interest on the par principal amount so prepaid up to, but not including, the Discounted Prepayment Effective Date. Each prepayment of outstanding Term Loans pursuant to this Section 2.09(a)(ii) shall be paid to the Discount Prepayment Accepting Lenders, Participating Lenders, or Qualifying Lenders, as applicable. The aggregate principal amount of the tranches and installments of the relevant Term Loans outstanding shall be deemed reduced by the full par value of the aggregate principal amount of the tranches of Term Loans prepaid on the Discounted Prepayment Effective Date in any Discounted Term Loan Prepayment.

(G) To the extent not expressly provided for herein, each Discounted Term Loan Prepayment shall be consummated pursuant to procedures consistent with the provisions in this Section 2.09(a)(ii), established by the Auction Agent acting in its reasonable discretion and as reasonably agreed by the Borrower.

(H) Notwithstanding anything in any Loan Document to the contrary, for purposes of this Section 2.09(a)(ii), each notice or other communication required to be delivered or otherwise provided to the Auction Agent (or its delegate) shall be deemed to have been given upon Auction Agent's (or its delegate's) actual receipt during normal business hours of such notice or communication; *provided* that any notice or communication actually received outside of normal business hours shall be deemed to have been given as of the opening of business on the next Business Day.

(I) Each of the Borrower and the Lenders acknowledges and agrees that the Auction Agent may perform any and all of its duties under this Section 2.09(a)(ii) by itself or through any Affiliate of the Auction Agent and expressly consents to any such delegation of duties by the Auction Agent to such Affiliate and the performance of such delegated duties by such Affiliate. The exculpatory provisions pursuant to this Agreement shall apply to each Affiliate of the Auction Agent and its respective activities in connection with any Discounted Term Loan



Prepayment provided for in this Section 2.09(a)(ii) as well as activities of the Auction Agent.

(J) The Borrower shall have the right, by written notice to the Auction Agent, to revoke in full (but not in part) its offer to make a Discounted Term Loan Prepayment and rescind the applicable Specified Discount Prepayment Notice, Discount Range Prepayment Notice or Solicited Discounted Prepayment Notice therefor at its discretion at any time on or prior to the applicable Specified Discount Prepayment Response Date (and if such offer is revoked pursuant to the preceding clauses, any failure by such Borrower to make any prepayment to a Term Lender, as applicable, pursuant to this Section 2.09(a)(ii) shall not constitute a Default or Event of Default under Section 7.01 or otherwise).

(b) In the event and on each occasion that any Net Proceeds are received by or on behalf of Holdings, any Intermediate Parent, the Borrower or any of its Restricted Subsidiaries in respect of any Prepayment Event after the Amendment No. 1 Effective Date, the Borrower shall, within three Business Days after such Net Proceeds are received (or, in the case of a Prepayment Event described in clause (b) of the definition of the term "Prepayment Event," on the date of such Prepayment Event), prepay Term Borrowings in an aggregate amount equal to 100% of the amount of such Net Proceeds; *provided* that, in the case of any event described in clause (a) of the definition of the term "Prepayment Event", if the Borrower and its Restricted Subsidiaries invest (or commit with a Person that is not Holdings, an Intermediate Parent, the Borrower or a Subsidiary to invest) the Net Proceeds from such event (or a portion thereof) within 12 months after receipt of such Net Proceeds in the business of the Borrower and its Restricted Subsidiaries (including in any acquisitions permitted under Section 6.04 and in working capital or trading activities), then no prepayment shall be required pursuant to this paragraph in respect of such Net Proceeds in respect of such event (or the applicable portion of such Net Proceeds, if applicable) except to the extent of any such Net Proceeds therefrom that have not been so invested (or committed to be invested) by the end of such 12-month period (or if committed to be so invested within such 12-month period, have not been so invested within 18 months after receipt thereof), at which time a prepayment shall be required in an amount equal to such Net Proceeds that have not been so invested (or committed to be invested); *provided, further*, that if the Escrow Assumption Date shall have occurred, the immediately preceding proviso shall not apply unless the Total Leverage Ratio at the time such Net Proceeds are received is less than or equal to 2.25 to 1.00 on a pro forma basis for such event. For the avoidance of doubt, no prepayment shall be required to be made from the Net Proceeds of any Prepayment Event consummated on or prior to the Amendment No. 1 Effective Date pursuant to this Section 2.09.

(c) Commencing with the first fiscal quarter of Holdings commencing after the earliest of (x) the Escrow Assumption Date, (y) January 31, 2018 and (z) the date of the termination of the Merger Agreement in accordance with its terms occurs, the Borrower shall prepay Term Borrowings in an aggregate amount equal to the ECF Percentage of Excess Cash Flow for such fiscal quarter; *provided* that such amount shall be reduced by the aggregate amount of prepayments of Term Loans made pursuant to

Section 2.09(a)(i) during such period (excluding all such prepayments funded with the proceeds of other Indebtedness, the issuance of Equity Interests or receipt of capital contributions or the proceeds of any sale or other disposition of assets outside the ordinary course of business). Each prepayment pursuant to this paragraph shall be made on or before the date that is five days after the date on which financial statements are required to be delivered pursuant to Section 5.01(b) with respect to the fiscal quarter for which Excess Cash Flow is being calculated (or, in the case of any prepayment with respect to the fourth fiscal quarter of any fiscal year, the date that is five days after the date on which financial statements are required to be delivered pursuant to Section 5.01(a) with respect to the fiscal year of which such quarter is the fourth fiscal quarter). For the avoidance of doubt, the first such prepayment shall be with respect to the fiscal quarter of the Borrower during which the earliest of (x) the Escrow Assumption Date, (y) January 31, 2018 and (z) the date of the termination of the Merger Agreement in accordance with its terms occurs, and such prepayment shall be made on or before the date that is five days after the date on which financial statements are required to be delivered pursuant to Section 5.01(b) with respect to such period.

(d) Prior to any optional prepayment of Borrowings pursuant to Section 2.09(a)(i), the Borrower shall select the Borrowing or Borrowings to be prepaid and shall specify such selection in the notice of such prepayment pursuant to paragraph (e) of this Section. In the event of any mandatory prepayment of Term Borrowings made at a time when Term Borrowings of more than one Class remain outstanding, the Borrower shall select Term Borrowings to be prepaid so that the aggregate amount of such prepayment is allocated between Term Borrowings (and, to the extent provided in the Refinancing Amendment for any Class of Other Term Loans, the Borrowings of such Class) pro rata based on the aggregate principal amount of outstanding Borrowings of each such Class; *provided* that any Term Lender (and, to the extent provided in the Refinancing Amendment for any Class of Other Term Loans, any Lender that holds Other Term Loans of such Class) may elect, by notice to the Administrative Agent by telephone (confirmed by facsimile) at least one Business Day prior to the prepayment date, to decline all or any portion of any prepayment of its Term Loans or Other Term Loans of any such Class pursuant to this Section (other than an optional prepayment pursuant to paragraph (a)(i) of this Section, which may not be declined), in which case the aggregate amount of the prepayment that would have been applied to prepay Term Loans or Other Term Loans of any such Class but was so declined shall be retained by the Borrower. Optional prepayments of Term Borrowings shall be allocated among the Classes of Term Borrowings as directed by the Borrower. In the absence of a designation by the Borrower as described in the preceding provisions of this paragraph of the Type of Borrowing of any Class, the Administrative Agent shall make such designation in its reasonable discretion with a view, but no obligation, to minimize breakage costs owing under Section 2.14.

(e) The Borrower shall notify the Administrative Agent by telephone (confirmed by facsimile) of any prepayment hereunder (i) in the case of prepayment of a Eurodollar Borrowing, not later than 11:00 a.m., New York City time, three Business Days before the date of prepayment and (ii) in the case of prepayment of an ABR Borrowing, not later than 11:00 a.m., New York City time, one Business Day before the date of prepayment. Each such notice shall be irrevocable and shall specify the prepayment date and principal amount of each Borrowing or portion thereof to be

prepaid and, in the case of a mandatory prepayment, a reasonably detailed calculation of the amount of such prepayment; *provided* that a notice of optional prepayment may state that such notice is conditional upon the effectiveness of other credit facilities or the receipt of the proceeds from the issuance of other Indebtedness or the occurrence of some other identifiable event or condition, in which case such notice of prepayment may be revoked by the Borrower (by notice to the Administrative Agent on or prior to the specified date of prepayment) if such condition is not satisfied. Promptly following receipt of any such notice, the Administrative Agent shall advise the Lenders of the contents thereof. Each partial prepayment of any Borrowing shall be in an amount that would be permitted in the case of an advance of a Borrowing of the same Type as provided in Section 2.02, except as necessary to apply fully the required amount of a mandatory prepayment. Each prepayment of a Borrowing shall be applied ratably to the Loans included in the prepaid Borrowing. Prepayments shall be accompanied by accrued interest to the extent required by Section 2.11.

(f) Notwithstanding any other provisions of Section 2.09(b) or (c), (A) to the extent that any of or all the Net Proceeds of any Prepayment Event by a Foreign Subsidiary giving rise to a prepayment pursuant to Section 2.09(b) (a “**Foreign Prepayment Event**”) or Excess Cash Flow attributable to a Foreign Subsidiary are prohibited or delayed by applicable local law from being repatriated to the Borrower, the portion of such Net Proceeds or Excess Cash Flow so affected will not be required to be applied to repay Term Loans at the times provided in Section 2.09(b) or (c), as the case may be, and such amounts may be retained by the applicable Foreign Subsidiary so long, but only so long, as the applicable local law will not permit repatriation to the Borrower (Borrower hereby agreeing to cause the applicable Foreign Subsidiary to promptly take all actions reasonably required by the applicable local law to permit such repatriation), and once such repatriation of any of such affected Net Proceeds or Excess Cash Flow is permitted under the applicable local law, such repatriation will be promptly effected and such repatriated Net Proceeds or Excess Cash Flow will be promptly (and in any event not later than three Business Days after such repatriation) applied (net of additional taxes payable or reserved against as a result thereof) to the repayment of the Term Loans pursuant to Section 2.09(b) or (c), as applicable, and (B) to the extent that the Borrower has determined in good faith that repatriation of any of or all the Net Proceeds of any Foreign Prepayment Event or Foreign Subsidiary Excess Cash Flow would have a material adverse tax consequence (taking into account any foreign tax credit or benefit actually realized in connection with such repatriation) with respect to such Net Proceeds or Excess Cash Flow, the Net Proceeds or Excess Cash Flow so affected may be retained by the applicable Foreign Subsidiary; *provided* that in the case of this clause (B), on or before the date that is eighteen months after the date that such Net Proceeds are received (or, in the case of Excess Cash Flow, a date on or before the date that is eighteen months after the date such Excess Cash Flow would have so required to be applied to prepayments pursuant to Section 2.09(c) unless previously repatriated in which case such repatriated Excess Cash Flow shall have been promptly applied to the repayment of the Term Loans pursuant to Section 2.09(c)), (x) the Borrower applies an amount equal to such Net Proceeds or Excess Cash Flow to such reinvestments or prepayments as if such Net Proceeds or Excess Cash Flow had been received by the Borrower rather than such Foreign Subsidiary, less the amount of additional taxes that would have been payable or reserved against if such Net Proceeds or Excess Cash Flow had been repatriated (or, if less, the Net Proceeds or Excess Cash Flow that would be calculated if received by such

Foreign Subsidiary) or (y) such Net Proceeds or Excess Cash Flow shall be applied to the repayment of Indebtedness of a Foreign Subsidiary.

(g) In the event and on each occasion that the aggregate Revolving Exposures exceed the Total Revolving Commitments, the Borrower shall prepay Revolving Borrowings (or, if no such Borrowings are outstanding, deposit cash collateral in an account with the Administrative Agent pursuant to Section 2.22) in an aggregate amount necessary to eliminate such excess.

(h) Additionally, notwithstanding anything else in this Agreement to the contrary, in the event that any Term Loan of any Lender would otherwise be repaid or prepaid from the proceeds of other Term Loans being funded on the date of such repayment or prepayment, if agreed to by the Borrower and such Lender and notified to the Administrative Agent prior to the date of the applicable repayment or prepayment, all or any portion of such Lender's Term Loan that would have otherwise been repaid or prepaid in connection therewith may be converted on a "cashless roll" basis into a new Term Loan.

Section 2.10. *Fees.* (a) The Borrower agrees to pay to each Administrative Agent, for its own account, fees payable in the amounts and at the times separately agreed upon between the Borrower and such Administrative Agent.

(b) [Reserved.]

(c) The Borrower agrees to pay to the Administrative Agent for the account of each Revolving Lender a commitment fee, which shall accrue at the rate of 0.50% per annum on the average daily unused amount of the Revolving Commitment of such Lender during the period from and including the Revolving Availability Date to but excluding the date on which the Revolving Commitments terminate. Accrued commitment fees shall be payable in arrears on the third Business Day following the last day of March, June, September and December of each year and on the date on which the Revolving Commitments terminate, commencing on the first such date to occur after the Revolving Availability Date. All commitment fees shall be computed on the basis of a year of 360 days and shall be payable for the actual number of days elapsed (including the first day but excluding the last day). For purposes of computing commitment fees, a Revolving Commitment of a Lender shall be deemed to be used to the extent of the outstanding Revolving Loans and LC Exposure of such Lender.

(d) The Borrower agrees to pay (i) to the Administrative Agent for the account of each Revolving Lender (other than any Defaulting Lender) a participation fee with respect to its participations in Letters of Credit, which shall accrue at the Applicable Rate used to determine the interest rate applicable to Eurodollar Revolving Loans on the daily amount of such Lender's LC Exposure (excluding any portion thereof attributable to unreimbursed LC Disbursements) during the period from and including the Revolving Availability Date to and including the later of the date on which such Lender's Revolving Commitment terminates and the date on which such Lender ceases to have any LC Exposure and (ii) to each Issuing Bank a fronting fee, which shall accrue at the rate of 0.25% per annum on the daily amount of the LC Exposure attributable to Letters of Credit issued by such Issuing Bank (excluding any portion thereof attributable to

unreimbursed LC Disbursements) during the period from and including the Revolving Availability Date to and including the later of the date of termination of the Revolving Commitments and the date on which there ceases to be any LC Exposure, as well as such Issuing Bank's standard fees with respect to the issuance, amendment, renewal or extension of any Letter of Credit or processing of drawings thereunder. Participation fees and fronting fees accrued through and including the last day of March, June, September and December of each year shall be payable on the third Business Day following such last day, commencing on the first such date to occur after the Revolving Availability Date; *provided* that all such fees shall be payable on the date on which the Revolving Commitments terminate and any such fees accruing after the date on which the Revolving Commitments terminate shall be payable on demand. Any other fees payable to an Issuing Bank pursuant to this paragraph shall be payable within 10 days after demand. All participation fees and fronting fees shall be computed on the basis of a year of 360 days and shall be payable for the actual number of days elapsed (including the first day but excluding the last day).

(e) Notwithstanding the foregoing, and subject to Section 2.21, the Borrower shall not be obligated to pay any amounts to any Defaulting Lender pursuant to this Section 2.10.

Section 2.11. *Interest.* (a) The Loans comprising each ABR Borrowing shall bear interest at the Alternate Base Rate plus the Applicable Rate.

(b) The Loans comprising each Eurodollar Borrowing shall bear interest at the Adjusted LIBO Rate for the Interest Period in effect for such Borrowing plus the Applicable Rate.

(c) Notwithstanding the foregoing, if any principal of or interest on any Loan or any fee or other amount payable by the Borrower hereunder is not paid when due, whether at stated maturity, upon acceleration or otherwise, such overdue amount shall bear interest, after as well as before judgment, at a rate per annum equal to (i) in the case of overdue principal of any Loan, 2.00% per annum plus the rate otherwise applicable to such Loan as provided in the preceding paragraphs of this Section or (ii) in the case of any other amount, 2.00% per annum plus the rate applicable to ABR Term Loans as provided in paragraph (a) of this Section; *provided* that no amount shall be payable pursuant to this Section 2.11(c) to a Defaulting Lender so long as such Lender shall be a Defaulting Lender; *provided further* that no amounts shall accrue pursuant to this Section 2.11(c) on any overdue amount, reimbursement obligation in respect of any LC Disbursement or other amount payable to a Defaulting Lender so long as such Lender shall be a Defaulting Lender.

(d) Accrued interest on each Loan shall be payable in arrears on each Interest Payment Date for such Loan and, in the case of Revolving Loans, upon termination of the Revolving Commitments, *provided* that (i) interest accrued pursuant to paragraph (c) of this Section shall be payable on demand, (ii) in the event of any repayment or prepayment of any Loan (other than a prepayment of an ABR Revolving Loan prior to the end of the Revolving Availability Period), accrued interest on the principal amount repaid or prepaid shall be payable on the date of such repayment or prepayment and (iii) in the event of any conversion of any Eurodollar Loan prior to the end of the current

Interest Period therefor, accrued interest on such Loan shall be payable on the effective date of such conversion.

(e) All interest hereunder shall be computed on the basis of a year of 360 days, except that interest computed by reference to the Alternate Base Rate shall be computed on the basis of a year of 365 days (or 366 days in a leap year), and in each case shall be payable for the actual number of days elapsed (including the first day but excluding the last day). The applicable Alternate Base Rate or Adjusted LIBO Rate shall be determined by the Administrative Agent, and such determination shall be conclusive absent manifest error.

Section 2.12. *Alternate Rate of Interest.* (a) If ~~at least two Business Days~~ prior to the commencement of any Interest Period for a Eurodollar Borrowing:

(i) ~~(a)~~ the Administrative Agent determines (which determination shall be conclusive absent manifest error) that adequate and reasonable means do not exist for ascertaining the Adjusted LIBO Rate or the LIBO Rate, as applicable (including, without limitation, because the LIBO Screen Rate is not available or published on a current basis) for such Interest Period; or

(ii) ~~(b)~~ the Administrative Agent is advised by the Required Lenders that the Adjusted LIBO Rate or the LIBO Rate, as applicable, for such Interest Period will not adequately and fairly reflect the cost to such Lenders of making or maintaining their Loans included in such Borrowing for such Interest Period;

then the Administrative Agent shall give notice thereof to the Borrower and the Lenders by telephone or facsimile as promptly as practicable thereafter and, until the Administrative Agent notifies the Borrower and the Lenders that the circumstances giving rise to such notice no longer exist, (i) any Interest Election Request that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Eurodollar Borrowing shall be ineffective and (ii) if any Borrowing Request requests a Eurodollar Borrowing, then such Borrowing shall be made as an ABR Borrowing; *provided, however,* that, in each case, the Borrower may revoke any Borrowing Request that is pending when such notice is received.

(b) If at any time the Administrative Agent determines (which determination shall be conclusive absent manifest error) that (i) the circumstances set forth in clause (a)(i) have arisen and such circumstances are unlikely to be temporary or (ii) the circumstances set forth in clause (a)(i) have not arisen but the supervisor for the administrator of the LIBO Screen Rate or a Governmental Authority having jurisdiction over the Administrative Agent has made a public statement identifying a specific date after which the LIBO Screen Rate shall no longer be used for determining interest rates for loans, then the Administrative Agent and the Borrower shall endeavor to establish an alternate rate of interest to the LIBO Rate that gives due consideration to the then prevailing market convention for determining a rate of interest for syndicated loans in the United States at such time, and shall enter into an amendment to this Agreement to reflect such alternate rate of interest and such other related changes to this Agreement as may be applicable (but for the avoidance of doubt, such related changes shall not include a reduction of the Applicable Rate). Notwithstanding anything to the contrary in Section

9.02, such amendment shall become effective without any further action or consent of any other party to this Agreement so long as the Administrative Agent shall not have received, within five Business Days after the date on which notice of such alternate rate of interest is provided to the Lenders, a written notice from the Majority in Interest of Lenders of each Class stating that such Majority in Interest of Lenders object to such amendment. Until an alternate rate of interest shall be determined in accordance with this clause (b) (but, in the case of the circumstances described in clause (ii) of the first sentence of this Section 2.12(b), only to the extent the LIBO Screen Rate for such Interest Period is not available or published at such time on a current basis), (x) any Interest Election Request that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Eurodollar Borrowing shall be ineffective and (y) if any Borrowing Request requests a Eurodollar Borrowing, then such Borrowing shall be made as an ABR Borrowing; provided that, if such alternate rate of interest shall be less than zero, such rate shall be deemed to be zero for the purposes of this Agreement.

Section 2.13. *Increased Costs.* (a) If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended by, any Lender or any Issuing Bank (except any such reserve requirement reflected in the Adjusted LIBO Rate); or

(ii) impose on any Lender or any Issuing Bank or the London interbank market any other condition, cost or expense affecting this Agreement or Eurodollar Loans made by such Lender or any Letter of Credit or participation therein;

and the result of any of the foregoing shall be to increase the cost to such Lender of making or maintaining any Eurodollar Loan (or of maintaining its obligation to make any such Loan or to increase the cost of such Lender or Issuing Bank of participating in, issuing or maintaining any Letter of Credit (or of maintaining its obligation to participate in or issue any Letter of Credit) or to reduce the amount of any sum received or receivable by such Lender or Issuing Bank hereunder (whether of principal, interest or otherwise), then, from time to time upon request of such Lender or Issuing Bank, the Borrower will pay to such Lender or Issuing Bank, as the case may be, such additional amount or amounts as will compensate such Lender or Issuing Bank, as the case may be, for such increased costs actually incurred or reduction actually suffered. Notwithstanding the foregoing, this paragraph will not apply to any such increased costs or reductions resulting from Taxes, as to which Section 2.15 shall govern.

(b) If any Lender or Issuing Bank determines that any Change in Law regarding capital requirements has the effect of reducing the rate of return on such Lender's or Issuing Bank's capital or on the capital of such Lender's or Issuing Bank's holding company, if any, as a consequence of this Agreement or the Loans made by, or participations in Letters of Credit by such Lender, or the Letters of Credit issued by such Issuing Bank, to a level below that which such Lender or Issuing Bank or such Lender's or Issuing Bank's holding company could have achieved but for such Change in Law (taking into consideration such Lender's or Issuing Bank's policies and the policies of

such Lender's or Issuing Bank's holding company with respect to capital adequacy), then, from time to time upon request of such Lender or Issuing Bank, the Borrower will pay to such Lender or Issuing Bank, as the case may be, such additional amount or amounts as will compensate such Lender or Issuing Bank or such Lender's or Issuing Bank's holding company for any such reduction actually suffered.

(c) A certificate of a Lender or an Issuing Bank setting forth the amount or amounts necessary to compensate such Lender or Issuing Bank or its holding company in reasonable detail, as the case may be, as specified in paragraph (a) or (b) of this Section delivered to the Borrower shall be conclusive absent manifest error. The Borrower shall pay such Lender or Issuing Bank, as the case may be, the amount shown as due on any such certificate within 15 days after receipt thereof.

(d) Failure or delay on the part of any Lender or Issuing Bank to demand compensation pursuant to this Section shall not constitute a waiver of such Lender's or Issuing Bank's right to demand such compensation, *provided that* the Borrower shall not be required to compensate a Lender or Issuing Bank pursuant to this Section for any increased costs incurred or reductions suffered more than 180 days prior to the date that such Lender or Issuing Bank, as the case may be, notifies the Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender's or Issuing Bank's intention to claim compensation therefor; *provided further* that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the 180-day period referred to above shall be extended to include the period of retroactive effect thereof.

Section 2.14. *Break Funding Payments.* In the event of (a) the payment of any principal of any Eurodollar Loan other than on the last day of an Interest Period applicable thereto (including as a result of an Event of Default), (b) the conversion of any Eurodollar Loan other than on the last day of the Interest Period applicable thereto, (c) the failure to borrow, convert, continue or prepay any Loan on the date specified in any notice delivered pursuant hereto (regardless of whether such notice may be revoked under Section 2.09(e) and is revoked in accordance therewith) or (d) the assignment of any Eurodollar Loan other than on the last day of the Interest Period applicable thereto as a result of a request by the Borrower pursuant to Section 2.17 or Section 9.02(c), then, in any such event, the Borrower shall, after receipt of a written request by any Lender affected by any such event (which request shall set forth in reasonable detail the basis for requesting such amount), compensate each Lender for the loss, cost and expense attributable to such event. In the case of a EurocurrencyEurodollar Loan, such loss, cost or expense to any Lender shall be deemed to be the amount determined by such Lender (it being understood that the deemed amount shall not exceed the actual amount) to be the excess, if any, of (i) the amount of interest that would have accrued on the principal amount of such Loan had such event not occurred, at the Adjusted LIBO Rate that would have been applicable to such Loan, for the period from the date of such event to the last day of the then current Interest Period therefor (or, in the case of a failure to borrow, convert or continue a EurocurrencyEurodollar Loan, for the period that would have been the Interest Period for such Loan), over (ii) the amount of interest that would accrue on such principal amount for such period at the interest rate which such Lender would bid were it to bid, at the commencement of such period, for deposits in Dollars of a comparable amount and period from other banks in the EurocurrencyEurodollar market.



A certificate of any Lender setting forth any amount or amounts that such Lender is entitled to receive pursuant to this Section delivered to the Borrower shall be conclusive absent manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within 15 days after receipt of such demand. Notwithstanding the foregoing, this Section 2.14 will not apply to losses, costs or expenses resulting from Taxes, as to which Section 2.15 shall govern. Each Amendment No. 1 Consenting Lender waives the provisions of this Section 2.14 with respect to the prepayment and/or conversion of its New Term Loans immediately following the Amendment No. 1 Effective Date.

Section 2.15. *Taxes.* (a) Any and all payments by or on account of any obligation of any Loan Party under any Loan Document shall be made free and clear of and without deduction for any Indemnified Taxes or Other Taxes, *provided* that if the applicable withholding agent shall be required by applicable Requirements of Law (as determined in the good faith discretion of the applicable withholding agent) to deduct any Indemnified Taxes or Other Taxes from such payments, then (i) the amount payable by the applicable Loan Party shall be increased as necessary so that after all required deductions have been made (including deductions applicable to additional amounts payable under this Section) the applicable Lender (or, in the case of any amount received by the Administrative Agent for its own account, the Administrative Agent) receives an amount equal to the sum it would have received had no such deductions been made, (ii) the applicable withholding agent shall make such deductions and (iii) the applicable withholding agent shall timely pay the full amount deducted to the relevant Governmental Authority in accordance with applicable Requirements of Law.

(b) Without limiting the provisions of paragraph (a) above, the Borrower shall timely pay any Other Taxes to the relevant Governmental Authority in accordance with Requirements of Law.

(c) The Borrower shall indemnify the Administrative Agent and each Lender, within 30 days after written demand therefor, for the full amount of any Indemnified Taxes payable by the Administrative Agent or such Lender, as the case may be, on or with respect to any payment by or on account of any obligation of any Loan Party under any Loan Document and any Other Taxes (including Indemnified Taxes or Other Taxes imposed or asserted on or attributable to amounts payable under this Section) and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes or Other Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate setting forth in reasonable detail the basis and calculation of the amount of such payment or liability delivered to the Borrower by a Lender, or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(d) As soon as practicable after any payment of Indemnified Taxes or Other Taxes by a Loan Party to a Governmental Authority, the Borrower shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(e) Each Lender shall, at such times as are reasonably requested by Borrower or the Administrative Agent, provide Borrower and the Administrative Agent with any properly completed and executed documentation prescribed by applicable Requirements of Law, or reasonably requested by Borrower or the Administrative Agent, certifying as to any entitlement of such Lender to an exemption from, or reduction in, any withholding Tax with respect to any payments to be made to such Lender under the Loan Documents (including, in the case of a Lender seeking exemption from the withholding imposed under FATCA, any documentation necessary to prevent such withholding). Each such Lender shall, whenever a lapse in time or change in circumstances renders such documentation expired, obsolete or inaccurate in any material respect, deliver promptly to Borrower and the Administrative Agent updated or other appropriate documentation (including any new documentation reasonably requested by the applicable withholding agent) or promptly notify Borrower and the Administrative Agent of its inability to do so. Unless the applicable withholding agent has received forms or other documents satisfactory to it indicating that payments under any Loan Document to or for a Lender are not subject to withholding tax or are subject to such Tax at a rate reduced by an applicable tax treaty, Borrower, Administrative Agent or other applicable withholding agent shall withhold amounts required to be withheld by applicable Requirements of Law from such payments at the applicable statutory rate.

Without limiting the generality of the foregoing:

(i) Each Lender that is a United States person (as defined in Section 7701(a)(30) of the Code) shall deliver to Borrower and the Administrative Agent on or before the date on which it becomes a party to this Agreement two properly completed and duly signed original copies of Internal Revenue Service Form W-9 (or any successor form) certifying that such Lender is exempt from U.S. federal backup withholding.

(ii) Each Lender that is not a United States person (as defined in Section 7701(a)(30) of the Code) shall deliver to Borrower and the Administrative Agent on or before the date on which it becomes a party to this Agreement (and from time to time thereafter when required by any Requirements of Law or upon the reasonable request of Borrower or the Administrative Agent) whichever of the following is applicable:

(A) two duly completed copies of Internal Revenue Service Form W-8BEN or W-8BEN-E (or any successor forms) claiming eligibility for benefits of an income tax treaty to which the United States of America is a party,

(B) two duly completed copies of Internal Revenue Service Form W-8ECI (or any successor forms),

(C) in the case of a Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate, in substantially the form of Exhibit P (any such certificate a “**United States Tax Compliance Certificate**”), or any other form approved by the Administrative Agent, to the effect that such Lender is

not (1) a “bank” within the meaning of Section 881(c)(3)(A) of the Code, (2) a “10 percent shareholder” of a Borrower within the meaning of Section 881(c)(3)(B) of the Code, or (3) a “controlled foreign corporation” described in Section 881(c)(3)(C) of the Code, and that no payments in connection with the Loan Documents are effectively connected with such Lender’s conduct of a U.S. trade or business and (y) two duly completed copies of Internal Revenue Service Form W-8BEN-E (or any successor forms),

(D) to the extent a Lender is not the beneficial owner (for example, where the Lender is a partnership, or is a Participant holding a participation granted by a participating Lender), Internal Revenue Service Form W-8IMY (or any successor forms) of the Lender, accompanied by a Form W-8ECI, W-8BEN or W-8BEN-E, United States Tax Compliance Certificate, Form W-9, Form W-8IMY (or other successor forms) or any other required information from each beneficial owner, as applicable (*provided* that, if the Lender is a partnership (and not a participating Lender) and one or more beneficial owners are claiming the portfolio interest exemption, the United States Tax Compliance Certificate shall be provided by such Lender on behalf of such beneficial owner(s)), or

(E) any other form prescribed by applicable Requirements of Law as a basis for claiming exemption from or a reduction in U.S. federal withholding tax duly completed together with such supplementary documentation as may be prescribed by applicable Requirements of Law to permit Borrower and the Administrative Agent to determine the withholding or deduction required to be made.

Each Lender shall, from time to time after the initial delivery by such Lender of the forms described above, whenever a lapse in time or change in such Lender’s circumstances renders such forms, certificates or other evidence so delivered expired, obsolete or inaccurate, promptly (1) deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) renewals, amendments or additional or successor forms, properly completed and duly executed by such Lender, together with any other certificate or statement of exemption required in order to confirm or establish such Lender’s status or that such Lender is entitled to an exemption from or reduction in U.S. federal withholding tax or (2) notify Administrative Agent and Borrower of its inability to deliver any such forms, certificates or other evidence.

Notwithstanding any other provision of this clause (e), a Lender shall not be required to deliver any form that such Lender is not legally eligible to deliver.

Each Lender hereby authorizes the Administrative Agent to deliver to the Loan Parties and to any successor Administrative Agent any documentation provided by such Lender to the Administrative Agent pursuant to this clause (e).

(f) If the Borrower determines in good faith that a reasonable basis exists for contesting any taxes for which indemnification has been demanded hereunder, the Administrative Agent or the relevant Lender, as applicable, shall cooperate with the Borrower in a reasonable challenge of such taxes if so requested by the Borrower, *provided* that (a) the Administrative Agent or such Lender determines in its reasonable discretion that it would not be prejudiced by cooperating in such challenge, (b) the Borrower pays all related expenses of the Administrative Agent or such Lender, as applicable and (c) the Borrower indemnifies the Administrative Agent or such Lender, as applicable, for any liabilities or other costs incurred by such party in connection with such challenge. The Administrative Agent or a Lender shall claim any refund that it determines is reasonably available to it, unless it concludes in its reasonable discretion that it would be adversely affected by making such a claim. If the Administrative Agent or a Lender determines, in its reasonable discretion, that it has received a refund of any Indemnified Taxes or Other Taxes as to which it has been indemnified by the Borrower or with respect to which the Borrower has paid additional amounts pursuant to this Section, it shall pay over such refund to the Borrower (but only to the extent of indemnity payments made, or additional amounts paid, by the Borrower under this Section with respect to the Indemnified Taxes or Other Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of the Administrative Agent or such Lender and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund), *provided that* the Borrower, upon the request of the Administrative Agent or such Lender, agrees promptly to repay the amount paid over to the Borrower (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) to the Administrative Agent or such Lender in the event the Administrative Agent or such Lender is required to repay such refund to such Governmental Authority. The Administrative Agent or such Lender, as the case may be, shall, at the Borrower's request, provide the Borrower with a copy of any notice of assessment or other evidence of the requirement to repay such refund received from the relevant taxing authority (*provided that* the Administrative Agent or such Lender may delete any information therein that the Administrative Agent or such Lender deems confidential). Notwithstanding anything to the contrary, this Section shall not be construed to require the Administrative Agent or any Lender to make available its tax returns (or any other information relating to taxes which it deems confidential).

(g) The agreements in this Section 2.15 shall survive the termination of this Agreement and the payment of the Loans and all other amounts payable hereunder.

(h) For purposes of this Section 2.15, the term "Lender" shall include any Issuing Bank.

(i) For purposes of FATCA, from and after the Restatement Effective Date, the Borrower and the Administrative Agent shall continue to treat (and the Lenders hereby authorize the Administrative Agent to continue to treat) this Agreement and the Loans (including, following the Escrow Assumption, the Escrow Term Loans) as not qualifying as "grandfathered obligations" within the meaning of Treasury Regulation Section 1.1474-2(b)(i).

Section 2.16. *Payments Generally; Pro Rata Treatment; Sharing of Setoffs.* (a) The Borrower shall make each payment required to be made by it under any Loan

Document (whether of principal, interest, fees or reimbursement of LC Disbursements, or of amounts payable under Section 2.13, 2.14 or 2.15, or otherwise) prior to the time expressly required hereunder or under such other Loan Document for such payment (or, if no such time is expressly required, prior to 2:00 p.m., New York City time), on the date when due, in immediately available funds, without condition or deduction for any counterclaim, recoupment or setoff. Any amounts received after such time on any date may, in the discretion of the Administrative Agent, be deemed to have been received on the next succeeding Business Day for purposes of calculating interest thereon. All such payments shall be made to such account as may be specified by the Administrative Agent, except payments to be made directly to any Issuing Bank shall be made as expressly provided herein and except that payments pursuant to Sections 2.13, 2.14, 2.15 and 9.03 shall be made directly to the Persons entitled thereto and payments pursuant to other Loan Documents shall be made to the Persons specified therein. The Administrative Agent shall distribute any such payments received by it for the account of any other Person to the appropriate recipient promptly following receipt thereof. If any payment (other than payments on the Eurodollar Loans) under any Loan Document shall be due on a day that is not a Business Day, the date for payment shall be extended to the next succeeding Business Day. If any payment on a Eurodollar Loan becomes due and payable on a day other than a Business Day, the maturity thereof shall be extended to the next succeeding Business Day unless the result of such extension would be to extend such payment into another calendar month, in which event such payment shall be made on the immediately preceding Business Day. In the case of any payment of principal pursuant to the preceding two sentences, interest thereon shall be payable at the then applicable rate for the period of such extension. All payments under each Loan Document shall be made in dollars.

(b) If at any time insufficient funds are received by and available to the Administrative Agent to pay fully all amounts of principal, unreimbursed LC Disbursements, interest and fees then due hereunder, such funds shall be applied *first*, towards payment of interest and fees then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of interest and fees then due to such parties, and *second*, towards payment of principal and unreimbursed LC Disbursements then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of principal and unreimbursed LC Disbursements then due to such parties.

(c) If any Lender shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of any principal of or interest on any Class of its Loans or participations in LC Disbursements resulting in such Lender receiving payment of a greater proportion of the aggregate amount of its Loans of such Class and participations in LC Disbursements and accrued interest thereon than the proportion received by any other Lender, then the Lender receiving such greater proportion shall purchase (for cash at face value) participations in the Loans of such Class and participations in LC Disbursements of other Lenders to the extent necessary so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Loans of such Class and participations in LC Disbursements; *provided* that (i) if any such participations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations shall be rescinded and the purchase price restored to the extent of such recovery, without interest and (ii) the provisions of this paragraph shall

not be construed to apply to (A) any payment made by the Borrower pursuant to and in accordance with the express terms of this Agreement (including the application of funds arising from the existence of a Defaulting Lender), (B) any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Loans or participations in LC Disbursements to any assignee or participant or (C) any disproportionate payment obtained by a Lender of any Class as a result of the extension by Lenders of the maturity date or expiration date of some but not all Loans or Revolving Commitments of that Class or any increase in the Applicable Rate in respect of Loans of Lenders that have consented to any such extension. The Borrower consents to the foregoing and agrees, to the extent it may effectively do so under applicable law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against the Borrower rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of the Borrower in the amount of such participation.

(d) Unless the Administrative Agent shall have received notice from the Borrower prior to the date on which any payment is due to the Administrative Agent for the account of the Lenders or the Issuing Banks hereunder that the Borrower will not make such payment, the Administrative Agent may assume that the Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption and in its sole discretion, distribute to the Lenders or Issuing Banks, as the case may be, the amount due. In such event, if the Borrower has not in fact made such payment, then each of the Lenders or Issuing Banks, as the case may be, severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender or Issuing Bank with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent, at the greater of the Federal Funds Effective Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation.

Section 2.17. *Mitigation Obligations; Replacement of Lenders.* (a) If any Lender requests compensation under Section 2.13, or if the Borrower is required to pay any additional amount to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.15 or any event gives rise to the operation of Section 2.20, then such Lender shall use reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or its participation in any Letter of Credit affected by such event, or to assign and delegate its rights and obligations hereunder to another of its offices, branches or Affiliates, if, in the judgment of such Lender, such designation or assignment and delegation (i) would eliminate or reduce amounts payable pursuant to Section 2.13 or 2.15 or mitigate the applicability of Section 2.20, as the case may be, and (ii) would not subject such Lender to any unreimbursed cost or expense reasonably deemed by such Lender to be material and would not be inconsistent with the internal policies of, or otherwise be disadvantageous in any material economic, legal or regulatory respect to, such Lender.

(b) If (i) any Lender requests compensation under Section 2.13 or gives notice under Section 2.20, (ii) the Borrower is required to pay any additional amount to any Lender or to any Governmental Authority for the account of any Lender pursuant to Section 2.15 or (iii) any Lender is a Defaulting Lender, then the Borrower may, at its

sole expense and effort, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in Section 9.04), all its interests, rights and obligations under this Agreement and the other Loan Documents to an Eligible Assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment and delegation); *provided that* (A) the Borrower shall have received the prior written consent of the Administrative Agent to the extent such consent would be required under Section 9.04(b) for an assignment of Loans or Commitments, as applicable (and if a Revolving Commitment is being assigned and delegated, each Issuing Bank, which consents, in each case, shall not unreasonably be withheld or delayed, (B) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans and unreimbursed participations in LC Disbursements, accrued but unpaid interest thereon, accrued but unpaid fees and all other amounts payable to it hereunder from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts), (C) the Borrower or such assignee shall have paid (unless waived) to the Administrative Agent the processing and recordation fee specified in Section 9.04(b)(ii) and (D) in the case of any such assignment resulting from a claim for compensation under Section 2.13, or payments required to be made pursuant to Section 2.15 or a notice given under Section 2.20, such assignment will result in a material reduction in such compensation or payments. A Lender shall not be required to make any such assignment and delegation if, prior thereto, as a result of a waiver by such Lender or otherwise (including as a result of any action taken by such Lender under paragraph (a) above), the circumstances entitling the Borrower to require such assignment and delegation cease to apply. Each party hereto agrees that an assignment required pursuant to this paragraph may be effected pursuant to an Assignment and Assumption executed by the Borrower, the Administrative Agent and the assignee and that the Lender required to make such assignment need not be a party thereto.

Section 2.18. *Incremental Credit Extensions.* (a) (i) At any time and from time to time after the Restatement Effective Date, subject to the terms and conditions set forth herein, the Borrower may, by notice to the Administrative Agent (whereupon the Administrative Agent shall promptly make available such notice to each of the Lenders), request to effect one or more additional revolving credit facility tranches hereunder (or an increase of the Revolving Commitments hereunder) (“**Incremental Revolving Facilities**”) from Additional Revolving Lenders; *provided that* at the time of each such request and upon the effectiveness of each Incremental Revolving Facility Amendment, (A) no Default shall have occurred and be continuing or shall result therefrom, (B) the Borrower shall be in compliance on a Pro Forma Basis with the Financial Performance Covenants recomputed as of the last day of the most-recently ended Test Period for which financial statements are available (calculated assuming that such Incremental Revolving Facility is fully drawn), (C) the Borrower shall have delivered a certificate of a Financial Officer to the effect set forth in clauses (A) and (B) above, together with reasonably detailed calculations demonstrating compliance with clause (B) above (which calculations shall, if made as of the last day of any fiscal quarter of the Borrower for which the Borrower has not delivered to the Administrative Agent the financial statements and Compliance Certificate required to be delivered by Section 5.01(a) or (b) and Section 5.01(d), respectively, be accompanied by a reasonably detailed calculation of Consolidated EBITDA and Consolidated Interest Expense for the relevant period),

(D) such Incremental Revolving Facility may be secured on a *pari passu* basis with the Loans, (E) the interest rate margins, rate floors, fees, premiums and maturity applicable to any Incremental Revolving Facility shall be determined by the Borrower and the lenders thereunder, provided that no Incremental Revolving Facility shall mature prior to the Revolving Maturity Date or require any scheduled amortization or mandatory commitment reductions prior to the Revolving Maturity Date, (F) any Incremental Revolving Facility Amendment shall be on the terms and pursuant to documentation to be determined by the Borrower and the Additional Revolving Lenders providing the applicable Incremental Revolving Facilities, (G) any Incremental Revolving Facility may be provided in any currency as mutually agreed among the Administrative Agent, the Borrower and the Additional Revolving Lenders and (H) in the case of an increase in the Revolving Commitments hereunder, the maturity date of such increase in the Revolving Commitment shall be the Revolving Maturity Date, such increase in the Revolving Commitment shall require no scheduled amortization or mandatory commitment reduction prior to the Revolving Maturity Date and shall be on the same terms governing the Revolving Commitments pursuant to this Agreement; *provided* that to the extent such terms and documentation are not consistent with this Agreement (except to the extent permitted by clause (E) or (G) above), they shall be reasonably satisfactory to the Administrative Agent; *provided, further*, that no Issuing Bank shall be required to act as “issuing bank” under any such Incremental Revolving Facility without its written consent. Each Incremental Revolving Facility shall be in a minimum principal amount of \$10,000,000 and integral multiples of \$1,000,000 in excess thereof; *provided* that such amount may be less than \$10,000,000 if such amount represents all the remaining availability under the Incremental Cap.

(ii) At any time and from time to time after the Restatement Effective Date, subject to the terms and conditions set forth herein, the Borrower may, by notice to the Administrative Agent (whereupon the Administrative Agent shall promptly make available such notice to each of the Lenders), request to effect one or more additional tranches of term loans hereunder or (so long as the proviso to subclause (ii)(E) below does not apply) increases in the amount of ~~New~~ Term B-1 Loans (“**Incremental Term Facilities**”) from one or more Additional Term Lenders; *provided* that at the time of each such request and upon the effectiveness of each Incremental Term Facility Amendment, (A) no Default shall have occurred and be continuing or shall result therefrom, (B) the Borrower shall be in compliance on a Pro Forma Basis with the Financial Performance Covenants recomputed as of the last day of the most-recently ended Test Period for which financial statements are available, (C) the Borrower shall have delivered a certificate of a Financial Officer to the effect set forth in clauses (A) and (B) above, together with reasonably detailed calculations demonstrating compliance with clause (B) above (which calculations shall, if made as of the last day of any fiscal quarter of the Borrower for which the Borrower has not delivered to the Administrative Agent the financial statements and Compliance Certificate required to be delivered by Section 5.01(a) or (b) and Section 5.01(d), respectively, be accompanied by a reasonably detailed calculation of Consolidated EBITDA and Consolidated Interest Expense for the relevant period), (D) the maturity date of any term loans incurred pursuant to any Incremental Term Facility shall not be earlier than the Term Maturity Date and such Incremental Term Facility shall not have a Weighted Average Life to



Maturity shorter than the Weighted Average Life to Maturity of the Term Loans, (E) the interest rate margins, rate floors, fees, premiums, funding discounts and, subject to clause (D), the maturity and amortization schedule for any term loans incurred pursuant to any Incremental Term Facility shall be determined by the Borrower and the Additional Term Lenders; provided that in the event that the interest rate margins for any term loans incurred pursuant to any Incremental Term Facility are higher than the interest rate margins for the ~~New~~ Term B-1 Loans by more than 50 basis points, then the interest rate margins for the ~~New~~ Term B-1 Loans shall be increased to the extent necessary so that such interest rate margins are equal to the interest rate margins for such term loans incurred pursuant to such Incremental Term Facility minus 50 basis points; *provided, further* that, in determining the interest rate margins applicable to the term loans incurred pursuant to such Incremental Term Facility and the ~~New~~ Term B-1 Loans (x) original issue discount (“OID”) or upfront fees (which shall be deemed to constitute like amounts of OID) payable by Borrower to the Term Lenders or any Additional Term Lenders in the initial primary syndication thereof shall be included (with OID being equated to interest based on assumed four-year life to maturity), (y) customary arrangement or commitment fees payable to the Lead Arranger (or its affiliates) in connection with this Agreement or to one or more arrangers (or their affiliates) of any Incremental Term Facility shall be excluded and (z) if the Incremental Term Facility includes an interest rate floor greater than the interest rate floor applicable to the ~~New~~ Term B-1 Loans, such increased amount shall be equated to interest margin for purposes of determining whether an increase to the applicable interest margin for the ~~New~~ Term B-1 Loans shall be required, to the extent an increase in the interest rate floor in the ~~New~~ Term B-1 Loans would cause an increase in the interest rate then in effect, and in such case the interest rate floor (but not the interest rate margin) applicable to the ~~New~~ Term B-1 Loans shall be increased by such increased amount, (F) the term loans incurred pursuant to any Incremental Term Facility may be secured by Liens on the Collateral on a *pari passu* or junior basis with respect to the Liens on the Collateral securing the other Loans and Commitments hereunder (*provided* that to the extent such term loans are secured by junior Liens the applicable parties shall have entered into a Junior Lien Intercreditor Agreement), (G) any Incremental Term Facility Amendment shall be on the terms and pursuant to documentation to be determined by the Borrower and the Additional Term Lenders providing the applicable Incremental Term Facilities and (H) any Incremental Term Facility may be provided in any currency as mutually agreed among the Administrative Agent, the Borrower and the Additional Term Lenders; *provided* that to the extent such terms and documentation are not consistent with this Agreement (except to the extent permitted by clauses (D), (E), (F) or (H) above), they shall be reasonably satisfactory to the Administrative Agent. Each Incremental Term Facility shall be in a minimum principal amount of \$25,000,000 and integral multiples of \$1,000,000 in excess thereof; *provided* that such amount may be less than \$25,000,000 if such amount represents all the remaining availability under the Incremental Cap.

(iii) Notwithstanding anything to the contrary herein, the sum of (i) the aggregate amount of commitments in respect of the Incremental Revolving

Facilities effected after the Restatement Effective Date, (ii) the aggregate principal amount of all Incremental Term Facilities incurred after the Restatement Effective Date, (iii) the aggregate principal amount of all secured Indebtedness incurred after the Restatement Effective Date pursuant to Section 6.01(a)(viii) and (iv) the aggregate principal amount of all Additional Notes issued after the Restatement Effective Date pursuant to Section 6.01(a)(xxii) shall not exceed \$200,000,000 (the maximum amount referred to in this clause (iii), the “**Incremental Cap**”). Notwithstanding anything herein to the contrary, no existing Lender will be required to participate in any Incremental Revolving Facility or Incremental Term Facility without its consent. For the avoidance of doubt, the assumption of the Escrow Term Loans on the Escrow Assumption Date shall not be deemed an incurrence of Incremental Revolving Facilities or Incremental Term Facilities pursuant to this Section 2.18.

(b) (i) Each notice from the Borrower pursuant to this Section shall set forth the requested amount of the relevant Incremental Revolving Facility or Incremental Term Facility.

(ii) Commitments in respect of any Incremental Revolving Facility shall become Commitments under this Agreement pursuant to an amendment (an “**Incremental Revolving Facility Amendment**”) to this Agreement and, as appropriate, the other Loan Documents, executed by the Borrower, the applicable Additional Revolving Lenders and the Administrative Agent. Incremental Revolving Facilities may be provided, subject to the prior written consent of the Borrower (not to be unreasonably withheld), by any existing Lender (it being understood that no existing Lender shall have the right to participate in any Incremental Revolving Facility or, unless it agrees, be obligated to participate in any Incremental Revolving Facility) or by any Additional Revolving Lender. An Incremental Revolving Facility Amendment may, without the consent of any other Lenders, effect such amendments to any Loan Documents as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent, to effect the provisions of this Section (including to provide for the issuance of letters of credit and swingline loans thereunder and to provide for the treatment of defaulting lenders). The effectiveness of any Incremental Revolving Facility Amendment shall, unless otherwise agreed to by the Administrative Agent and the Additional Revolving Lenders, be subject to the satisfaction on the date thereof (each, an “**Incremental Revolving Facility Closing Date**”) of each of the conditions set forth in Section 4.02 (it being understood that all references to “the date of such Borrowing” (or other similar reference) in Section 4.02 shall be deemed to refer to the Incremental Revolving Facility Closing Date) and, to the extent reasonably requested by the Administrative Agent, receipt by the Administrative Agent of legal opinions, board resolutions, officers’ certificates and/or reaffirmation agreements consistent with those delivered on the Restatement Effective Date under Section 4.01 (other than changes to such legal opinions resulting from a change in law, change in fact or change to counsel’s form of opinion reasonably satisfactory to the Administrative Agent).

(iii) Commitments in respect of any Incremental Term Facility shall become Commitments under this Agreement pursuant to an amendment (an “**Incremental Term Facility Amendment**”) to this Agreement and, as appropriate, the other Loan Documents executed by the Borrower, the applicable Additional Term Lenders and the Administrative Agent. Incremental Term Facilities may be provided, subject to the prior written consent of the Borrower (not to be unreasonably withheld), by any existing Lender (it being understood that no existing Lender shall have any right to participate in any Incremental Term Facility or, unless it agrees, be obligated to provide any Incremental Term Facilities) or by any Additional Term Lender. An Incremental Term Facility Amendment may, without the consent of any other Lenders, effect such amendments to any Loan Documents as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent, to effect the provisions of this Section. The effectiveness of any Incremental Term Facility Amendment shall, unless otherwise agreed to by the Administrative Agent and the Additional Term Lenders, be subject to the satisfaction on the date thereof (each, an “**Incremental Term Facility Closing Date**”) of each of the conditions set forth in Section 4.02 (it being understood that all references to “the date of such Borrowing” (or other similar reference) in Section 4.02 shall be deemed to refer to the Incremental Term Facility Closing Date) and, to the extent reasonably requested by the Administrative Agent, receipt by the Administrative Agent of legal opinions, board resolutions, officers’ certificates and/or reaffirmation agreements consistent with those delivered on the Restatement Effective Date under Section 4.01 (other than changes to such legal opinions resulting from a change in law, change in fact or change to counsel’s form of opinion reasonably satisfactory to the Administrative Agent).

(c) (i) Upon each increase in the Revolving Commitments pursuant to this Section, each Revolving Lender immediately prior to such increase will automatically and without further act be deemed to have assigned to each Additional Revolving Lender providing a portion of such increase (each a “**Revolving Commitment Increase Lender**”), and each such Revolving Commitment Increase Lender will automatically and without further act be deemed to have assumed, a portion of such Revolving Lender’s participations hereunder in outstanding Letters of Credit such that, after giving effect to such increase and each such deemed assignment and assumption of participations, the percentage of the aggregate outstanding participations hereunder in Letters of Credit held by each Revolving Lender (including each such Revolving Commitment Increase Lender) will equal such Revolving Lender’s Applicable Percentage. If, on the date of such increase, there are any Revolving Loans outstanding, such Revolving Loans shall, upon the effectiveness of the applicable Incremental Revolving Facility, be prepaid from the proceeds of Revolving Loans made under such Incremental Revolving Facility so that Revolving Loans are thereafter held by the Revolving Lenders according to their Applicable Percentage (after giving effect to the increase in Revolving Commitments), which prepayment shall be accompanied by accrued interest on the Revolving Loans being prepaid and any costs incurred by any Revolving Lender in accordance with Section 2.13. The Administrative Agent and the Lenders hereby agree that the minimum borrowing, pro rata borrowing, pro rata payment requirements and notice requirements contained elsewhere in this Agreement shall not apply to the transactions effected pursuant to the immediately preceding sentence.

(d) Upon each Incremental Term Facility Closing Date pursuant to this Section, each Additional Term Lender participating in the applicable Incremental Term Facility shall make an additional term loan to the Borrower in a principal amount equal to such Additional Term Lender's commitment in respect of such Incremental Term Facility. Any such term loan shall be a "Term Loan" for all purposes of this Agreement and the other Loan Documents.

(e) This Section 2.18 shall supersede any provisions in Section 2.16 or Section 9.02 to the contrary.

Section 2.19. *Refinancing Amendments; Maturity Extension.* (a) At any time after the Restatement Effective Date, the Borrower may obtain, from any Lender or any Additional Lender, Credit Agreement Refinancing Indebtedness in respect of (a) all or any portion of the Term Loans (which for purposes of this sentence will be deemed to include any Incremental Term Loans or Other Term Loans) or (b) all or any portion of the Revolving Loans (or unused Revolving Commitments) then outstanding under this Agreement (which for purposes of this clause (b) will be deemed to include any then outstanding Incremental Revolving Loans, Incremental Revolving Commitments, Other Revolving Loans and Other Revolving Commitments), in the form of (x) Other Term Loans or Other Term Commitments or (y) Other Revolving Loans or Other Revolving Commitments, as the case may be, in each case pursuant to a Refinancing Amendment; *provided* that such Credit Agreement Refinancing Indebtedness (i) may be secured by Liens on the Collateral on a *pari passu* or junior basis with respect to the Liens on the Collateral securing the other Loans and Commitments hereunder (*provided* that to the extent such term loans are secured by junior Liens the applicable parties shall have entered into a Junior Lien Intercreditor Agreement), (ii) will have such pricing and optional prepayment terms as may be agreed by the Borrower and the Lenders thereof (*provided*, that such Credit Agreement Refinancing Indebtedness may participate on a pro rata basis or on a less than pro rata basis (but not on a greater than pro rata basis) in any voluntary or mandatory prepayments hereunder, as specified in the applicable Refinancing Amendment), (iii) (x) with respect to any Other Revolving Loans or Other Revolving Commitments, will have a maturity date that is not prior to the maturity date of the Revolving Loans (or unused Revolving Commitments) being refinanced and (y) with respect to any Other Term Loans or Other Term Commitments, will have a maturity date that is not prior to the maturity date of, and will have a Weighted Average Life to Maturity that is not shorter than, the Term Loans being refinanced, (iv) the proceeds of such Credit Agreement Refinancing Indebtedness shall be applied, substantially concurrently with the incurrence thereof, to the prepayment of outstanding Term Loans or reduction of the Revolving Commitments, the Other Revolving Commitments or the commitments under the Incremental Revolving Facility being so refinanced and (v) subject to clause (ii) above, will have terms and conditions that are substantially identical to, or less favorable (taken as a whole) to the investors providing such Credit Agreement Refinancing Indebtedness than, the Refinanced Debt; *provided further* that the terms and conditions applicable to such Credit Agreement Refinancing Indebtedness may provide for any additional or different financial or other covenants or other provisions that are agreed between the Borrower and the Lenders thereof and applicable only during periods after the Latest Maturity Date that is in effect on the date such Credit Agreement Refinancing Indebtedness is issued, incurred or obtained. The effectiveness of any Refinancing Amendment shall be subject to the satisfaction on the date thereof of

each of the conditions set forth in Section 4.02 and, to the extent reasonably requested by the Administrative Agent, receipt by the Administrative Agent of legal opinions, board resolutions, officers' certificates and/or reaffirmation agreements consistent with those delivered on the Restatement Effective Date under Section 4.01 (other than changes to such legal opinions resulting from a change in law, change in fact or change to counsel's form of opinion reasonably satisfactory to the Administrative Agent). Each Class of Credit Agreement Refinancing Indebtedness incurred under this Section 2.19 shall be in an aggregate principal amount that is (x) not less than \$25,000,000 in the case of Other Term Loans or \$5,000,000 in the case of Other Revolving Loans and (y) an integral multiple of \$1,000,000 in excess thereof in each case. Any Refinancing Amendment may provide for the issuance of Letters of Credit for the account of the Borrower pursuant to any Other Revolving Commitments established thereby, on terms substantially equivalent to the terms applicable to Letters of Credit under the Revolving Commitments. The Administrative Agent shall promptly notify each Lender as to the effectiveness of each Refinancing Amendment. Each of the parties hereto hereby agrees that, upon the effectiveness of any Refinancing Amendment, this Agreement shall be deemed amended to the extent (but only to the extent) necessary to reflect the existence and terms of the Credit Agreement Refinancing Indebtedness incurred pursuant thereto (including any amendments necessary to treat the Loans and Commitments subject thereto as Other Revolving Loans, Other Term Loans, Other Revolving Commitments and/or Other Term Commitments). Any Refinancing Amendment may, without the consent of any other Lenders, effect such amendments to this Agreement and the other Loan Documents as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent and the Borrower, to effect the provisions of this Section. In addition, if so provided in the relevant Refinancing Amendment and with the consent of each Issuing Bank, participations in Letters of Credit expiring on or after the Revolving Maturity Date shall be reallocated from Lenders holding Revolving Commitments to Lenders holding extended revolving commitments in accordance with the terms of such Refinancing Amendment; provided, however, that such participation interests shall, upon receipt thereof by the relevant Lenders holding Revolving Commitments, be deemed to be participation interests in respect of such Revolving Commitments and the terms of such participation interests (including, without limitation, the commission applicable thereto) shall be adjusted accordingly.

(b) At any time after the Restatement Effective Date, the Borrower and any Lender may agree, by notice to the Administrative Agent (each such notice, an "**Extension Notice**"), to extend the maturity date of such Lender's Revolving Commitments and/or Term Loans to the extended maturity date specified in such Extension Notice.

(c) This Section 2.19 shall supersede any provisions in Section 2.16 or Section 9.02 to the contrary.

Section 2.20. *Illegality.* If any Lender determines that any law has made it unlawful, or that any Governmental Authority has asserted that it is unlawful, for any Lender to make, maintain or fund Loans whose interest is determined by reference to the Adjusted LIBO Rate, or to determine or charge interest rates based upon the Adjusted LIBO Rate, then, on notice thereof by such Lender to the Borrower through the Administrative Agent, (a) any obligation of such Lender to make or continue Eurodollar

Loans or to convert ABR Loans to Eurodollar Loans shall be suspended, and (b) if such notice asserts the illegality of such Lender making or maintaining ABR Loans the interest rate on which is determined by reference to the Adjusted LIBO Rate component of the Alternate Base Rate, the interest rate on such ABR Loans of such Lender shall, if necessary to avoid such illegality, be determined by the Administrative Agent without reference to the Adjusted LIBO Rate component of the Alternate Base Rate, in each case until such Lender notifies the Administrative Agent and the Borrower that the circumstances giving rise to such determination no longer exist. Upon receipt of such notice, (x) the Borrower shall, upon three Business Days' notice from such Lender (with a copy to the Administrative Agent), prepay or, if applicable, convert all Eurodollar Loans of such Lender to ABR Loans (the interest rate on which ABR Loans of such Lender shall, if necessary to avoid such illegality, be determined by the Administrative Agent without reference to the Adjusted LIBO Rate component of the Alternate Base Rate), either on the last day of the Interest Period therefor, if such Lender may lawfully continue to maintain such Eurodollar Loans to such day, or immediately, if such Lender may not lawfully continue to maintain such Eurodollar Loans, and (y) if such notice asserts the illegality of such Lender determining or charging interest rates based upon the Adjusted LIBO Rate, the Administrative Agent shall during the period of such suspension compute the Alternate Base Rate applicable to such Lender without reference to the Adjusted LIBO Rate component thereof until the Administrative Agent is advised in writing by such Lender that it is no longer illegal for such Lender to determine or charge interest rates based upon the Adjusted LIBO Rate. Each Lender agrees to notify the Administrative Agent and the Borrower in writing promptly upon becoming aware that it is no longer illegal for such Lender to determine or charge interest rates based upon the Adjusted LIBO Rate. Upon any such prepayment or conversion, the Borrower shall also pay accrued interest on the amount so prepaid or converted.

Section 2.21 Defaulting *Lenders*. Notwithstanding any provision of this Agreement to the contrary, if any Lender becomes a Defaulting Lender, then the following provisions shall apply for so long as such Lender is a Defaulting Lender:

(a) fees shall cease to accrue on the unfunded portion of the Revolving Commitment of such Defaulting Lender pursuant to Section 2.10(c) (it being understood, for the avoidance of doubt, that the Borrower shall have no obligation to retroactively pay such fees after such Lender ceases to be a Defaulting Lender);

(b) the Revolving Commitment and Revolving Exposure of such Defaulting Lender shall not be included in determining whether the Required Lenders or the Majority in Interest have taken or may take any action hereunder (including any consent to any amendment, waiver or other modification pursuant to Section 9.02); *provided* that this clause (b) shall not apply to the vote of a Defaulting Lender in the case of an amendment, waiver or other modification requiring the consent of such Lender or each Lender affected thereby;

(c) any payment of principal, interest, fees or other amounts received by the Administrative Agent for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to Article 7 or otherwise) or received by the Administrative Agent from a Defaulting Lender pursuant to Article 8 shall be applied at

such time or times as may be determined by the Administrative Agent as follows: *first*, to the payment of any amounts owing by such Defaulting Lender to the Administrative Agent hereunder; *second*, as the Borrower may request (so long as no Default or Event of Default exists), to the funding of any Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement as determined by the Administrative Agent; *third*, if so determined by the Administrative Agent and the Borrower, to be held in a deposit account and released pro rata in order to satisfy such Defaulting Lender's potential future funding obligations with respect to Loans under this Agreement; *fourth*, to the payment of any amounts owing to the Lenders as a result of any judgment of a court of competent jurisdiction obtained by any Lender against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; *fifth*, so long as no Default or Event of Default exists, to the payment of any amounts owing to the Borrower as a result of any judgment of a court of competent jurisdiction obtained by the Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; and *sixth*, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; *provided* that if such payment is a payment of the principal amount of any Loans or LC Disbursements in respect of which such Defaulting Lender has not fully funded its appropriate share, such payment shall be applied solely to pay the Loans of, and LC Disbursements owed to, all non-Defaulting Lenders on a pro rata basis prior to being applied to the payment of any Loans of, or LC Disbursements owed to, such Defaulting Lender until such time as all Loans are held by the Lenders pro rata in accordance with the Revolving Commitments. Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender or to post cash collateral pursuant to this Section 2.21(c) shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto;

(d) if any LC Exposure exists at the time such Lender becomes a Defaulting Lender then:

(i) all or any part of the LC Exposure of such Defaulting Lender shall be reallocated among the non-Defaulting Lenders in accordance with their respective Applicable Percentage but only to the extent the sum of all non-Defaulting Lenders' Revolving Exposure plus such Defaulting Lender's LC Exposure does not exceed the total of all non-Defaulting Lenders' Revolving Commitments; provided that each such reallocation shall be given effect only if, at the date the applicable Lender becomes a Defaulting Lender, no Default or Event of Default exists;

(ii) if the reallocation described in clause (i) above cannot, or can only partially, be effected, the Borrower shall within one Business Day following notice by the Administrative Agent cash collateralize for the benefit of the Issuing Bank only the Borrower's obligations corresponding to such Defaulting Lender's LC Exposure (after giving effect to any partial reallocation pursuant to clause (i) above) in accordance with the procedures set forth in Section 2.22 for so long as such LC Exposure is outstanding;

(iii) if the Borrower cash collateralizes any portion of such Defaulting Lender's LC Exposure pursuant to clause (ii) above, the Borrower shall not be required to pay any fees to such Defaulting Lender pursuant to Section 2.10(d) with respect to such Defaulting Lender's LC Exposure during the period such Defaulting Lender's LC Exposure is cash collateralized;

(iv) if the LC Exposure of the non-Defaulting Lenders is reallocated pursuant to clause (i) above, then the fees payable to the Lenders pursuant to Section 2.10(c) and Section 2.10(d) shall be adjusted in accordance with such non-Defaulting Lenders' Applicable Percentage; and

(v) if all or any portion of such Defaulting Lender's LC Exposure is neither reallocated nor cash collateralized pursuant to clause (i) or (ii) above, then, without prejudice to any rights or remedies of the Issuing Bank or any other Lender hereunder, all fees payable under Section 2.10(d) with respect to such Defaulting Lender's LC Exposure shall be payable to the Issuing Bank until and to the extent that such LC Exposure is reallocated and/or cash collateralized; and

(e) so long as such Lender is a Defaulting Lender, the Issuing Bank shall not be required to issue, amend or increase any Letter of Credit, unless it is satisfied that the related exposure and the Defaulting Lender's then outstanding LC Exposure will be 100% covered by the Revolving Commitments of the non-Defaulting Lenders and/or cash collateral will be provided by the Borrower in accordance with Section 2.21(d), and participating interests in any newly issued or increased Letter of Credit shall be allocated among non-Defaulting Lenders in a manner consistent with Section 2.21(d)(i) (and such Defaulting Lender shall not participate therein).

If (i) a Bankruptcy Event with respect to a Lender Parent of any Lender shall occur following the Restatement Effective Date and for so long as such event shall continue or (ii) the Issuing Bank has a good faith belief that any Lender has defaulted in fulfilling its obligations under one or more other agreements in which such Lender commits to extend credit, the Issuing Bank shall not be required to issue, amend or increase any Letter of Credit, unless the Issuing Bank shall have entered into arrangements with the Borrower or such Lender, satisfactory to the Issuing Bank to defease any risk to it in respect of such Lender hereunder.

In the event that the Administrative Agent, the Borrower and the Issuing Bank each agrees that a Defaulting Lender has adequately remedied all matters that caused such Lender to be a Defaulting Lender, then the LC Exposure of the Lenders shall be readjusted to reflect the inclusion of such Lender's Revolving Commitment and on such date such Lender shall purchase at par such of the Revolving Loans of the other Lenders as the Administrative Agent shall determine may be necessary in order for such Lender to hold such Revolving Loans in accordance with its Applicable Percentage.

*Section 2.22 Letters of Credit.*

(a) *LC Commitment.* (i) Subject to the terms and conditions hereof, the Issuing Bank, in reliance on the agreements of the other Revolving Lenders set forth in Section 2.22(c), agrees to issue letters of credit ("**Letters of Credit**") for the account of



the Borrower (or for the account of any Subsidiary so long as the Borrower and such Subsidiary are co-applicants in respect of such Letter of Credit) on any Business Day during the Revolving Availability Period in such form as may be approved from time to time by the Issuing Bank; provided that the Issuing Bank shall have no obligation to issue any Letter of Credit if, after giving effect to such issuance, (x) the LC Obligations would exceed the LC Commitment, (y) the aggregate amount of the Available Revolving Commitments would be less than zero or (z) subject to Section 9.04(b)(ii) (E), the Applicable Fronting Exposure of such Issuing Bank would exceed its Revolving Commitment. Each Letter of Credit shall, except as provided in Section 2.22(a)(ii) below, expire no later than the earlier of (A) the first anniversary of its date of issuance and (B) the date that is five Business Days prior to the Revolving Maturity Date, provided that any Letter of Credit with a one-year term may provide for the renewal thereof for additional one-year periods (which shall in no event extend beyond the date referred to in clause (B) above).

(ii) If requested by the Borrower and if the Issuing Bank agrees, the Issuing Bank may issue one or more Letters of Credit hereunder, with expiry dates that would occur after the fifth (5th) Business Day prior to the Revolving Maturity Date, based upon the Borrower's agreement to cash collateralize the LC Obligations in accordance with Section 2.22(h). If the Borrower fails to cash collateralize the outstanding LC Obligations in accordance with the requirements of Section 2.22(h), each outstanding Letter of Credit shall automatically be deemed to be drawn in full on such date and the reimbursement obligations of the Borrower set forth in Section 2.22(d) shall be deemed to apply and shall be construed such that the reimbursement obligation is to provide cash collateral in accordance with the requirements of Section 2.22(h).

(iii) The Borrower shall grant to the Administrative Agent for the benefit of the Issuing Bank and the Lenders, pursuant to a collateral agreement, a security interest in all cash, deposit accounts and all balances therein and all proceeds of the foregoing as required to be deposited pursuant to Section 2.22(a)(ii) or Section 2.22(h). Cash collateral shall be maintained in blocked, interest bearing deposit accounts at JPMorgan Chase Bank, N.A. (or any affiliate thereof) (the "**LC Cash Collateral Account**"). All interest on such cash collateral shall be paid to the Borrower upon the Borrower's request, provided that such interest shall first be applied to all outstanding Obligations at such time and the balance shall be distributed to the Borrower.

(iv) The Issuing Bank shall not at any time be obligated to issue any Letter of Credit if such issuance would conflict with, or cause the Issuing Bank or any LC Participant to exceed any limits imposed by, any applicable Requirement of Law.

(b) *Procedure for Issuance of Letter of Credit.* The Borrower may from time to time request that the Issuing Bank issue a Letter of Credit by delivering to the Issuing Bank at its address for notices specified herein an Application therefor, completed to the satisfaction of the Issuing Bank, and such other certificates, documents and other papers and information as the Issuing Bank may reasonably request. Upon receipt of any Application, the Issuing Bank will process such Application and the certificates,

documents and other papers and information delivered to it in connection therewith in accordance with its customary procedures and shall promptly issue the Letter of Credit requested thereby (but in no event shall the Issuing Bank be required to issue any Letter of Credit earlier than three Business Days after its receipt of the Application therefor and all such other certificates, documents and other papers and information relating thereto) by issuing the original of such Letter of Credit to the beneficiary thereof or as otherwise may be agreed to by the Issuing Bank and the Borrower. The Issuing Bank shall furnish a copy of such Letter of Credit to the Borrower promptly following the issuance thereof. The Issuing Bank shall promptly furnish to the Administrative Agent, which shall in turn promptly furnish to the Lenders, notice of the issuance of each Letter of Credit (including the amount thereof).

(c) *LC Participation.* (i) The Issuing Bank irrevocably agrees to grant and hereby grants to each LC Participant, and, to induce the Issuing Bank to issue Letters of Credit, each LC Participant irrevocably agrees to accept and purchase and hereby accepts and purchases from the Issuing Bank, on the terms and conditions set forth below, for such LC Participant's own account and risk an undivided interest equal to such LC Participant's Applicable Percentage in the Issuing Bank's obligations and rights under and in respect of each Letter of Credit and the amount of each draft paid by the Issuing Bank thereunder. Each LC Participant agrees with the Issuing Bank that, if a draft is paid under any Letter of Credit for which the Issuing Bank is not reimbursed in full by the Borrower in accordance with the terms of this Agreement (or in the event that any reimbursement received by the Issuing Bank shall be required to be returned by it at any time), such LC Participant shall pay to the Issuing Bank upon demand at the Issuing Bank's address for notices specified herein an amount equal to such LC Participant's Applicable Percentage of the amount that is not so reimbursed (or is so returned). Each LC Participant's obligation to pay such amount shall be absolute and unconditional and shall not be affected by any circumstance, including (A) any setoff, counterclaim, recoupment, defense or other right that such LC Participant may have against the Issuing Bank, the Borrower or any other Person for any reason whatsoever, (B) the occurrence or continuance of a Default or an Event of Default or the failure to satisfy any of the other conditions specified in Section 4.02, (C) any adverse change in the condition (financial or otherwise) of the Borrower, (D) any breach of this Agreement or any other Loan Document by the Borrower, any other Loan Party or any other LC Participant or (E) any other circumstance, happening or event whatsoever, whether or not similar to any of the foregoing.

(ii) If any amount required to be paid by any LC Participant to the Issuing Bank pursuant to Section 2.22(c) in respect of any unreimbursed portion of any payment made by the Issuing Bank under any Letter of Credit is paid to the Issuing Bank within three Business Days after the date such payment is due, such LC Participant shall pay to the Issuing Bank on demand an amount equal to the product of (A) such amount, times (B) the daily average Federal Funds Effective Rate during the period from and including the date such payment is required to the date on which such payment is immediately available to the Issuing Bank, times (C) a fraction the numerator of which is the number of days that elapse during such period and the denominator of which is 360. If any such amount required to be paid by any LC Participant pursuant to Section 2.22(c) is not made available to the Issuing Bank by such LC Participant within three

Business Days after the date such payment is due, the Issuing Bank shall be entitled to recover from such LC Participant, on demand, such amount with interest thereon calculated from such due date at the Applicable Rate to ABR Revolving Loans. A certificate of the Issuing Bank submitted to any LC Participant with respect to any amounts owing under this Section shall be conclusive in the absence of manifest error.

(iii) Whenever, at any time after the Issuing Bank has made payment under any Letter of Credit and has received from any LC Participant its pro rata share of such payment in accordance with Section 2.22(c), the Issuing Bank receives any payment related to such Letter of Credit (whether directly from the Borrower or otherwise, including proceeds of collateral applied thereto by the Issuing Bank), or any payment of interest on account thereof, the Issuing Bank will distribute to such LC Participant its pro rata share thereof; *provided, however*, that in the event that any such payment received by the Issuing Bank shall be required to be returned by the Issuing Bank, such LC Participant shall return to the Issuing Bank the portion thereof previously distributed by the Issuing Bank to it.

(d) *Reimbursement Obligations of the Borrower.* If any draft is paid under any Letter of Credit, the Borrower shall reimburse the Issuing Bank for the amount of (x) the draft so paid and (y) any taxes, fees, charges or other costs or expenses incurred by the Issuing Bank in connection with such payment, not later than 12:00 Noon, New York City time, on the Business Day immediately following the day that the Borrower receives such notice from the relevant Issuing Bank. Each such payment shall be made to the Issuing Bank at its address for notices referred to herein in Dollars and in immediately available funds. Interest shall be payable on any such amounts from the date on which the relevant draft is paid until payment in full at the rate set forth in (x) until the Business Day next succeeding the date of the relevant notice, Section 2.11(b) and (y) thereafter, Section 2.11(c).

(e) *Obligations Absolute.* The Borrower's obligations under this Section 2.22(e) shall be absolute, unconditional and irrevocable under any and all circumstances and irrespective of any setoff, counterclaim or defense to payment that the Borrower may have or have had against the Issuing Bank, any beneficiary of a Letter of Credit or any other Person. The Borrower also agrees with the Issuing Bank that the Issuing Bank shall not be responsible for, and the Borrower's Reimbursement Obligations under Section 2.22(e) shall not be affected by, among other things, the validity or genuineness of documents or of any endorsements thereon, even though such documents shall in fact prove to be invalid, fraudulent or forged, or any dispute between or among the Borrower and any beneficiary of any Letter of Credit or any other party to which such Letter of Credit may be transferred or any claims whatsoever of the Borrower against any beneficiary of such Letter of Credit or any such transferee or payment by the Issuing Bank under a Letter of Credit against presentation of a draft or other document that does not comply with the terms of such Letter of Credit or any other event or circumstance whatsoever, whether or not similar to any of the foregoing, that might, but for the provisions of this Section, constitute a legal or equitable discharge of, or provide a right of setoff against, the Borrower's obligations hereunder. The Issuing Bank shall not be liable for any error, omission, interruption or delay in transmission, dispatch or delivery

of any message or advice, however transmitted, in connection with any Letter of Credit, except that the foregoing shall not be construed to excuse the Issuing Bank from liability to the Borrower to the extent of any direct damages (as opposed to special, indirect, consequential or punitive damages, claims in respect of which are hereby waived by the Borrower to the extent permitted by applicable law) suffered by the Borrower that are caused by errors or omissions found by a final and nonappealable decision of a court of competent jurisdiction to have resulted from the gross negligence or willful misconduct of the Issuing Bank. The Borrower agrees that any action taken or omitted by the Issuing Bank under or in connection with any Letter of Credit or the related drafts or documents, if done in the absence of gross negligence or willful misconduct, shall be binding on the Borrower and shall not result in any liability of the Issuing Bank to the Borrower; *provided, however*, that in no event shall the Issuing Bank have any liability to any other Person for indirect, special, incidental, consequential or punitive damages (as opposed to direct or actual damages).

*(f) Letters of Credit Payment.* If any draft shall be presented for payment under any Letter of Credit, the Issuing Bank shall promptly notify the Borrower of the date and amount thereof. The responsibility of the Issuing Bank to the Borrower in connection with any draft presented for payment under any Letter of Credit shall, in addition to any payment obligation expressly provided for in such Letter of Credit, be limited to determining that the documents (including each draft) delivered under such Letter of Credit in connection with such presentment are substantially in conformity with such Letter of Credit.

*(g) Applications.* To the extent that any provision of any Application or other agreement submitted by the Borrower to, or entered into by the Borrower with, the applicable Issuing Bank related to any Letter of Credit is inconsistent with the provisions of this Agreement, the provisions of this Agreement shall apply.

*(h) Action in Respect of Letters of Credit.* (i) Not later than the date that is ten (10) Business Days prior to the Revolving Maturity Date, or at any time after the Revolving Maturity Date when the aggregate funds on deposit in the LC Cash Collateral Account shall be less than the amounts required herein, the Borrower shall pay to the Administrative Agent in immediately available funds, at the Administrative Agent's office referred to in Section 9.01, for deposit in the LC Cash Collateral Account described in Section 2.22(a)(ii), the amount required so that, after such payment, the aggregate funds on deposit in the LC Cash Collateral Account are not less than 105% of the sum of all outstanding LC Obligations with an expiration date beyond the Revolving Maturity Date.

(ii) The Administrative Agent may, from time to time after funds are deposited in any LC Cash Collateral Account, apply funds then held in such LC Cash Collateral Account to the payment of any amounts, in accordance with the terms herein, as shall have become or shall become due and payable by the Borrower to the Issuing Bank or Lenders in respect of the LC Obligations. The Administrative Agent shall promptly give written notice of any such application; *provided, however*, that the failure to give such written notice shall not invalidate any such application.

(i) *Designation of Additional Issuing Banks.* The Borrower may, at any time and from time to time, designate as additional Issuing Banks one or more Revolving Lenders that agree, in their sole discretion, to serve in such capacity as provided below. The acceptance by a Revolving Lender of an appointment as an Issuing Bank hereunder shall be evidenced by an agreement, which shall be in form and substance reasonably satisfactory to the Administrative Agent and the Borrower, executed by the Borrower, the Administrative Agent and such designated Revolving Lender and, from and after the effective date of such agreement, (i) such Revolving Lender shall have all the rights and obligations of an Issuing Bank under this Agreement and (ii) references herein to the term “Issuing Bank” shall be deemed to include such Revolving Lender in its capacity as an issuer of Letters of Credit hereunder.

(j) *Termination of an Issuing Bank.* The Borrower may terminate the appointment of any Issuing Bank as an “Issuing Bank” hereunder by providing a written notice thereof to such Issuing Bank, with a copy to the Administrative Agent. Any such termination shall become effective upon the earlier of (i) such Issuing Bank’s acknowledging receipt of such notice and (ii) the fifth Business Day following the date of delivery thereof; provided that no such termination shall become effective unless and until the LC Exposure attributable to Letters of Credit issued by such Issuing Bank (or its Affiliates) shall have been reduced to zero. At the time any such termination shall become effective, the Borrower shall pay all unpaid fees accrued for the account of the terminated Issuing Bank pursuant to Section 2.10(d). Notwithstanding the effectiveness of any such termination, the terminated Issuing Bank shall remain a party hereto and shall continue to have all the rights of an Issuing Bank under this Agreement with respect to Letters of Credit issued by it prior to such termination, but shall not issue any additional Letters of Credit.

(k) *Issuing Bank Reports to the Administrative Agent.* Unless otherwise agreed by the Administrative Agent, each Issuing Bank shall, in addition to its notification obligations set forth elsewhere in this Section, report in writing to the Administrative Agent (i) periodic activity (for such period or recurrent periods as shall be requested by the Administrative Agent) in respect of Letters of Credit issued by such Issuing Bank, including all issuances, extensions, amendments and renewals, all expirations and cancellations and all disbursements and reimbursements, (ii) within five Business Days following the time that such Issuing Bank issues, amends, renews or extends any Letter of Credit, the date of such issuance, amendment, renewal or extension, and the currency and face amount of the Letters of Credit issued, amended, renewed or extended by it and outstanding after giving effect to such issuance, amendment, renewal or extension (and whether the amounts thereof shall have changed), (iii) on each Business Day on which such Issuing Bank makes any LC Disbursement, the date, currency and amount of such LC Disbursement, (iv) on any Business Day on which the Borrower fails to reimburse an LC Disbursement required to be reimbursed to such Issuing Bank on such day, the date of such failure and the currency and amount of such LC Disbursement and (v) on any other Business Day, such other information as the Administrative Agent shall reasonably request as to the Letters of Credit issued by such Issuing Bank.

~~Section 2.23- Reallocation of New Term Loans; Matters Relating to Repayments, Prepayment and Assignments of New Term Loans.~~

~~(A) Exchanges of New Term Loans~~ On the Escrow Assumption Date immediately following the Escrow Assumption, the Initial Term Loans and the Escrow Term Loans of each Lender with any such New Term Loans shall be exchanged at par so that each Lender with any New Term Loans holds New Term Loans that were initially Initial Term Loans and New Term Loans that were initially Escrow Term Loans in the same proportion as each other Lender with New Term Loans. On each date on which any additional New Term Loans are incurred pursuant to any Incremental Term Facility Amendment, immediately following the incurrence, the Initial Term Loans, the Escrow Term Loans and the New Term Loans incurred pursuant to each Incremental Term Facility Amendment of each Lender with any such New Term Loans shall be exchanged at par so that each Lender with any New Term Loans holds New Term Loans that were initially Initial Term Loans, New Term Loans that were initially Escrow Term Loans and New Term Loans incurred pursuant to each Incremental Term Facility Amendment in the same proportion as each other Lender with New Term Loans.

~~(B) Repayments, Prepayments, Extensions and Assignments of New Term Loans.~~ From and after each exchange of New Term Loans pursuant to clause (a) above, all repayments, prepayments, extensions and assignments of New Term Loans pursuant to this Agreement shall consist of a pro rata repayment, prepayment, extension or assignment, as applicable, of New Term Loans that were initially Initial Term Loans, New Term Loans that were initially Escrow Term Loans and New Term Loans that were initially New Term Loans under each previously effective Incremental Term Facility Amendment.

### ARTICLE 3 REPRESENTATIONS AND WARRANTIES

Each of Holdings and the Borrower represents and warrants to the Administrative Agent and each of the Lenders that:

Section 3.01. *Organization; Powers.* Each of Holdings, the Borrower and the Restricted Subsidiaries is duly organized, validly existing and in good standing (to the extent such concept exists in the relevant jurisdictions) under the laws of the jurisdiction of its organization, has the corporate or other organizational power and authority to carry on its business as now conducted and as proposed to be conducted and to execute, deliver and perform its obligations under each Loan Document to which it is a party and to effect the Transactions and, except where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect, is qualified to do business in, and is in good standing in, every jurisdiction where such qualification is required.

Section 3.02. *Authorization; Enforceability.* The Transactions to be entered into by each Loan Party have been duly authorized by all necessary corporate or other action and, if required, action by the holders of such Loan Party's Equity Interests. This Agreement has been duly executed and delivered by each of Holdings and the Borrower and constitutes, and each other Loan Document to which any Loan Party is to be a party, when executed and delivered by such Loan Party, will constitute, a legal, valid and binding obligation of Holdings, the Borrower or such Loan Party, as the case may be, enforceable against it in accordance with its terms, subject to applicable bankruptcy,

insolvency, reorganization, moratorium or other laws affecting creditors' rights generally and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law.

Section 3.03. *Governmental Approvals; No Conflicts.* The Transactions (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority or Regulatory Supervising Organization, except such as have been obtained or made and are in full force and effect and except filings necessary to perfect Liens created under the Loan Documents, (b) will not violate (i) the Organizational Documents of, or (ii) any Requirements of Law applicable to, Holdings, the Borrower or any Restricted Subsidiary, (A) will not violate or result in a default under any indenture or other agreement or instrument binding upon Holdings, the Borrower or any Restricted Subsidiary or their respective assets, or give rise to a right thereunder to require any payment, repurchase or redemption to be made by Holdings, the Borrower or any Restricted Subsidiary, or give rise to a right of, or result in, termination, cancellation or acceleration of any obligation thereunder and (b) will not result in the creation or imposition of any Lien on any asset of Holdings, the Borrower or any Restricted Subsidiary, except Liens created under the Loan Documents, except (in the case of each of clauses (a), (b)(ii) and (c)) to the extent that the failure to obtain or make such consent, approval, registration, filing or action, or such violation, as the case may be, individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect.

Section 3.04. *Financial Condition; No Material Adverse Effect.* (a) The Audited Financial Statements (i) were prepared in accordance with GAAP consistently applied throughout the periods covered thereby, except as otherwise expressly noted therein and (ii) fairly present the financial condition of the Borrower and its consolidated Subsidiaries as of the date thereof and their results of operations for the periods covered thereby in accordance with GAAP consistently applied throughout the periods covered thereby, except as otherwise expressly noted therein.

(b) The unaudited consolidated balance sheet dated March 31, 2017 of the Borrower and the related consolidated statements of income or operations, shareholders' equity and cash flows for the fiscal quarter ended on that date (i) were prepared in accordance with GAAP consistently applied throughout the periods covered thereby, except as otherwise expressly noted therein and (ii) fairly present the financial condition of the Borrower and its consolidated Subsidiaries as of the date thereof and their results of operations for the periods covered thereby, subject, in the case of clauses (i) and (ii), to the absence of footnotes and to normal year-end audit adjustments.

(c) [Reserved.]

(d) Since December 31, 2016, there has been no Material Adverse Effect.

Section 3.05. *Properties.* (a) Each of Holdings, the Borrower and the Restricted Subsidiaries has good title to, or valid leasehold interests in, all its real and personal property material to its business, if any (including the Mortgaged Properties), (i) free and clear of all Liens except for Liens permitted by Section 6.02 and (ii) except for minor defects in title that do not interfere with its ability to conduct its business as

currently conducted or as proposed to be conducted or to utilize such properties for their intended purposes, in each case, except where the failure to do so could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(b) As of the Restatement Effective Date, after giving effect to the Transactions to be consummated on or prior to the Restatement Effective Date, none of Holdings, the Borrower or any Restricted Subsidiary owns any real property.

Section 3.06. *Litigation and Environmental Matters.* (a) Except for routine examinations conducted by a Regulatory Supervising Organization or Governmental Authority in the ordinary course of the business of the Borrower and its Subsidiaries, there is no claim, action, suit, investigation or proceeding pending against, or, to the knowledge of Holdings or the Borrower, threatened in writing against or affecting (i) Holdings, the Borrower or any Restricted Subsidiary or (ii) any officer, director or key employee of Holdings, the Borrower or any Restricted Subsidiary in their respective capacities in such positions, before (or, in the case of material threatened claims, actions, suits, investigations or proceedings, would be before) or by any Governmental Authority, Regulatory Supervising Organization or arbitrator that could reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect.

(b) Except with respect to any matters that, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect, none of Holdings, the Borrower or any Restricted Subsidiary (i) has failed to comply with any Environmental Law or to obtain, maintain or comply with any permit, license or other approval required under any Environmental Law, (ii) has, to the knowledge of Holdings or the Borrower, become subject to any Environmental Liability, (iii) has received written notice of any claim, allegation, investigation or order with respect to any Environmental Liability or (iv) has, to the knowledge of Holdings or the Borrower, any basis to reasonably expect that Holdings, the Borrower or any Restricted Subsidiary will become subject to any Environmental Liability.

Section 3.07. *Compliance with Laws and Agreements.* (a) Each of Holdings, the Borrower and its Restricted Subsidiaries is in compliance with (i) its Organizational Documents, (ii) all Requirements of Law applicable to it or its property and (iii) all indentures and other agreements and instruments binding upon it or its property, except, in the case of clauses (ii) and (iii) of this Section, where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.

Section 3.08. *Investment Company Status.* No Loan Party is an “investment company” as defined in, or subject to regulation under, the Investment Company Act of 1940, as amended from time to time.

Section 3.09. *Taxes.* Except as could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, Holdings, the Borrower and each Restricted Subsidiary (a) have timely filed or caused to be filed all Tax returns and reports required to have been filed and (b) have paid or caused to be paid all Taxes required to have been paid (whether or not shown on a Tax return) including in their capacity as tax withholding agents, except any Taxes (i) that are not overdue by more



than 30 days or (ii) that are being contested in good faith by appropriate proceedings, *provided* that Holdings, the Borrower or such Subsidiary, as the case may be, has set aside on its books adequate reserves therefor in accordance with GAAP. There are no audits, assessments, claims or other Tax proceedings against Holdings, the Borrower or any Restricted Subsidiary that could, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

Section 3.10. *ERISA*. (a) Except as could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect, each Plan is in compliance with the applicable provisions of ERISA, the Code and other federal or state laws.

(b) Except as could not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect, (i) no ERISA Event has occurred or is reasonably expected to occur, (ii) neither Borrower nor any ERISA Affiliate has incurred, or reasonably expects to incur, any liability under Title IV of ERISA with respect to any Plan (other than premiums due and not delinquent under Section 4007 of ERISA), (iii) neither Borrower nor any ERISA Affiliate has incurred, or reasonably expects to incur, any liability (and no event has occurred which, with the giving of notice under Section 4219 of ERISA, would result in such liability) under Sections 4201 or 4243 of ERISA with respect to a Multiemployer Plan and (iv) neither Borrower nor any ERISA Affiliate has engaged in a transaction that could be subject to Section 4069 or 4212(c) of ERISA.

Section 3.11. *Disclosure*. Neither (a) the Information Materials as of the Restatement Effective Date nor (b) any of the other reports, financial statements, certificates or other written information furnished by or on behalf of any Loan Party to the Administrative Agent or any Lender in connection with the negotiation of any Loan Document or delivered thereunder (as modified or supplemented by other information so furnished) when taken as a whole contains any material misstatement of fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not materially misleading; *provided* that, with respect to projected financial information, Holdings and the Borrower represent only that such information was prepared in good faith based upon assumptions believed by them to be reasonable at the time delivered and, if such projected financial information was delivered prior to the Restatement Effective Date in connection with the transactions consummated on the Restatement Effective Date, as of the Restatement Effective Date, it being understood that any such projected financial information may vary from actual results and such variations could be material.

Section 3.12. *Subsidiaries*. As of the Restatement Effective Date, Schedule 3.12 sets forth the name of, and the ownership interest of Holdings, the Borrower and each Subsidiary in, each Subsidiary.

Section 3.13. *Intellectual Property; Licenses, Etc*. Each of Holdings, the Borrower and the Restricted Subsidiaries owns, licenses or possesses the right to use all Intellectual Property that is reasonably necessary for the operation of its business as currently conducted, and, without conflict with the rights of any Person, except to the extent such conflicts, individually or in the aggregate, could not reasonably be expected

to have a Material Adverse Effect. None of Holdings, the Borrower or any Restricted Subsidiary, in the operation of its business as currently conducted, infringes upon any Intellectual Property rights held by any Person except for such infringements, individually or in the aggregate, which could not reasonably be expected to have a Material Adverse Effect. No claim or litigation regarding any Intellectual Property is pending or, to the knowledge of Holdings and the Borrower, threatened against Holdings, the Borrower or any Restricted Subsidiary, which, individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect.

Section 3.14. *Solvency.*

(a) Immediately after the consummation of the Transactions to occur on the Restatement Effective Date, the Borrower and its Subsidiaries, taken as a whole, will not be Insolvent.

(b) Immediately after the consummation of the Transactions to occur on the Escrow Assumption Date, the Borrower and its Subsidiaries, taken as a whole, will not be Insolvent.

Section 3.15. *Senior Indebtedness.* The Loan Document Obligations constitute “Senior Indebtedness” (or any comparable term) under and as defined in the documentation governing any Junior Financing.

Section 3.16. *Federal Reserve Regulations.* No part of the proceeds of the Loans will be used, directly or indirectly, to purchase or carry any margin stock or to refinance any Indebtedness originally incurred for such purpose, in each case, in a manner that entails a violation (including on the part of any Lender) of the provisions of Regulations U or X of the Board of Governors.

Section 3.17. *Use of Proceeds.* (a) The ~~Borrower will use the~~ proceeds of the ~~Initial~~ Term ~~B-1~~ Loans ~~received~~ on the ~~Restatement Effective Date (i) to consummate the Restatement Effective Date Refinancing, (ii)~~ Amendment No. 1 Effective Date shall not be used for any purpose other than to repay a portion of the New Term Loans outstanding on the Amendment No. 1 Effective Date and to pay fees and expenses in connection therewith ~~and (iii) to the extent such proceeds remain after application under clauses (i) and (ii), for working capital and general corporate purposes.~~

(b) The Borrower and its Restricted Subsidiaries will use the proceeds of borrowings under the Revolving Facility and the Letters of Credit issued hereunder for working capital and other general corporate purposes, including the financing of Permitted Acquisitions.

Section 3.18. *Regulatory Status and Memberships Held.* (a) Except as set forth on Schedule 3.18(a), each Broker-Dealer Subsidiary is duly (i) registered, licensed or qualified as a broker-dealer and is in compliance in all material respects with all Requirements of Law of all material jurisdictions in which it is required to be so registered, licensed or qualified and each such registration, license or qualification is in full force and effect and (ii) registered as a broker-dealer with the SEC under the Exchange Act and is in compliance in all material respects with the applicable provisions

of the Exchange Act and all rules and regulations thereunder and applicable state securities laws, including the net capital requirements and customer protection requirements thereof.

(b) Each Subsidiary of the Borrower listed on Schedule 3.18(b) is duly registered with, or a member of, the Regulatory Supervising Organization(s) indicated for such Subsidiary and is in compliance in all material respects with all applicable rules and regulations of such Regulatory Supervising Organization(s).

Section 3.19. *PATRIOT Act, OFAC and FCPA.*

(a) Holdings, the Borrower and the Subsidiaries will not, directly or indirectly, use the proceeds of the Loans, or lend, contribute or otherwise make available such proceeds to any Subsidiary, joint venture partner or other Person, for the purpose of funding (i) any activities of or business with any Person, or in any country or territory, that, at the time of such funding, is the subject of Sanctions, or (ii) any other transaction that will result in a violation by any Person (including any Person participating in the transaction, whether as underwriter, advisor, investor, lender or otherwise) of Sanctions.

(b) Holdings, the Borrower and the Restricted Subsidiaries will not use the proceeds of the Loans directly, or, to the knowledge of Holdings, indirectly, for any payments to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended (the “**FCPA**”).

(c) Except as could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect, none of Holdings, the Borrower or any Subsidiary has, in the past three years, committed a violation of applicable regulations of the United States Department of the Treasury’s Office of Foreign Assets Control (“**OFAC**”), Title III of the USA Patriot Act or the FCPA.

(d) (i) None of the Loan Parties is an individual or entity currently on OFAC’s list of Specially Designated Nationals and Blocked Persons (the “**SDN List**”) or is owned 50% or more, directly or indirectly, by one or more parties on the SDN List and (ii) except as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect, none of the Restricted Subsidiaries that are not Loan Parties or, to the knowledge of Holdings, any director, officer, employee or agent of any Loan Party or other Restricted Subsidiary, in each case, is an individual or entity currently on the SDN List or is owned 50% or more, directly or indirectly, by one or more parties on the SDN List, nor is Holdings, the Borrower or any Restricted Subsidiary located, organized or resident in a country or territory that is the subject of Sanctions.

Section 3.20. *EEA Financial Institutions.* No Loan Party is an EEA Financial Institution.

ARTICLE 4  
CONDITIONS

Section 4.01. *Restatement Effective Date.* The obligations of the Lenders to make Loans hereunder on the Restatement Effective Date shall not become effective until the date on which each of the following conditions shall be satisfied (or waived in accordance with Section 9.02):

(a) The Administrative Agent (or its counsel) shall have received from each other party thereto either (i) a counterpart of the Restatement Agreement signed on behalf of such party or (ii) written evidence satisfactory to the Administrative Agent (which may include facsimile or other electronic transmission of a signed counterpart of this Agreement) that such party has signed a counterpart of the Restatement Agreement.

(b) The Administrative Agent shall have received written opinions (addressed to the Administrative Agent and the Lenders and dated the Restatement Effective Date) of Paul, Weiss, Rifkind, Wharton & Garrison LLP, New York counsel for the Loan Parties, and Schulte Roth & Zabel LLP, special counsel for the Loan Parties, as to such matters as the Administrative Agent may reasonably request and in form and substance reasonably satisfactory to the Administrative Agent and the Lead Arranger. Each of Holdings and the Borrower hereby requests such counsels to deliver such opinions.

(c) The Administrative Agent shall have received a certificate of each Loan Party, dated the Restatement Effective Date, substantially in the form of Exhibit G with appropriate insertions, executed by any Responsible Officer of such Loan Party, and including or attaching the documents referred to in paragraph (d) of this Section.

(d) The Administrative Agent shall have received a copy of (i) each Organizational Document of each Loan Party certified, to the extent applicable, as of a recent date by the applicable Governmental Authority, (ii) signature and incumbency certificates of the Responsible Officers of each Loan Party executing the Loan Documents to which it is a party, (iii) resolutions of the board of directors and/or similar governing bodies of each Loan Party approving and authorizing the execution, delivery and performance of the Loan Documents to which it is a party, certified as of the Restatement Effective Date by its secretary, an assistant secretary or a Responsible Officer as being in full force and effect without modification or amendment, and (iv) a good standing certificate (to the extent such concept exists) from the applicable Governmental Authority of each Loan Party's jurisdiction of incorporation, organization or formation.

(e) The Administrative Agent shall have received upfront fees from the Borrower for the account of the Lenders providing Initial Term Loans in the amounts previously agreed between the Borrower and the Administrative Agent.

(f) The Administrative Agent (or its counsel) shall have received from each Loan Party either (i) a counterpart of a Reaffirmation Agreement signed on behalf of such party or (ii) written evidence satisfactory to the Administrative Agent (which may include facsimile or other electronic transmission of a signed counterpart of a

Reaffirmation Agreement) that such party has signed a counterpart of a Reaffirmation Agreement.

(g) The Administrative Agent shall have received a certificate from the chief financial officer or chief operating officer of the Borrower (x) in the form of Exhibit Q certifying as to the solvency of the Borrower and its Subsidiaries on a consolidated basis after giving effect to the Transactions to be consummated on or prior to the Restatement Effective Date and (y) as to the satisfaction of the conditions set forth in Section 4.02.

(h) The Administrative Agent and the Lead Arranger shall have received, at least five Business Days prior to the Restatement Effective Date, all documentation and other information about the Loan Parties as shall have been reasonably requested in writing at least 10 Business Days prior to the Restatement Effective Date by the Administrative Agent or the Lead Arranger that they shall have reasonably determined is required by regulatory authorities under applicable “know your customer” and anti-money laundering rules and regulations, including without limitation the USA Patriot Act.

(i) The Administrative Agent shall have received a Borrowing Request requesting the borrowing of the Initial Term Loans.

The Administrative Agent shall notify Holdings, the Borrower and the Lenders of the Restatement Effective Date, and such notice shall be conclusive and binding.

Section 4.02. *Each Credit Event.* The obligation of each Lender to make a Loan on the occasion of any Borrowing (including any Borrowing on the Restatement Effective Date but excluding, for the avoidance of doubt, the assumption of the Escrow Term Loans on the Escrow Assumption Date), and of each Issuing Bank to issue, amend, renew or extend any Letter of Credit, is subject to receipt of the request therefor in accordance herewith and to the satisfaction of the following conditions:

(a) The representations and warranties of each Loan Party set forth in the Loan Documents shall be true and correct in all material respects on and as of the date of such Borrowing or the date of issuance, amendment, renewal or extension of such Letter of Credit, as the case may be; *provided* that, to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; *provided further* that any representation and warranty that is qualified as to “materiality,” “Material Adverse Effect” or similar language shall be true and correct in all respects on the date of such credit extension or on such earlier date, as the case may be.

(b) At the time of and immediately after giving effect to such Borrowing or the issuance, amendment, renewal or extension of such Letter of Credit, as the case may be, no Default or Event of Default shall have occurred and be continuing.

(c) Solely with respect to the obligations of each Revolving Lender to make a Revolving Loan on the occasion of any Borrowing and of each Issuing Bank to issue,

amend, renew or extend any Letter of Credit, the Revolving Availability Date shall have occurred.

Each Borrowing (*provided* that a conversion or a continuation of a Borrowing shall not constitute a “Borrowing” for purposes of this Section) and each issuance, amendment, renewal or extension of a Letter of Credit shall be deemed to constitute a representation and warranty by Holdings and the Borrower on the date thereof as to the matters specified in paragraphs (a), (b) and, if applicable, (c) of this Section.

Section 4.03. *Escrow Assumption Date*. The Escrow Term Loans incurred under the Escrow Term Loan Credit Agreement shall not be assumed by the Borrower or deemed to be outstanding under this Agreement until the date on which each of the following conditions shall be satisfied (or waived in accordance with Section 9.02):

(a) The Merger and Contribution shall have been, or substantially concurrently with the assumption of the Escrow Term Loans shall be, consummated in accordance with the terms of the Merger Agreement without giving effect to any amendment, change or supplement or waiver of any provision thereof (including any change in the purchase price) in any manner that is materially adverse to the interests of the Term Lenders or the Lead Arranger (in each case in their capacities as such) without the prior written consent (not to be unreasonably withheld or delayed) of JPMorgan Chase Bank, N.A.

(b) The Acquisition Agreement Representations (as defined below) and the Specified Representations (as defined below) shall be true and correct in all material respects as of the Escrow Assumption Date. “**Acquisition Agreement Representations**” shall mean such of the representations made by KCG in the Merger Agreement as are material to the interests of the Term Lenders, but only to the extent that the breach of any such representation would result in (i) Virtu Financial, Inc. or any of its affiliates having the right to terminate its or their obligations under the Merger Agreement (after giving effect to any applicable notice and cure period) or (y) the failure of a condition precedent to Virtu Financial, Inc.’s obligation to consummate the Merger and Contribution pursuant to the Merger Agreement. “**Specified Representations**” shall mean the representations and warranties set forth in Section 3.01 (limited to the Loan Parties as to existence and corporate power and authority to enter into the Loan Documents), Section 3.02, Section 3.03(b)(i) (limited to the Organizational Documents of the Loan Parties), Section 3.08, Section 3.14(b), Section 3.16, Section 3.19(a), Section 3.19(b), Section 3.19(c) and Section 3.02(b) of the Collateral Agreement (other than with respect to any Collateral (other than to the extent a Lien on such Collateral may be perfected by the filing of a financing statement under the Uniform Commercial Code) that is not or cannot reasonably be provided or perfected on the Escrow Assumption Date after the use of the Loan Parties’ commercially reasonable efforts to do so without undue burden or expense).

(c) Since April 20, 2017, there shall not have been any change, event or occurrence that, individually or in the aggregate, has resulted in or would reasonably be expected to have a Company Material Adverse Effect (as defined in the Merger Agreement as in effect on April 20, 2017).

(d) The Administrative Agent shall have received a Solvency Certificate from the Borrower's chief financial officer in substantially the form attached as Exhibit Q hereto.

(e) The Administrative Agent shall have received written opinions (addressed to the Administrative Agent and the Lenders and dated the Escrow Assumption Date) of Paul, Weiss, Rifkind, Wharton & Garrison LLP, New York counsel for the Loan Parties, and Schulte Roth & Zabel LLP, special counsel for the Loan Parties, consistent in form and scope with those opinions delivered pursuant to Section 4.01(b), with such changes as are necessary or appropriate to reflect the assumptions, reaffirmations and joinders occurring in respect of the Loan Documents on the Escrow Assumption Date.

(f) The Administrative Agent shall have received a certificate of each Loan Party, dated the Escrow Assumption Date, substantially in the form of Exhibit G with appropriate insertions, executed by any Responsible Officer of such Loan Party, and including or attaching the documents referred to in clause (g) below.

(g) The Administrative Agent shall have received a copy of (i) each Organizational Document of each Loan Party certified, to the extent applicable, as of a recent date by the applicable Governmental Authority, (ii) signature and incumbency certificates of the Responsible Officers of each Loan Party executing the Loan Documents to which it is a party, (iii) resolutions of the board of directors and/or similar governing bodies of each Loan Party approving and authorizing the execution, delivery and performance of the Loan Documents to which it is a party, certified as of the Escrow Assumption Date by its secretary, an assistant secretary or a Responsible Officer as being in full force and effect without modification or amendment, and (iv) a good standing certificate (to the extent such concept exists) from the applicable Governmental Authority of each Loan Party's jurisdiction of incorporation, organization or formation.

(h) The Administrative Agent shall have received all fees and other amounts previously agreed in writing by the Lead Arranger and the Borrower to be due and payable on or prior to the Escrow Assumption Date, including, to the extent invoiced at least three Business Days prior to the Escrow Assumption Date (or such later day as the Borrower may reasonably agree), reimbursement or payment of all out-of-pocket expenses (including reasonable fees, charges and disbursements of counsel) required to be reimbursed or paid by any Loan Party under any Loan Document or as otherwise agreed in writing between the Lead Arranger and the Borrower.

(i) The KCG Refinancing shall have been, or shall substantially concurrently with the assumption of the Escrow Term Loans be, consummated or arrangements for the KCG Refinancing (reasonably satisfactory to the Administrative Agent) shall have been established substantially concurrently with the assumption of the Escrow Term Loans.

(j) The Collateral and Guarantee Requirement shall have been, or shall be substantially concurrently on the Escrow Assumption Date, satisfied and the Administrative Agent shall have received a completed Perfection Certificate dated the Escrow Assumption Date and signed by a Responsible Officer of the Borrower, together with all attachments contemplated thereby; *provided* that to the extent that any security interest in the Collateral (other than any Collateral the security interest in which may be

perfected by the filing of a UCC financing statement or the delivery of certificates evidencing equity interests of the Borrower and its wholly-owned, material domestic Subsidiaries (in each case, to the extent certificated) evidencing the Equity Interests required to be pledged pursuant to the Collateral and Guarantee Requirement with respect to which a Lien may be perfected by the delivery of a stock or equivalent certificate, but, with respect to Subsidiaries of KCG, only to the extent received after use of commercially reasonable efforts to do so)) is not perfected on the Escrow Assumption Date after use of commercially reasonable efforts to do so without undue burden or expense, the perfection of such security interest shall not constitute a condition precedent to the Escrow Assumption Date but shall be required to be perfected not later than 90 days (subject to extensions as may be agreed to by the Administrative Agent in its sole discretion) after the Escrow Assumption Date.

(k) The Administrative Agent (or its counsel) shall have received from each Loan Party (other than any Loan Party delivering a joinder to the Collateral Agreement and the Guarantee Agreement on the Escrow Assumption Date pursuant to clause (j) above) either (i) a counterpart to a Reaffirmation Agreement signed on behalf of such party or (ii) written evidence satisfactory to the Administrative Agent (which may include facsimile or other electronic submission of a signed counterpart of a Reaffirmation Agreement) that such party has signed a counterpart of a Reaffirmation Agreement.

(l) The Administrative Agent and the Lead Arranger shall have received, at least five Business Days prior to the Restatement Effective Date, all documentation and other information about the Loan Parties as shall have been reasonably requested in writing at least 10 Business Days prior to the Restatement Effective Date by the Administrative Agent or the Lead Arranger that they shall have reasonably determined is required by regulatory authorities under applicable “know your customer” and anti-money laundering rules and regulations, including without limitation the USA Patriot Act.

(m) The Administrative Agent and the Lead Arranger shall have received (i) the audited consolidated balance sheets and related consolidated statements of operations cash flows and shareholders’ equity of each of Holdings and KCG for the three most recently completed fiscal years of Holdings and KCG, respectively, ended at least 90 days before the Escrow Assumption Date, accompanied by a report thereon by their respective independent registered public accountants (without a “going concern” or like qualification or exception and qualification or exception as to scope of audit); (ii) the unaudited consolidated balance sheets and related statements of operations and cash flows of each of Holdings and KCG for each subsequent fiscal quarter of Holdings and KCG, respectively, ended at least 45 days before the Escrow Assumption Date (other than the fourth fiscal quarter of any fiscal year) (the “**Quarterly Financial Statements**”); and (iii) a pro forma balance sheet and related statement of operations of Holdings and its subsidiaries (including KCG and its Subsidiaries) as of and for the twelve-month period ending with the latest quarterly period of Holdings covered by the Quarterly Financial Statements, in each case after giving effect to the Transactions (the “**Pro Forma Financial Statements**”), all of which financial statements shall be prepared in accordance with generally accepted accounting principles in the United States and



comply with in all material respects the requirements of Regulation S-X under the Securities Act.

(n) The Senior Representative for the Second Lien Notes and each Loan Party shall have delivered to the Administrative Agent an executed counterpart to a Junior Lien Intercreditor Agreement.

## ARTICLE 5 AFFIRMATIVE COVENANTS

Until the Commitments shall have expired or been terminated, the principal of and interest on each Loan and all fees, expenses and other amounts (other than contingent amounts not yet due) payable under any Loan Document shall have been paid in full and all Letters of Credit shall have expired or been terminated and all LC Disbursements shall have been reimbursed, each of Holdings and the Borrower covenants and agrees with the Administrative Agent and each of the Lenders that:

Section 5.01. *Financial Statements and Other Information.* Holdings or the Borrower will furnish to the Administrative Agent, which will furnish to each Lender:

(a) on or before the date on which such financial statements are required or permitted to be filed with the SEC (or, if such financial statements are not required to be filed with the SEC, on or before the date that is 90 days after the end of each fiscal year of Holdings), audited consolidated balance sheet and audited consolidated statements of operations and comprehensive income, stockholders' equity and cash flows of Holdings as of the end of and for such year (commencing with financial statements as of the end of and for the fiscal year ending December 31, 2017), and related notes thereto, setting forth in each case in comparative form the figures for the previous fiscal year, all reported on by KPMG LLP or any other independent registered public accounting firm of nationally recognized standing (without a "going concern" or like qualification or exception (other than with respect to, or resulting from, (i) any potential inability to satisfy the Financial Performance Covenants in a future date or period or (ii) an upcoming maturity date of any Indebtedness under this Agreement occurring within 12 months from the time such report is required to be delivered to the Administrative Agent) and without any qualification or exception as to the scope of such audit) to the effect that such consolidated financial statements present fairly in all material respects the financial condition as of the end of and for such year and results of operations and cash flows of Holdings and its Subsidiaries on a consolidated basis in accordance with GAAP consistently applied, and which statements shall include an accompanying customary management discussion and analysis (which, for the avoidance of doubt, shall not be required to include strategy level detail with respect to operational performance, trading algorithms, "ticker-level" information or information that Holdings otherwise reasonably considers to be proprietary or highly sensitive);

(b) commencing with the financial statements for the fiscal quarter ending June 30, 2017, on or before the date on which such financial statements are required or permitted to be filed with the SEC with respect to each of the first three fiscal quarters of each fiscal year of Holdings (or, if such financial statements are not required to be filed with the SEC, on or before the date that is 30 days after the end of each such fiscal

quarter), unaudited consolidated balance sheet and unaudited consolidated statements of operations and comprehensive income, stockholders' equity and cash flows as of the end of and for such fiscal quarter and the then elapsed portion of the fiscal year, setting forth in each case in comparative form the figures for the corresponding period or periods of (or, in the case of the balance sheet, as of the end of) the previous fiscal year, all certified by a Financial Officer as presenting fairly in all material respects the financial condition as of the end of and for such fiscal quarter and such portion of the fiscal year and results of operations and cash flows of Holdings and its Subsidiaries on a consolidated basis in accordance with GAAP consistently applied, subject to normal year-end audit adjustments and the absence of footnotes and which statements shall include an accompanying customary management discussion and analysis (which, for the avoidance of doubt, shall not be required to include strategy level detail with respect to operational performance, trading algorithms, "ticker-level" information or information that the Borrower otherwise reasonably considers to be proprietary or highly sensitive);

(c) simultaneously with the delivery of each set of consolidated financial statements referred to in clauses (a) and (b) above, the related consolidating financial statements reflecting adjustments necessary to eliminate the accounts of Unrestricted Subsidiaries (if any) from such consolidated financial statements;

(d) not later than five days after any delivery of financial statements under paragraph (a) or (b) above (and, in any event, not later than five days after the date on which such financial statements were required to have been delivered), a certificate of a Financial Officer (i) certifying as to whether a Default has occurred and, if a Default has occurred, specifying the details thereof and any action taken or proposed to be taken with respect thereto, (ii) setting forth reasonably detailed calculations (A) demonstrating compliance with the Financial Performance Covenants and (B) beginning with the financial statements for the fiscal quarter ended June 30, 2017, of Excess Cash Flow for the fiscal quarter ended June 30, 2017 and, in the case of financial statements delivered with respect to any subsequent fiscal quarter, of Excess Cash Flow for such fiscal quarter (or in the case of financial statements delivered under paragraph (a) above, for the fourth fiscal quarter of such fiscal year) and (iii) in the case of financial statements delivered under paragraph (a) or (b) above, setting forth a reasonably detailed calculation of the Net Proceeds received during the applicable period by or on behalf of the Borrower or any of its Restricted Subsidiary in respect of any event described in clause (a) of the definition of the term "Prepayment Event" and the portion of such Net Proceeds that has been invested or are intended to be reinvested in accordance with the proviso in Section 2.09(b);

(e) not later than five days after any delivery of financial statements under paragraph (a) above, a certificate of the accounting firm that reported on such financial statements stating whether it obtained knowledge during the course of its examination of such financial statements of any Default relating to the Financial Performance Covenants and, if such knowledge has been obtained, describing such Default (which certificate may be limited to the extent required by accounting rules or guidelines);

(f) not later than 90 days after the commencement of each fiscal year of Holdings, a detailed consolidated budget for the Borrower and its Subsidiaries for such fiscal year (consisting of projected net revenue by asset class and geography, projected

expenses, projected GAAP EBITDA (i.e., earnings before interest, taxes, depreciation and amortization) and projected capital expenditures for such fiscal year and setting forth the material assumptions used for purposes of preparing such budget);

(g) promptly after the same become publicly available, copies of all proxy statements and registration statements (other than amendments to any registration statement (to the extent such registration statement, in the form it became effective, is delivered to the Administrative Agent), exhibits to any registration statement and, if applicable, any registration statement on Form S-8) filed by Holdings, any Intermediate Parent, the Borrower or any of its Restricted Subsidiaries with the SEC or with any national securities exchange, or distributed by Holdings, any Intermediate Parent, the Borrower or any of its Restricted Subsidiaries to the holders of its Equity Interests generally, as the case may be;

(h) promptly upon filing with any applicable Regulatory Supervising Organization, a copy of each FOCUS report or similar report relating to the regulatory capital or similar requirements applicable to the Subsidiary filing such report;

(i) promptly after the request by the Administrative Agent on the behalf of any Lender, all documentation and other information that such Lender reasonably requests in order to comply with its ongoing obligations under applicable “know your customer” and anti-money laundering rules and regulations, including the USA Patriot Act;

(j) promptly following any request therefor, such other information regarding the operations, business affairs and financial condition of Holdings, any Intermediate Parent, the Borrower or any of its Restricted Subsidiaries, or compliance with the terms of any Loan Document, as the Administrative Agent on its own behalf or on behalf of any Lender may reasonably request in writing; and

(k) within 15 days after the end of each calendar month, a statement of the consolidated net trading revenue of Holdings and its Restricted Subsidiaries for such calendar month and for the then elapsed portion of the fiscal year, all certified by a Financial Officer as fairly presenting the net trading revenue of Holdings and its Restricted Subsidiaries as described in Holdings’ internal books and records (which statement need not be prepared in accordance with GAAP).

Notwithstanding the foregoing, the obligations in paragraphs (a) and (b) of this Section 5.01 may be satisfied with respect to financial information of Holdings and its Subsidiaries by furnishing the Form 10-K or 10-Q (or the equivalent), as applicable, of Holdings (or a parent company thereof) filed with the SEC or any national securities exchange; *provided* that (i) to the extent such information relates to a parent of Holdings, such information is accompanied by consolidating information, which may be unaudited, that explains in reasonable detail the differences between the information relating to such parent, on the one hand, and the information relating to Holdings and its Subsidiaries on a standalone basis, on the other hand, and (ii) to the extent such information is in lieu of information required to be provided under Section 5.01(a), such materials are accompanied by a report and opinion of KPMG LLP or any other independent registered public accounting firm of nationally recognized standing, which report and opinion shall

be prepared in accordance with generally accepted auditing standards and shall not be subject to any “going concern” or like qualification or exception (other than with respect to, or resulting from, (i) any potential inability to satisfy the Financial Performance Covenants in a future date or period or (ii) an upcoming maturity date of any Indebtedness under this Agreement occurring within 12 months from the time such report is required to be delivered to the Administrative Agent) or any qualification or exception as to the scope of such audit.

Documents required to be delivered pursuant to Section 5.01(a), (b) or (f) (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and, if so delivered, shall be deemed to have been delivered on the date (i) on which Holdings posts such documents, or provides a link thereto, on the Internet at the website address listed on Schedule 9.01 (or otherwise notified pursuant to Section 9.01(e)); or (ii) on which such documents are posted on Holdings’ behalf on an Internet or intranet website, if any, to which each Lender and the Administrative Agent have access (whether a commercial, third-party website or whether sponsored by the Administrative Agent); *provided* that: (i) the Borrower shall deliver paper copies of such documents to the Administrative Agent upon its reasonable request until a written notice to cease delivering paper copies is given by the Administrative Agent and (ii) the Borrower shall notify the Administrative Agent (by telecopier or electronic mail) of the posting of any such documents and, upon its reasonable request, provide to the Administrative Agent by electronic mail electronic versions (i.e., soft copies) of such documents. The Administrative Agent shall have no obligation to request the delivery of or maintain paper copies of the documents referred to above, and each Lender shall be solely responsible for timely accessing posted documents and maintaining its copies of such documents.

The Borrower hereby acknowledges that (a) the Administrative Agent and/or the Lead Arranger will make available to the Lenders materials and/or information provided by or on behalf of the Borrower hereunder (collectively, “**Borrower Materials**”) by posting the Borrower Materials on IntraLinks or another similar electronic system (the “**Platform**”) and (b) certain of the Lenders (each, a “**Public Lender**”) may have personnel who do not wish to receive material non-public information with respect to the Borrower or its Affiliates, or the respective securities of any of the foregoing, and who may be engaged in investment and other market-related activities with respect to such Persons’ securities. The Borrower hereby agrees that it will use commercially reasonable efforts to identify that portion of the Borrower Materials that may be distributed to the Public Lenders and that (w) all such Borrower Materials shall be clearly and conspicuously marked “PUBLIC” which, at a minimum, shall mean that the word “PUBLIC” shall appear prominently on the first page thereof; (x) by marking Borrower Materials “PUBLIC,” the Borrower shall be deemed to have authorized the Administrative Agent, the Lead Arranger and the Lenders to treat such Borrower Materials as not containing any material non-public information (although it may be sensitive and proprietary) with respect to the Borrower or its securities for purposes of United States Federal and state securities laws (*provided, however*, that to the extent such Borrower Materials constitute Information, they shall be treated as set forth in Section 9.12); (y) all Borrower Materials marked “PUBLIC” are permitted to be made available through a portion of the Platform designated “Public Side Information”; and (z) the Administrative Agent and the Lead Arranger shall be entitled to treat any Borrower

Materials that are not marked “PUBLIC” as being suitable only for posting on a portion of the Platform not designated “Public Side Information.” Notwithstanding the foregoing, the Borrower shall be under no obligation to mark any Borrower Materials “PUBLIC”; *provided*, that the following Borrower Materials may be marked “PUBLIC” unless the Borrower, after receiving notice from the Administrative Agent within a reasonable period of time prior to the intended distribution of such Borrower Materials, notifies the Administrative Agent that such Borrower Materials contain material non-public information: (1) the Loan Documents and (2) any notification of changes in the terms of the facilities provided hereunder.

The Borrower hereby represents and warrants that each of the Borrower, its controlling Person and each of its subsidiaries, either (i) has no registered or publicly traded securities outstanding, or (ii) files its financial statements with the SEC and/or makes its financial statements available to potential holders of its 144A securities, and, accordingly, the Borrower hereby (i) authorizes the Administrative Agent to make the financial statements to be provided under Section 5.01(a)(i) and (ii) above, along with the Loan Documents, available to Public Lenders and (ii) agrees that at the time such financial statements are provided hereunder, they shall already have been made available to holders of its securities. The Borrower will not request that any other material be posted to Public Lenders without expressly representing and warranting to the Administrative Agent in writing that such materials do not constitute material non-public information within the meaning of the federal securities laws or that the Borrower has no outstanding publicly traded securities, including 144A securities. In no event shall the Administrative Agent post compliance certificates or budgets to Public Lenders.

Section 5.02. *Notices of Material Events.* Promptly after any Responsible Officer of Holdings or the Borrower obtains actual knowledge thereof, Holdings or the Borrower will furnish to the Administrative Agent (for distribution to each Lender through the Administrative Agent) written notice of the following:

(a) the occurrence of any Default;

(b) the filing or commencement of any action, suit or proceeding by or before any arbitrator, Governmental Authority or Regulatory Supervising Organization against or, to the knowledge of a Financial Officer or another executive officer of Holdings, any Intermediate Parent, the Borrower or any Subsidiary, affecting Holdings, any Intermediate Parent, the Borrower or any Subsidiary or the receipt of a notice of an Environmental Liability that could reasonably be expected to result in a Material Adverse Effect;

(c) the commencement of any investigation by any Governmental Authority of or affecting Holdings, the Borrower or any Subsidiary that could reasonably be expected to result in a Material Adverse Effect;

(d) the occurrence of any ERISA Event that could reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect; and

(e) the appearance of Holdings, the Borrower or any Subsidiary or Vincent Viola on the Specially Designated Nationals and Blocked Person List or other similar

lists maintained by OFAC and/or the United States Department of Treasury, or identified in any related executive orders issued by the President of the United States.

Each notice delivered under this Section shall be accompanied by a written statement of a Responsible Officer of Holdings or the Borrower setting forth the details of the event or development requiring such notice and any action taken or proposed to be taken with respect thereto.

Section 5.03. *Information Regarding Collateral.* (a) Holdings or the Borrower will furnish to the Administrative Agent prompt (and in any event within 30 days or such longer period as reasonably agreed to by the Administrative Agent) written notice of any change (i) in any Loan Party's legal name (as set forth in its certificate of organization or like document), (ii) in the jurisdiction of incorporation or organization of any Loan Party or in the form of its organization or (iii) in any Loan Party's organizational identification number.

(b) Not later than five days after delivery of financial statements pursuant to Section 5.01(a) or (b) (and, in any event, not later than five days after the date on which such financial statements were required to have been delivered), Holdings or the Borrower shall deliver to the Administrative Agent a certificate executed by a Responsible Officer of Holdings or the Borrower (i) setting forth the information required pursuant to Sections 1(a)(i), 1(b), 2, 5, 6 and 8 (other than 8(f)) of the Perfection Certificate or confirming that there has been no change in such information since the date of the Perfection Certificate delivered prior to the Restatement Effective Date or the date of the most recent certificate delivered pursuant to this Section or Section 4.03(j), (ii) identifying any Wholly Owned Subsidiary that has become, or ceased to be, a Material Subsidiary during the most recently ended fiscal quarter and (iii) certifying that all notices required to be given prior to the date of such certificate by Section 5.03 have been given.

Section 5.04. *Existence; Conduct of Business.* Each of Holdings and the Borrower will, and will cause each Intermediate Parent and Restricted Subsidiary to, do or cause to be done all things necessary to obtain, preserve, renew and keep in full force and effect its legal existence and the rights, licenses, permits, privileges, franchises (including exchange memberships), patents, copyrights, trademarks, trade names and Governmental Approvals material to the conduct of its business, except to the extent (other than with respect to the preservation of the existence of Holdings and the Borrower) that the failure to do so, individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect; *provided* that the foregoing shall not prohibit any merger, consolidation, liquidation or dissolution permitted under Section 6.03 or any Disposition permitted by Section 6.05.

Section 5.05. *Payment of Taxes, Etc.* Each of Holdings and the Borrower will, and will cause each Intermediate Parent and Restricted Subsidiary to, pay its obligations in respect of Tax liabilities, assessments and governmental charges, before the same shall become delinquent or in default, except where the failure to make such payment could not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect.

Section 5.06. *Maintenance of Properties.* Each of Holdings and the Borrower will, and will cause each Restricted Subsidiary to, keep and maintain all property material to the conduct of its business in good working order and condition, ordinary wear and tear excepted, except where the failure to do so could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

Section 5.07. *Insurance.* Each of Holdings and the Borrower will, and will cause each Restricted Subsidiary to, maintain, with insurance companies that Holdings believes (in the good faith judgment of the management of Holdings) are financially sound and responsible at the time the relevant coverage is placed or renewed, insurance in at least such amounts (after giving effect to any self-insurance which Holdings believes (in the good faith judgment of management of Holdings) is reasonable and prudent in light of the size and nature of its business) and against at least such risks (and with such risk retentions) as Holdings believes (in the good faith judgment of the management of Holdings) are reasonable and prudent in light of the size and nature of its business, and will furnish to the Lenders, upon written request from the Administrative Agent, information presented in reasonable detail as to the insurance so carried. Each such policy of insurance shall (a) name the Administrative Agent, on behalf of the Lenders, as an additional insured thereunder as its interests may appear and (b) in the case of each casualty insurance policy, contain a loss payable clause or endorsement that names the Administrative Agent, on behalf of the Lenders, as the loss payee thereunder.

Section 5.08. *Books and Records; Inspection and Audit Rights; Quarterly Teleconferences.* (a) Each of Holdings and the Borrower will, and will cause each Intermediate Parent and Restricted Subsidiary to, maintain proper books of record and account in which entries that are full, true and correct in all material respects and are in conformity with GAAP consistently applied shall be made of all material financial transactions and matters involving the assets and business of Holdings, the Borrower, such Intermediate Parent or such Restricted Subsidiary, as the case may be. Each of Holdings and the Borrower will, and will cause each Intermediate Parent and Restricted Subsidiary to, permit any representatives designated by the Administrative Agent or any Lender, upon reasonable prior notice, to visit and inspect its properties, to examine and make extracts from its books and records, and to discuss its affairs, finances and condition with its officers and independent accountants, all at such reasonable times and as often as reasonably requested; *provided that*, excluding any such visits and inspections during the continuation of an Event of Default, only the Administrative Agent on behalf of the Lenders may exercise visitation and inspection rights of the Administrative Agent and the Lenders under this Section 5.08 and the Administrative Agent shall not exercise such rights more often than two times during any calendar year absent the existence of an Event of Default and only one such time shall be at the Borrower's expense; *provided further that* (i) when an Event of Default exists, the Administrative Agent or any Lender (or any of their respective representatives or independent contractors) may do any of the foregoing at the expense of the Borrower at any time during normal business hours and upon reasonable advance notice and (ii) the Administrative Agent and the Lenders shall give Holdings and the Borrower the opportunity to participate in any discussions with Holdings' or the Borrower's independent public accountants.

(b) Within 10 Business Days of the earlier of (x) the delivery of any financial statements required to be delivered under Section 5.01(a) or (b) and (y) the date on

which such financial statements were required to have been delivered, the Borrower shall host a teleconference meeting with the Lenders to discuss the results presented therein or for the applicable period, as applicable, and such other matters reasonably related thereto.

Section 5.09. *Compliance with Laws.* Each of Holdings and the Borrower will, and will cause each Intermediate Parent and Restricted Subsidiary to, comply with its Organizational Documents and all Requirements of Law (including Environmental Laws, ERISA and the USA Patriot Act) with respect to it, its property and operations, except where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.

Section 5.10. *Use of Proceeds.* (a) The ~~Borrower will use the~~ proceeds of the ~~Initial~~ Term B-1 Loans received on the ~~Restatement~~ Amendment No. 1 Effective Date ~~(i) to consummate the Restatement~~ shall be used solely to repay a portion of the New Term Loans outstanding on the Amendment No. 1 Effective Date Refinancing, (ii) and to pay fees and expenses in connection therewith ~~and (iii) to the extent such proceeds remain after application under clauses (i) and (ii); for working capital and general corporate purposes.~~

(b) The Borrower and its Restricted Subsidiaries will use the proceeds of borrowings under the Revolving Facility and any Incremental Revolving Facility or pursuant to any Incremental Term Facility for working capital and other general corporate purposes, including the financing of Permitted Acquisitions.

Section 5.11. *Additional Subsidiaries.* (a) If (i) any additional Restricted Subsidiary is formed or acquired after the Restatement Effective Date or (ii) if any Restricted Subsidiary ceases to be an Excluded Subsidiary, an Immaterial Subsidiary, a Foreign Subsidiary, a Regulated Subsidiary or an Excluded Domestic Subsidiary, Holdings or the Borrower will, within 30 days after such formation, acquisition or cessation, notify the Administrative Agent thereof, and will cause (x) such Restricted Subsidiary (unless such Restricted Subsidiary is an Excluded Subsidiary, a Foreign Subsidiary, a Regulated Subsidiary or an Excluded Domestic Subsidiary) to satisfy the Collateral and Guarantee Requirement with respect to such Restricted Subsidiary and (y) any Loan Party that owns any Equity Interests in or Indebtedness of any such Restricted Subsidiary to satisfy the Collateral and Guarantee Requirement with respect to such Equity Interests and Indebtedness, in each case within 30 days after such notice (or such longer period as the Administrative Agent shall reasonably agree and the Administrative Agent shall have received a completed Perfection Certificate with respect to such Restricted Subsidiary signed by a Responsible Officer, together with all attachments contemplated thereby).

(b) Within 30 days (or such longer period as the Administrative Agent may reasonably agree) after Holdings or the Borrower identifies any new Material Subsidiary pursuant to Section 5.03(b), all actions (if any) required to be taken with respect to such Subsidiary in order to satisfy the Collateral and Guarantee Requirement shall have been taken with respect to such Subsidiary.



Section 5.12. *Further Assurances.* (a) Each of Holdings and the Borrower will, and will cause each Loan Party to, execute any and all further documents, financing statements, agreements and instruments, and take all such further actions (including the filing and recording of financing statements, fixture filings, mortgages, deeds of trust and other documents), that may be required under any applicable law or that the Administrative Agent or the Required Lenders may reasonably request, to cause the Collateral and Guarantee Requirement to be and remain satisfied, all at the expense of the Loan Parties.

(b) If, after the Restatement Effective Date, any material assets (including any owned (but not leased) real property or improvements thereto or any interest therein with a fair market value in excess of \$5,000,000) are acquired by the Borrower or any other Loan Party or are held by any Subsidiary on or after the time it becomes a Loan Party pursuant to Section 5.11 (other than assets constituting Collateral under a Security Document that become subject to the Lien created by such Security Document upon acquisition thereof or constituting Excluded Assets), the Borrower will notify the Administrative Agent thereof, and, if requested by the Administrative Agent, the Borrower will cause such assets to be subjected to a Lien securing the Secured Obligations and will take, and cause the other Loan Parties to take, such actions as shall be necessary and reasonably requested by the Administrative Agent to grant and perfect such Liens, including actions described in paragraph (a) of this Section, all at the expense of the Loan Parties and subject to the last paragraph of the definition of the term “Collateral and Guarantee Requirement.”

Section 5.13. *Designation of Subsidiaries.* The Borrower may at any time after the Restatement Effective Date designate any Restricted Subsidiary (other than the Borrower or any Intermediate Parent) as an Unrestricted Subsidiary or any Unrestricted Subsidiary as a Restricted Subsidiary; *provided that* (a) immediately before and after such designation on a Pro Forma Basis, no Event of Default shall have occurred and be continuing, (b) immediately after giving effect to such designation, the Borrower shall be in compliance, on a Pro Forma Basis, with the Financial Performance Covenants recomputed as of the last day of the most recent Test Period for which financial statements are available, (c) no Subsidiary may be designated as an Unrestricted Subsidiary or continue as an Unrestricted Subsidiary if it is a “Restricted Subsidiary” for the purpose of any other Indebtedness of Holdings or the Borrower and (d) if a Restricted Subsidiary is being designated as an Unrestricted Subsidiary hereunder, the sum of (A) the fair market value of assets of such Restricted Subsidiary as of such date of designation (the “**Designation Date**”), plus (B) the aggregate fair market value of assets of all Unrestricted Subsidiaries (in each case measured as of the date of each such Unrestricted Subsidiary’s designation as an Unrestricted Subsidiary) shall not exceed 5.0% of the Consolidated Total Assets of the Borrower and its Subsidiaries as of such Designation Date pro forma for such designation. The designation of any Subsidiary as an Unrestricted Subsidiary after the Restatement Effective Date shall constitute an Investment by the Borrower therein at the date of designation in an amount equal to the fair market value of the Borrower’s or its Subsidiary’s (as applicable) investment therein. The designation of any Unrestricted Subsidiary as a Restricted Subsidiary shall constitute (i) the incurrence at the time of designation of any Investment, Indebtedness or Liens of such Subsidiary existing at such time and (ii) a return on any Investment by the Borrower in Unrestricted Subsidiaries pursuant to the preceding sentence in an amount

equal to the fair market value at the date of such designation of the Borrower's or its Subsidiary's (as applicable) Investment in such Subsidiary.

Notwithstanding the foregoing, any Unrestricted Subsidiary that has been re-designated a Restricted Subsidiary may not be subsequently re-designated as an Unrestricted Subsidiary.

Section 5.14. *[Reserved.]*

Section 5.15. *Maintenance of Ratings.* The Borrower will use commercially reasonable efforts to maintain a corporate credit rating from S&P and a corporate family rating from Moody's, in each case with respect to the Borrower, and a rating of the Term Loans and (prior to the Revolving Maturity Date) the Revolving Facility by each of S&P and Moody's.

Section 5.16. *[Reserved.]*

Section 5.17. *Regulatory Matters.* The Borrower will, and will cause each of its Regulated Subsidiaries to, comply in all material respects with all material rules and regulations, as applicable, of the SEC, FINRA or any other applicable domestic or foreign Governmental Authority or Regulatory Supervising Organization (including such rules and regulations dealing with net capital or other applicable requirements), except, with respect to all such matters, other than noncompliance by such Regulated Subsidiaries with minimum capital requirements, to the extent that failure to comply therewith would not, in the aggregate, reasonably be expected to have a Material Adverse Effect.

## ARTICLE 6 NEGATIVE COVENANTS

Until the Commitments have expired or been terminated and the principal of and interest on each Loan and all fees, expenses and other amounts payable (other than contingent amounts not yet due) under any Loan Document have been paid in full and all Letters of Credit have expired or been terminated and all LC Disbursements shall have been reimbursed, each of Holdings and the Borrower covenants and agrees with the Administrative Agent and each of the Lenders that:

Section 6.01. *Indebtedness; Certain Equity Securities.* (a) Holdings and the Borrower will not, and will not permit any Restricted Subsidiary to, create, incur, assume or permit to exist any Indebtedness, except:

(i) Indebtedness of Holdings, the Borrower and any of the Restricted Subsidiaries under the Loan Documents (including any Indebtedness incurred pursuant to Section 2.01(d), 2.18 or 2.19);

(ii) (A) Indebtedness outstanding on the Restatement Effective Date and listed on Schedule 6.01 and any Permitted Refinancing thereof, (B) intercompany Indebtedness outstanding on the Restatement Effective Date and listed on Schedule 6.01, (C) if the Escrow Assumption occurs, Indebtedness in

respect of the Second Lien Notes outstanding on the Escrow Assumption Date and any Permitted Refinancing thereof and (D) Indebtedness in respect of the Existing Yen Bonds;

(iii) Guarantees by Holdings, the Borrower and the Restricted Subsidiaries in respect of Indebtedness of the Borrower or any Restricted Subsidiary otherwise permitted hereunder; *provided* that such Guarantee is otherwise permitted by Section 6.04; *provided further* that (A) no Guarantee by any Restricted Subsidiary of any Junior Financing shall be permitted unless such Restricted Subsidiary shall have also provided a Guarantee of the Loan Document Obligations pursuant to the Guarantee Agreement, (B) if the Indebtedness being Guaranteed is subordinated to the Loan Document Obligations, such Guarantee shall be subordinated to the Guarantee of the Loan Document Obligations on terms at least as favorable to the Lenders as those contained in the subordination of such Indebtedness, (C) no Guarantee by a Regulated Subsidiary of any Trading Debt of a non-Regulated Subsidiary shall be permitted unless such non-Regulated Subsidiary is consolidated with such Regulated Subsidiary for regulatory capital purposes, (D) no Guarantee by a Domestic Subsidiary that is not a Regulated Subsidiary of any Trading Debt shall be permitted unless such Domestic Subsidiary is a Subsidiary Loan Party and (E) any such Guarantee of Trading Debt shall be unsecured;

(iv) Indebtedness of the Borrower owing to any Restricted Subsidiary or of any Restricted Subsidiary owing to any other Restricted Subsidiary or the Borrower or Holdings to the extent permitted by Section 6.04; *provided* that all such Indebtedness of any Loan Party owing to any Restricted Subsidiary that is not a Loan Party shall be subordinated to the Loan Document Obligations (to the extent any such Indebtedness is outstanding at any time after the date that is 30 days after the Restatement Effective Date or such later date as the Administrative Agent may reasonably agree) (but only to the extent permitted by applicable law and not giving rise to adverse tax consequences) on terms (i) at least as favorable to the Lenders as those set forth in the form of intercompany note attached as Exhibit H or (ii) otherwise reasonably satisfactory to the Administrative Agent;

(v) (A) Indebtedness (including Capital Lease Obligations) of the Borrower or any Restricted Subsidiaries financing the acquisition, construction, repair, replacement or improvement of fixed or capital assets, other than software; *provided* that such Indebtedness is incurred concurrently with or within 270 days after the applicable acquisition, construction, repair, replacement or improvement, and (B) any Permitted Refinancing of any Indebtedness set forth in the immediately preceding clause (A); *provided further* that, at the time of any such incurrence of Indebtedness and after giving Pro Forma Effect thereto and the use of the proceeds thereof, the aggregate principal amount of Indebtedness that is outstanding in reliance on this clause (v) shall not exceed the greater of \$50,000,000 and 15% of Consolidated EBITDA for the most recently ended Test Period for which financial statements are available as of such time;

(vi) Indebtedness in respect of Swap Agreements permitted by Section 6.07;

(vii) Indebtedness of any Person that becomes a Restricted Subsidiary (or of any Person not previously a Restricted Subsidiary that is merged or consolidated with or into Holdings or a Restricted Subsidiary) after the Restatement Effective Date as a result of a Permitted Acquisition or the Merger and Contribution, or Indebtedness of any Person that is assumed by Holdings or any Restricted Subsidiary in connection with an acquisition of assets by Holdings or such Restricted Subsidiary in a Permitted Acquisition, and Permitted Refinancings thereof; *provided* that (A) such Indebtedness is not incurred in contemplation of or in connection with such Permitted Acquisition or the Merger and Contribution, (B) the Borrower will be in Pro Forma Compliance with the Financial Performance Covenants for, or as of the last day of, the most recently ended Test Period for which financial statements are available and (C) no Default or Event of Default shall exist or result therefrom;

(viii) Indebtedness of the Loan Parties incurred to finance a Permitted Acquisition and any Permitted Refinancing thereof; *provided* that (A) the primary obligor in respect of, and any Person that Guarantees, such Indebtedness shall be a Loan Party and no other Person shall be an obligor in respect of such Indebtedness, (B) such Indebtedness is (x) unsecured and has terms and conditions (other than pricing, optional prepayment, redemption premiums and subordination terms), taken as a whole, that are not materially less favorable to Holdings and its Restricted Subsidiaries as the terms and conditions of this Agreement or (y) so long as there is availability under the Incremental Cap, secured by the Collateral (and no other assets) on a pari passu or junior basis with the Secured Obligations; *provided* that (1) such secured debt shall reduce availability under the Incremental Cap on a dollar-for-dollar basis, (2) such secured debt shall not have a Weighted Average Life to Maturity shorter than the Weighted Average Life to Maturity of the Term Loans, (3) such secured debt shall not have any mandatory prepayment provisions (other than provisions related to customary asset sale and change of control offers) that could result in prepayments of such Indebtedness prior to the Term Loans, (4) such secured debt has terms and conditions (other than pricing, optional prepayment, redemption premiums and subordination terms), taken as a whole, that are substantially identical to or no more favorable to the investors providing such debt than the terms and conditions of this Agreement (except for covenants or other provisions applicable only to periods after the Latest Maturity Date), (5) the security agreements relating to such Indebtedness shall be substantially the same as the Security Documents (with such differences as are reasonably satisfactory to the Administrative Agent) and (6) such Indebtedness and any agent or trustee under the agreements or indenture governing such Indebtedness shall be subject to the First Lien Intercreditor Agreement or Junior Lien Intercreditor Agreement, as applicable; *provided* that if such Indebtedness is issued pursuant to an agreement or indenture that has not previously been made subject thereto, then the Loan Parties, the Administrative Agent and the Senior Representative for such Indebtedness shall have executed and delivered the First Lien Intercreditor Agreement or the Junior Lien Intercreditor Agreement, as

applicable, (C) such Indebtedness does not mature prior to the date that is 180 days after the Latest Maturity Date, (D) such Indebtedness has no scheduled amortization or payments, repurchases or redemptions of principal prior to the date that is 180 days after the Latest Maturity Date and (E) immediately after giving effect thereto and the use of the proceeds thereof, (x) no Default or Event of Default shall exist or result therefrom and (y) the Borrower will be in Pro Forma Compliance with the Financial Performance Covenants for, or as of the last day of, the most recently ended Test Period for which financial statements are available; *provided* that the Borrower shall have delivered a certificate of a Responsible Officer to the Administrative Agent at least five Business Days prior to the incurrence of such Indebtedness, together with a reasonably detailed description of the material terms and conditions of such Indebtedness or drafts of the documentation relating thereto, stating that the Borrower has determined in good faith that such terms and conditions satisfy the foregoing requirements;

(ix) Indebtedness incurred by a Restricted Subsidiary that is not a Loan Party to finance a Permitted Acquisition and any Permitted Refinancing thereof; *provided* that (A) immediately after giving effect thereto and the use of the proceeds thereof, (x) no Default or Event of Default shall exist or result therefrom and (y) the Borrower will be in Pro Forma Compliance with the Financial Performance Covenants for, or as of the last day of, the most recently ended Test Period for which financial statements are available and (B) the aggregate principal amount of outstanding Indebtedness incurred in reliance on this clause (ix) shall not exceed \$10,000,000 at any time;

(x) Indebtedness representing deferred compensation to employees of Holdings and its Restricted Subsidiaries incurred in the ordinary course of business;

(xi) Indebtedness consisting of unsecured promissory notes issued by any Loan Party to current or former officers, directors and employees, their permitted transferees, or their respective estates, executors, trustees, administrators, heirs, legatees or distributees to finance the purchase or redemption of Equity Interests of Holdings (or any direct or indirect parent thereof or any Employee Holding Vehicle) permitted by Section 6.08(a);

(xii) Indebtedness constituting indemnification obligations or obligations in respect of purchase price or other similar adjustments incurred in a Permitted Acquisition, any other Investment or any Disposition, in each case permitted under this Agreement;

(xiii) Indebtedness consisting of obligations under deferred compensation or other similar arrangements incurred in connection with any Permitted Acquisition or other Investment permitted hereunder;

(xiv) Cash Management Obligations and other Indebtedness in respect of netting services, overdraft protections and similar arrangements, in each case, incurred in the ordinary course of business in connection with deposit accounts;

(xv) Indebtedness of Holdings and its Restricted Subsidiaries; *provided* that at the time of the incurrence thereof and after giving Pro Forma Effect thereto and the use of the proceeds thereof, (A) the aggregate principal amount of Indebtedness outstanding in reliance on this clause (xv) shall not exceed \$50,000,000 and (B) the aggregate principal amount of Indebtedness outstanding in reliance on this clause (xv) in respect of which the primary obligor or a guarantor is a Restricted Subsidiary that is not a Loan Party shall not exceed \$20,000,000;

(xvi) Indebtedness consisting of (A) the financing of insurance premiums or (B) take-or-pay obligations contained in supply arrangements, in each case in the ordinary course of business;

(xvii) Indebtedness incurred by the Borrower or any of the Restricted Subsidiaries in respect of letters of credit, bank guarantees, bankers' acceptances or similar instruments issued or created in the ordinary course of business, including in respect of workers compensation claims, health, disability or other employee benefits or property, casualty or liability insurance or self-insurance or other reimbursement-type obligations regarding workers compensation claims;

(xviii) obligations in respect of performance, bid, appeal and surety bonds and performance and completion guarantees and similar obligations provided by Holdings or any of its Restricted Subsidiaries or obligations in respect of letters of credit, bank guarantees or similar instruments related thereto, in each case in the ordinary course of business or consistent with past practice;

(xix) [reserved];

(xx) Permitted Unsecured Refinancing Debt, and any Permitted Refinancing thereof;

(xxi) Permitted First Priority Refinancing Debt and Permitted Junior Lien Refinancing Debt, and any Permitted Refinancing thereof;

(xxii) Indebtedness of the Borrower in respect of one or more series of senior unsecured notes or senior secured notes that will be secured by the Collateral on a pari passu or junior basis with the Secured Obligations, that are issued or made in lieu of Incremental Revolving Facilities and/or Incremental Term Facilities pursuant to an indenture or a note purchase agreement or otherwise and any extensions, renewals, refinancings and replacements thereof (the "**Additional Notes**"); *provided* that (i) such Additional Notes are not scheduled to mature prior to the date that is 91 days after the Latest Maturity Date then in effect and such Additional Notes shall not have a Weighted Average Life to Maturity shorter than the Weighted Average Life to Maturity of the Term Loans then in effect, (ii) such Additional Notes shall not have any mandatory prepayment provisions (other than provisions related to customary asset sale and change of control offers) that could result in prepayments of such Additional Notes prior to the Term Loans then in effect, (iii) such Additional Notes have terms and conditions (other than pricing, optional prepayment,

redemption premiums and subordination terms), taken as a whole, that are substantially identical to or no more favorable to the investors providing such Additional Notes than the terms and conditions of this Agreement (except for covenants or other provisions applicable only to periods after the Latest Maturity Date), (iv) the aggregate principal amount of all Additional Notes issued pursuant to this paragraph (xxii) shall not exceed (x) the Incremental Cap less (y) the amount of all Incremental Revolving Facilities and Incremental Term Facilities and the aggregate principal amount of all secured Indebtedness incurred after the Restatement Effective Date pursuant to Section 6.01(a)(viii), and such Additional Notes shall reduce availability under the Incremental Cap on a dollar-for-dollar basis, (v) such Additional Notes shall not be Guaranteed by any Person other than a Loan Party, (vi) in the case of Additional Notes that are secured, the obligations in respect thereof shall not be secured by any Lien on any asset of the Holdings or any Restricted Subsidiary other than any asset constituting Collateral, (vii) at the time of such incurrence (except in the case of any extension, renewal, refinancing or replacement thereof that does not exceed the principal amount (or accreted value, if applicable) of the Indebtedness so extended, renewed, refinanced or replaced) and immediately after giving effect thereto, the Borrower shall be in compliance with the Financial Performance Covenants on a Pro Forma Basis as of the end of the most recent Test Period for which financial statements are available, (viii) no Default or Event of Default shall have occurred and be continuing or would exist immediately after giving effect to such incurrence, (ix) if such Additional Notes are secured, the security agreements relating to such Additional Notes shall be substantially the same as the Security Documents (with such differences as are reasonably satisfactory to the Administrative Agent) and (x) if such Additional Notes are secured, such Additional Notes and the trustee or other representative under the indenture or other agreement governing such Additional Notes shall be subject to the First Lien Intercreditor Agreement or Junior Lien Intercreditor Agreement, as applicable; *provided* that if such Additional Notes are issued pursuant to an indenture or other agreement that has not previously been made subject thereto, then Holdings, the Borrower, the Subsidiary Loan Parties, the Administrative Agent and the Senior Representative for such Additional Notes shall have executed and delivered the First Lien Intercreditor Agreement or the Junior Lien Intercreditor Agreement, as applicable;

(xxiii) Trading Debt incurred in the ordinary course of business or in a manner consistent with past practices; and

(xxiv) all premiums (if any), interest (including post-petition interest and capitalized or paid in kind interest), fees, expenses, charges and additional or contingent interest on obligations described in clauses (i) through (xxiii) above.

(b) [Reserved].

(c) Neither Holdings nor the Borrower will, nor will they permit any Restricted Subsidiary to, issue any preferred Equity Interests or any Disqualified Equity Interests, except (A) in the case of Holdings, preferred Equity Interests that are Qualified Equity Interests and (B) in the case of the Borrower or any Restricted Subsidiary,

preferred Equity Interests issued to and held by Holdings, the Borrower or any Restricted Subsidiary.

Section 6.02. *Liens.* Neither Holdings nor the Borrower will, nor will they permit any Restricted Subsidiary to, create, incur, assume or permit to exist any Lien on any property or asset now owned or hereafter acquired by it, except:

(i) Liens created under the Loan Documents;

(ii) Permitted Encumbrances;

(iii) Liens existing on the Restatement Effective Date and set forth on Schedule 6.02 and any modifications, replacements, renewals or extensions thereof; *provided* that (A) such modified, replacement, renewal or extension Lien does not extend to any additional property other than (x) after-acquired property that is affixed or incorporated into the property covered by such Lien and (y) proceeds and products thereof, and (B) the obligations secured or benefited by such modified, replacement, renewal or extension Lien are, if Indebtedness, permitted by Section 6.01 or, if not Indebtedness, not prohibited hereunder;

(iv) Liens securing Indebtedness permitted under Section 6.01(a)(v); *provided* that (A) such Liens attach concurrently with or within 270 days after the acquisition, repair, replacement, construction or improvement (as applicable) of the property subject to such Liens, (B) such Liens do not at any time encumber any property other than the property financed by such Indebtedness except for accessions to such property and the proceeds and the products thereof and (C) with respect to Capital Lease Obligations, such Liens do not at any time extend to or cover any assets (except for accessions to or proceeds of such assets) other than the assets subject to such Capital Lease Obligations; *provided further* that individual financings of equipment provided by one lender may be cross collateralized to other financings of equipment provided by such lender;

(v) leases, licenses, subleases or sublicenses granted to others that do not (A) interfere in any material respect with the business of Holdings and its Restricted Subsidiaries, taken as a whole, or (B) secure any Indebtedness;

(vi) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of goods;

(vii) Liens (A) of a collection bank arising under Section 4-210 of the Uniform Commercial Code on items in the course of collection and (B) in favor of a banking institution arising as a matter of law encumbering deposits (including the right of setoff) and that are within the general parameters customary in the banking industry;

(viii) Liens (A) on cash advances or escrow deposits in favor of the seller of any property to be acquired in an Investment permitted pursuant to



Section 6.04 to be applied against the purchase price for such Investment or otherwise in connection with any escrow arrangements with respect to any such Investment or any Disposition permitted under Section 6.05 (including any letter of intent or purchase agreement with respect to such Investment or Disposition), or (B) consisting of an agreement to dispose of any property in a Disposition permitted under Section 6.05, in each case, solely to the extent such Investment or Disposition, as the case may be, would have been permitted on the date of the creation of such Lien;

(ix) Liens on property of any Restricted Subsidiary that is not a Loan Party or a Regulated Subsidiary, which Liens secure Indebtedness of such Restricted Subsidiary permitted under Section 6.01 or other obligations of such Restricted Subsidiary that are not prohibited hereunder;

(x) Liens granted by a Restricted Subsidiary that is not a Loan Party in favor of any Loan Party and Liens granted by a Loan Party in favor of any other Loan Party;

(xi) Liens existing on property at the time of its acquisition or existing on the property of any Person at the time such Person becomes a Restricted Subsidiary, in each case after the Restatement Effective Date (other than Liens on the Equity Interests of any Person that becomes a Restricted Subsidiary); *provided* that (A) such Lien was not created in contemplation of or in connection with such acquisition or such Person becoming a Restricted Subsidiary, (B) such Lien does not extend to or cover any other assets or property (other than the proceeds or products thereof and other than after-acquired property subject to a Lien securing Indebtedness and other obligations incurred prior to such time and which Indebtedness and other obligations are permitted hereunder that require or include, pursuant to their terms at such time, a pledge of after-acquired property, it being understood that such requirement shall not be permitted to apply to any property to which such requirement would not have applied but for such acquisition), and (C) if the obligations secured thereby constitute Indebtedness, such Indebtedness is permitted under Section 6.01(a)(v) or (vii);

(xii) any interest or title of a lessor under leases (other than leases constituting Capital Lease Obligations) entered into by Holdings or any Restricted Subsidiaries in the ordinary course of business;

(xiii) Liens arising out of conditional sale, title retention, consignment or similar arrangements for sale of goods by Holdings or any Restricted Subsidiaries in the ordinary course of business;

(xiv) Liens deemed to exist in connection with Investments in repurchase agreements under clause (e) of the definition of the term "Permitted Investments";

(xv) Liens incurred in the ordinary course of business (A) encumbering reasonable customary initial deposits and margin deposits and

similar Liens attaching to commodity trading accounts or other brokerage accounts, in each case not for speculative purposes or (B) in favor of clearing agencies, clearing firms, settlement banks and similar entities (acting in their capacities as such) involved in the clearance and settlement of transactions in, and custody of, financial assets;

(xvi) Liens that are contractual rights of setoff (A) relating to the establishment of depository relations with banks not given in connection with the incurrence of Indebtedness, (B) relating to pooled deposit or sweep accounts to permit satisfaction of overdraft or similar obligations incurred in the ordinary course of business of Holdings and its Restricted Subsidiaries or (C) relating to purchase orders and other agreements entered into with customers of the Holdings or any Restricted Subsidiary in the ordinary course of business;

(xvii) ground leases in respect of real property on which facilities owned or leased by Holdings or any of the Restricted Subsidiaries are located;

(xviii) Liens on insurance policies and the proceeds thereof securing the financing of the premiums with respect thereto;

(xix) Liens on the Collateral securing Permitted First Priority Refinancing Debt, Permitted Junior Lien Refinancing Debt, Additional Notes and Indebtedness incurred to finance a Permitted Acquisition to the extent permitted to be secured pursuant to Section 6.01(a)(viii);

(xx) Liens securing Trading Debt; *provided* that any Liens securing Trading Debt shall be limited to the commodity, futures and other accounts (including deposit accounts and securities accounts) maintained by the relevant debtor with the financial institution providing such Trading Debt (or with any of its Affiliates or third parties acting as a securities, commodities, futures or other financial intermediary or performing a similar role on behalf of such financial institutions in connection with such Trading Debt) and all cash, securities, investment property (excluding any Equity Interests of the Borrower or its Subsidiaries), instruments, payment intangibles and other assets, including assets which would be customarily subject of a Repo Agreement or customarily acceptable as "borrowing base collateral" in secured warehouse financings, in or credited to such accounts or otherwise relating to, arising out of or evidencing such accounts or assets or held in the possession of, to the order or under the direction or control of, such financial institution (or any of its Affiliates acting on its behalf) or any exchange or clearing organization through which transactions on behalf of the relevant debtor are executed or cleared and all proceeds of any of the foregoing);

(xxi) other Liens; *provided* that at the time of the granting of and after giving Pro Forma Effect to any such Lien and the obligations secured thereby (including the use of proceeds thereof) the aggregate face amount of obligations secured by Liens existing in reliance on this clause (xxi) shall not exceed the greater of \$20,000,000 and 7.5% of Consolidated EBITDA for the most recently ended Test Period for which financial statements are available; and

(xxii) Liens securing the Second Lien Notes outstanding on the Escrow Assumption Date or any Permitted Refinancing thereof; *provided* that such Liens are junior to the Liens created under the Loan Documents pursuant to a Junior Lien Intercreditor Agreement.

Section 6.03. *Fundamental Changes.* (a) Neither Holdings nor the Borrower will, nor will they permit any other Restricted Subsidiary to, merge into or consolidate with any other Person, or permit any other Person to merge into or consolidate with it, or liquidate or dissolve, except that:

(i) any Restricted Subsidiary (other than the Borrower) may merge with (A) the Borrower; *provided* that the Borrower shall be the continuing or surviving Person, or (B) in the case of any Restricted Subsidiary, any one or more other Restricted Subsidiaries; *provided* that when any Restricted Subsidiary Loan Party is merging with another Restricted Subsidiary (x) the continuing or surviving Person shall be a Subsidiary Loan Party or (y) if the continuing or surviving Person is not a Subsidiary Loan Party, the acquisition of such Subsidiary Loan Party by such surviving Restricted Subsidiary is otherwise permitted under Section 6.04;

(ii) (A) any Restricted Subsidiary that is not a Loan Party may merge or consolidate with or into any other Restricted Subsidiary that is not a Loan Party and (B) any Restricted Subsidiary may liquidate or dissolve or change its legal form if Holdings determines in good faith that such action is in the best interests of Holdings, the Borrower and its Restricted Subsidiaries and is not materially disadvantageous to the Lenders;

(iii) any Restricted Subsidiary (other than an Intermediate Parent or the Borrower) may make a Disposition of all or substantially all of its assets (upon voluntary liquidation or otherwise) to another Restricted Subsidiary; *provided* that if the transferor in such a transaction is a Loan Party, then (A) the transferee must be a Loan Party, (B) to the extent constituting an Investment, such Investment must be a permitted Investment in a Restricted Subsidiary that is not a Loan Party in accordance with Section 6.04 or (C) to the extent constituting a Disposition to a Restricted Subsidiary that is not a Loan Party, such Disposition is for fair value and any promissory note or other non-cash consideration received in respect thereof is a permitted Investment in a Restricted Subsidiary that is not a Loan Party in accordance with Section 6.04;

(iv) the Borrower may merge or consolidate with any other Person; *provided* that (A) the Borrower shall be the continuing or surviving Person or (B) if the Person formed by or surviving any such merger or consolidation is not the Borrower (any such Person, the “**Successor Borrower**”), (w) the Successor Borrower shall be an entity organized or existing under the laws of the United States, any State thereof or the District of Columbia, (x) the Successor Borrower shall expressly assume all the obligations of the Borrower under this Agreement and the other Loan Documents to which the Borrower is a party pursuant to a supplement hereto or thereto in form and substance reasonably satisfactory to the Administrative Agent, (y) each Loan Party other than the Borrower, unless it is

the other party to such merger or consolidation, shall have reaffirmed, pursuant to an agreement in form and substance reasonably satisfactory to the Administrative Agent, that its Guarantee of, and grant of any Liens as security for, the Secured Obligations shall apply to the Successor Borrower's obligations under this Agreement and (z) the Borrower shall have delivered to the Administrative Agent a certificate of a Responsible Officer and an opinion of counsel, each stating that such merger or consolidation complies with this Agreement; *provided further* that (1) if such Person is not a Loan Party, no Default exists after giving effect to such merger or consolidation and (2) if the foregoing requirements are satisfied, the Successor Borrower will succeed to, and be substituted for, the Borrower under this Agreement and the other Loan Documents; *provided further* that the Borrower agrees to use commercially reasonable efforts to provide any documentation and other information about the Successor Borrower as shall have been reasonably requested in writing by any Lender through the Administrative Agent that such Lender shall have reasonably determined is required by regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including without limitation the USA Patriot Act;

(v) Holdings may merge or consolidate with any other Person, so long as no Event of Default exists after giving effect to such merger or consolidation; *provided* that (A) Holdings shall be the continuing or surviving Person or (B) if the Person formed by or surviving any such merger or consolidation is not Holdings or is a Person into which Holdings has been liquidated (any such Person, the "**Successor Holdings**"), (w) the Successor Holdings shall expressly assume all the obligations of Holdings under this Agreement and the other Loan Documents to which Holdings is a party pursuant to a supplement hereto or thereto in form and substance reasonably satisfactory to the Administrative Agent, (x) each Loan Party other than Holdings, unless it is the other party to such merger or consolidation, shall have reaffirmed, pursuant to an agreement in form and substance reasonably satisfactory to the Administrative Agent, that its Guarantee of and grant of any Liens as security for the Secured Obligations shall apply to the Successor Holdings' obligations under this Agreement, (y) the Successor Holdings shall, immediately following such merger or consolidation, directly or indirectly own all Subsidiaries owned by Holdings immediately prior to such merger and (z) Holdings shall have delivered to the Administrative Agent a certificate of a Responsible Officer and an opinion of counsel, each stating that such merger or consolidation complies with this Agreement; *provided further* that if the foregoing requirements are satisfied, the Successor Holdings will succeed to, and be substituted for, Holdings under this Agreement and the other Loan Documents; *provided further* that the Borrower agrees to use commercially reasonable efforts to provide any documentation and other information about the Successor Holdings as shall have been reasonably requested in writing by any Lender through the Administrative Agent that such Lender shall have reasonably determined is required by regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including without limitation the USA Patriot Act

(vi) any Restricted Subsidiary (other than the Borrower) may merge, consolidate or amalgamate with any other Person in order to effect an Investment permitted pursuant to Section 6.04; *provided* that the continuing or surviving Person shall be a Restricted Subsidiary, which together with each of its Restricted Subsidiaries, shall have complied with the requirements of Sections 5.11 and 5.12 and if the other party to such transaction is not a Loan Party, no Default exists after giving effect to such transaction; and

(vii) any Restricted Subsidiary (other than the Borrower) may effect a merger, dissolution, liquidation, consolidation or amalgamation to effect a Disposition permitted pursuant to Section 6.05; *provided* that if the other party to such transaction is not a Loan Party, no Default exists after giving effect to the transaction.

(b) The Borrower will not, and Holdings and the Borrower will not permit any Restricted Subsidiary to, engage to any material extent in any business other than businesses of the type conducted by the Borrower and the Restricted Subsidiaries (and KCG and its subsidiaries) on the Restatement Effective Date and businesses reasonably related or ancillary thereto.

(c) Holdings and any Intermediate Parent will not conduct, transact or otherwise engage in any business or operations other than (i) the ownership and/or acquisition of the Equity Interests of the Borrower and any Intermediate Parent, (ii) the maintenance of its legal existence, including the ability to incur fees, costs and expenses relating to such maintenance, (iii) participating in tax, accounting and other administrative matters, (iv) the performance of its obligations under and in connection with the Loan Documents, any documentation governing any Indebtedness or Guarantee permitted to be incurred or made by it under Article 6, the Holdings LLC Agreement, and the other agreements contemplated hereby, (v) any public offering of its common stock or any other issuance or registration of its Equity Interests for sale or resale not prohibited by this Agreement, including the costs, fees and expenses related thereto, (vi) any transaction that Holdings or any Intermediate Parent is permitted to enter into or consummate under Article 6 (including, but not limited to, the making of any Restricted Payment permitted by Section 6.08 or holding of any cash or Permitted Investments received in connection with Restricted Payments made in accordance with Section 6.08 pending application thereof in the manner contemplated by Section 6.04, the incurrence of any Indebtedness permitted to be incurred by it under Section 6.01 and the making of any Investment permitted to be made by it under Section 6.04), (vii) incurring fees, costs and expenses relating to overhead and general operating including professional fees for legal, tax and accounting issues and paying taxes, (viii) providing indemnification to officers and directors and as otherwise permitted in Section 6.09, (ix) activities incidental to the consummation of the Transactions and (x) activities incidental to the businesses or activities described in clauses (i) to (ix) of this paragraph.

(d) Holdings and any Intermediate Parent will not own or acquire any assets (other than Equity Interests as referred to in paragraph (c)(i) above, cash, Permitted Investments, loans and advances made by Holdings or any Intermediate Parent under Section 6.04(b) and intercompany Investments permitted to be made by it under Section 6.04) or incur any liabilities (other than liabilities as referred to in paragraph (c) above,

liabilities imposed by law, including tax liabilities, and other liabilities incidental to its existence and business and activities permitted by this Agreement).

(e) Notwithstanding anything to the contrary in this Section 6.03, the Transactions (including the Merger and Contribution) shall be permitted.

Section 6.04. *Investments, Loans, Advances, Guarantees and Acquisitions.* Neither Holdings nor the Borrower will, nor will they permit any Restricted Subsidiary or Intermediate Parent to, make or hold any Investment, except:

(a) Permitted Investments;

(b) loans or advances to officers, directors and employees of Holdings, the Borrower and its Restricted Subsidiaries (i) for reasonable and customary business-related travel, entertainment, relocation and analogous ordinary business purposes, (ii) in connection with such Person's purchase of Equity Interests of Holdings (or any direct or indirect parent thereof or any Employee Holding Vehicle) (*provided* that the amount of such loans and advances made in cash to such Person shall be contributed to the Borrower in cash as common equity or Qualified Equity Interests) and (iii) for purposes not described in the foregoing clauses (i) and (ii), in an aggregate principal amount outstanding at any time not to exceed \$5,000,000;

(c) Investments (i) by Holdings, the Borrower or any Restricted Subsidiary in any Loan Party (excluding any new Restricted Subsidiary that becomes a Loan Party pursuant to such Investment), (ii) by any Restricted Subsidiary that is not a Loan Party in any other Restricted Subsidiary that is also not a Loan Party, (iii) by Holdings or any Restricted Subsidiary (A) in any Restricted Subsidiary; *provided* that the aggregate amount of such Investments made by Loan Parties after the Restatement Effective Date in Restricted Subsidiaries that are not Loan Parties in reliance on this clause (iii)(A) (including any such Investments deemed to be made pursuant to Section 6.14) (together with the amount of Investments made in Restricted Subsidiaries (other than Regulated Subsidiaries) that are not Loan Parties pursuant to Section 6.04(h) and the amount of Investments and acquisitions made pursuant to Section 6.04(m), in each case, after the Restatement Effective Date) shall not exceed the Non-Loan Party Investment Amount at the time of any such Investment, (B) in any Regulated Subsidiary in the form of short-term intercompany advances and Indebtedness, in each case made in the ordinary course of business to provide for working capital and other operational requirements of such Regulated Subsidiary, (C) in any Restricted Subsidiary that is not a Loan Party, constituting an exchange of Equity Interests of such Restricted Subsidiary for Indebtedness of such Subsidiary, (D) constituting Guarantees of Indebtedness or other monetary obligations of Restricted Subsidiaries that are not Loan Parties owing to any Loan Party or (E) constituting unsecured Guarantees of Trading Debt to the extent such Guarantees are permitted under Section 6.01(a)(iii), (1) by Holdings, any Intermediate Parent, the Borrower or any Restricted Subsidiary in Restricted Subsidiaries that are not Loan Parties so long as such Investment is part of a series of simultaneous transactions that result in the proceeds of the initial transaction being invested in one or more Loan Parties or, if the proceeds were initially held by a non-Loan Party, in a Restricted Subsidiary that is not a Loan Party and (iv) by Holdings, the Borrower or any Restricted Subsidiary in any Restricted Subsidiary that is not a Loan Party, consisting of the

contribution of Equity Interests of any other Restricted Subsidiary that is not a Loan Party so long as the Equity Interests of the transferee Restricted Subsidiary is pledged to secure the Secured Obligations;

(d) Investments consisting of extensions of trade credit in the ordinary course of business;

(e) Investments (i) existing or contemplated on the Restatement Effective Date and set forth on Schedule 6.04(e) and any modification, replacement, renewal, reinvestment or extension thereof and (ii) existing on the Restatement Effective Date by Holdings, the Borrower or any Restricted Subsidiary in the Borrower or any Restricted Subsidiary and any modification, renewal or extension thereof; *provided* that in each case the amount of the original Investment is not increased except by the terms of such Investment to the extent as set forth on Schedule 6.04(e) or as otherwise permitted by this Section 6.04;

(f) Investments in Swap Agreements permitted under Section 6.07;

(g) promissory notes and other non-cash consideration received in connection with Dispositions permitted by Section 6.05;

(h) Permitted Acquisitions; *provided* that the aggregate amount of consideration paid or provided by Holdings, any Intermediate Parent, the Borrower or any other Loan Party (including any Indebtedness incurred by any such Person to finance any portion of such consideration) after the Restatement Effective Date in reliance on this Section 6.04(h) (together with any Investments made in Subsidiaries that are not Loan Parties pursuant to Section 6.04(c)(iii)(A), Investments deemed to be made pursuant to Section 6.14 and the amount of Investments and acquisitions made pursuant to Section 6.04(m), in each case, after the Restatement Effective Date) for Permitted Acquisitions (including the aggregate principal amount of all Indebtedness assumed in connection with Permitted Acquisitions) of any Restricted Subsidiary (other than a Regulated Subsidiary) that shall not be or, after giving effect to such Permitted Acquisition, shall not become, a Loan Party, shall not exceed the Non-Loan Party Investment Amount at such time;

(i) prior to the Escrow Assumption Date, Investments in the Escrow Borrower to fund interest and other amounts owing or required to be pre-funded with respect to the Escrow Term Loans and, to the extent applicable, interest and other amounts owing or required to be pre-funded in respect of the Second Lien Notes;

(j) Investments in the ordinary course of business consisting of Uniform Commercial Code Article 3 endorsements for collection or deposit and Uniform Commercial Code Article 4 customary trade arrangements with customers consistent with past practices;

(k) Investments (including debt obligations and Equity Interests) received in connection with the bankruptcy or reorganization of suppliers and customers or in settlement of delinquent obligations of, or other disputes with, customers and suppliers

or upon the foreclosure with respect to any secured Investment or other transfer of title with respect to any secured Investment;

(l) loans and advances to Holdings (or any direct or indirect parent thereof) or any Intermediate Parent in lieu of, and not in excess of the amount of (after giving effect to any other loans, advances or Restricted Payments in respect thereof), Restricted Payments to the extent permitted to be made to Holdings (or such parent) in accordance with Section 6.08(a)(iv), (v), (vi), (vii) or (viii);

(m) so long as immediately after giving effect to any such Investment or acquisition no Default shall have occurred and be continuing, other Investments and other acquisitions; *provided* that at the time any such Investment (including any such Investments deemed to be made pursuant to Section 6.14) or other acquisition is made, the aggregate outstanding amount of all Investments made in reliance on this clause (m) (including all such Investments deemed made pursuant to Section 6.14), Investments made in Subsidiaries that are not Loan Parties pursuant to Section 6.04(c)(iii)(A) and Investments made in Restricted Subsidiaries (other than Regulated Subsidiaries) that are not Loan Parties pursuant to Section 6.04(h), together with the aggregate amount of all consideration paid in connection with all other acquisitions made in reliance on this clause (m) (including the aggregate principal amount of all Indebtedness assumed in connection with any such other acquisition), in each case, after the Restatement Effective Date, shall not exceed the Non-Loan Party Investment Amount at the time of any such Investment or acquisition;

(n) advances of payroll payments to employees in the ordinary course of business;

(o) Investments and other acquisitions to the extent that payment for such Investments is made solely with Qualified Equity Interests (excluding Cure Amounts) of Holdings (or any direct or indirect parent thereof);

(p) Investments of a Subsidiary acquired after the Restatement Effective Date or of a Person merged or consolidated with any Subsidiary in accordance with this Section and Section 6.03 after the Restatement Effective Date (other than existing Investments in subsidiaries of such Subsidiary or Person, which must comply with the requirements of Section 6.04(h) or 6.04(m)) to the extent that such Investments were not made in contemplation of or in connection with such acquisition, merger or consolidation and were in existence on the date of such acquisition, merger or consolidation;

(q) Investments made or acquired in the ordinary course trading activities of the Borrower and its Restricted Subsidiaries;

(r) non-cash Investments in connection with tax planning and reorganization activities; *provided* that after giving effect to any such activities, the security interests of the Lenders in the Collateral, taken as a whole, would not be materially impaired;

(s) Investments in any Foreign Subsidiary made for the purposes of providing such Foreign Subsidiary the necessary capital to comply with any capital or margin requirements of a Regulatory Supervisory Organization; *provided* that the aggregate



outstanding amount of Investments made pursuant to this clause shall not exceed \$25,000,000 at any time;

(t) if the Escrow Assumption occurs, Investments as a result of the Transactions, including, without limitation, Investments of a Subsidiary acquired in the Merger and Contribution to the extent that such Investments are in existence on the Escrow Assumption Date; and

(u) Investments in market structure companies, including securities exchanges, venues and clearing firms, in the ordinary course of business; provided, that the aggregate amount of Investments at any one time outstanding under this clause (u) in any such market structure company shall not exceed \$10,000,000.

Section 6.05. *Asset Sales*. Neither Holdings nor the Borrower will, nor will they permit any Restricted Subsidiary to, sell, transfer, lease or otherwise dispose of any asset, including any Equity Interest owned by it, nor will Holdings or the Borrower permit any Restricted Subsidiary to issue any additional Equity Interest in such Restricted Subsidiary (other than issuing directors' qualifying shares, nominal shares issued to foreign nationals to the extent required by applicable Requirements of Law and other than issuing Equity Interests to Holdings, the Borrower or a Restricted Subsidiary in compliance with Section 6.04(c)) (each, a "**Disposition**"), except:

(a) Dispositions of obsolete or worn out property, whether now owned or hereafter acquired, in the ordinary course of business and Dispositions of property no longer used or useful in the conduct of the business of Holdings, any Intermediate Parent, the Borrower and its Restricted Subsidiaries;

(b) Dispositions of inventory and other assets in the ordinary course of business;

(c) Dispositions of property to the extent that (i) such property is exchanged for credit against the purchase price of similar replacement property or (ii) the proceeds of such Disposition are promptly applied to the purchase price of such replacement property;

(d) Dispositions of property to the Borrower or a Restricted Subsidiary; *provided* that if the transferor in such a transaction is a Loan Party, then (i) the transferee must be a Loan Party, (ii) to the extent constituting an Investment, such Investment must be a permitted Investment in a Restricted Subsidiary that is not a Loan Party in accordance with Section 6.04 or (iii) to the extent constituting a Disposition to a Restricted Subsidiary that is not a Loan Party, such Disposition is for fair value and any promissory note or other non-cash consideration received in respect thereof is a permitted investment in a Restricted Subsidiary that is not a Loan Party in accordance with Section 6.04;

(e) Dispositions permitted by Section 6.03 (other than Section 6.03(a)(vii)), Investments permitted by Section 6.04, Restricted Payments permitted by Section 6.08 and Liens permitted by Section 6.02;

(f) Dispositions of property acquired by Holdings, the Borrower or any of its Restricted Subsidiaries after the Restatement Effective Date pursuant to sale-leaseback transactions permitted by Section 6.06;

(g) Dispositions of Permitted Investments;

(h) Dispositions of accounts receivable in connection with the collection or compromise thereof;

(i) leases, subleases, licenses or sublicenses (including the provision of software under an open source license), in each case in the ordinary course of business and that do not materially interfere with the business of Holdings, the Borrower and its Restricted Subsidiaries, taken as a whole;

(j) transfers of property subject to Casualty Events upon receipt of the Net Proceeds of such Casualty Event;

(k) Dispositions of property to Persons other than Restricted Subsidiaries (including the sale or issuance of Equity Interests of a Restricted Subsidiary) not otherwise permitted under this Section 6.05; *provided* that (i) the aggregate amount of consideration received from Dispositions made in reliance on this clause (k) after the Restatement Effective Date shall not exceed \$100,000,000, (ii) no Default shall exist at the time of, or would result from, such Disposition (other than any such Disposition made pursuant to a legally binding commitment entered into at a time when no Default existed or would have resulted from such Disposition) and (iii) with respect to any Disposition pursuant to this clause (k) for a purchase price in excess of \$5,000,000, Holdings, the Borrower or a Restricted Subsidiary shall receive not less than 75% of such consideration in the form of cash or Permitted Investments; *provided, however*, that for the purposes of this clause (iii), (A) any liabilities (as shown on the most recent balance sheet of Holdings provided hereunder or in the footnotes thereto) of Holdings, the Borrower or such Restricted Subsidiary, other than liabilities that are by their terms subordinated in right of payment to the Loan Document Obligations, that are assumed by the transferee with respect to the applicable Disposition and for which Holdings, any Intermediate Parent, the Borrower and all of the Restricted Subsidiaries shall have been validly released by all applicable creditors in writing, shall be deemed to be cash, (B) any securities received by Holdings, any Intermediate Parent, the Borrower or such Restricted Subsidiary from such transferee that are converted by Holdings, any Intermediate Parent, the Borrower or such Restricted Subsidiary into cash or Permitted Investments (to the extent of the cash or Permitted Investments received) within 180 days following the closing of the applicable Disposition, shall be deemed to be cash and (C) any Designated Non-Cash Consideration received by Holdings, any Intermediate Parent, the Borrower or such Restricted Subsidiary in respect of such Disposition having an aggregate fair market value, taken together with all other Designated Non-Cash Consideration received pursuant to this clause (k) that is at that time outstanding, not in excess of \$20,000,000 at the time of the receipt of such Designated Non-Cash Consideration, with the fair market value of each item of Designated Non-Cash Consideration being measured at the time received and without giving effect to subsequent changes in value, shall be deemed to be cash;

(l) Dispositions of Investments in joint ventures to the extent required by, or made pursuant to customary buy/sell arrangements between, the joint venture parties set forth in joint venture arrangements and similar binding arrangements;

(m) Dispositions of assets listed on Schedule 6.05;

(n) Dispositions of non-core assets acquired in (i) a Permitted Acquisition; *provided* that (A) such assets were identified to the Administrative Agent in writing as non-core assets within thirty days of the time that the applicable Permitted Acquisition was consummated and (B) such Disposition is consummated within one year after the date on which the applicable Permitted Acquisition was consummated, or (ii) the Merger and Contribution; and

(o) Dispositions of securities, Swap Agreements and other financial instruments as part of the ordinary course trading business of the Borrower and its Restricted Subsidiaries;

*provided* that any Disposition of any property pursuant to this Section 6.05 (except pursuant to Section 6.05(e) and except for Dispositions by a Loan Party to another Loan Party), shall be for no less than the fair market value of such property at the time of such Disposition.

Section 6.06. *Sale and Leaseback Transactions.* Neither Holdings nor the Borrower will, nor will they permit any Restricted Subsidiary or Intermediate Parent to, enter into any arrangement, directly or indirectly, whereby it shall sell or transfer any property, real or personal, used or useful in its business, whether now owned or hereafter acquired, and thereafter rent or lease such property or other property that it intends to use for substantially the same purpose or purposes as the property sold or transferred, except for any such sale of any fixed or capital assets by the Borrower or any Restricted Subsidiary that is made for cash consideration in an amount not less than the fair value of such fixed or capital asset and is consummated within 270 days after the Borrower or such Restricted Subsidiary, as applicable, acquires or completes the construction of such fixed or capital asset; *provided* that, if such sale and leaseback results in a Capital Lease Obligation, such Capital Lease Obligation is permitted by Section 6.01 and any Lien made the subject of such Capital Lease Obligation is permitted by Section 6.02.

Section 6.07. *Swap Agreements.* Neither Holdings nor the Borrower will, nor will they permit any Restricted Subsidiary or Intermediate Parent to, enter into any Swap Agreement, except (a) (i) Swap Agreements entered into to hedge or mitigate risks to which Holdings, the Borrower or any Restricted Subsidiary has actual exposure (other than those in respect of shares of capital stock or other Equity Interests of Holdings, the Borrower or any Restricted Subsidiary) and (ii) Swap Agreements entered into in order to effectively cap, collar or exchange interest rates (from fixed to floating rates, from one floating rate to another floating rate or otherwise) with respect to any interest-bearing liability or investment of Holdings, the Borrower or any Restricted Subsidiary; *provided* that any Swap Agreement entered into pursuant to this clause (a) shall be entered into in the ordinary course of business and not for speculative purposes and (b) Swap Agreements entered into in the ordinary course trading business of the Borrower or any Restricted Subsidiary.

Section 6.08. *Restricted Payments; Certain Payments of Indebtedness.* (a) Neither Holdings nor the Borrower will, nor will they permit any Restricted Subsidiary to declare or make, or agree to pay or make, directly or indirectly, any Restricted Payment, except:

(i) each Restricted Subsidiary may make Restricted Payments to the Borrower or any other Restricted Subsidiary;

(ii) Holdings, the Borrower and each Restricted Subsidiary may declare and make dividend payments or other distributions payable solely in the Equity Interests of such Person; *provided* that in the case of any such Restricted Payment by a Restricted Subsidiary that is not a Wholly Owned Subsidiary of the Borrower, such Restricted Payment is made to the Borrower, any Restricted Subsidiary and to each other owner of Equity Interests of such Restricted Subsidiary based on their relative ownership interests of the relevant class of Equity Interests;

(iii) following the Escrow Assumption Date, so long as no Default has occurred and is continuing or would be caused thereby, the payment of quarterly distributions or dividends in an amount not to exceed \$46,300,000 during each of the first four consecutive fiscal quarters beginning with the fiscal quarter in which the Escrow Assumption Date occurs; *provided* that (x) the Total Leverage Ratio as of the last day of the most recently ended Test Period prior to any such distribution or dividend, determined on a Pro Forma Basis, is less than or equal to 4.25 to 1.00, (y) for the avoidance of doubt, unused amounts with respect to any such fiscal quarter shall not be available in any other fiscal quarter and (z) any payment pursuant to this clause (iii) shall reduce Cumulative Excess Cash Flow that is Not Otherwise Applied (but not in excess of the amount by which Cumulative Excess Cash Flow that is Not Otherwise Applied exceeds zero at such time);

(iv) repurchases of Equity Interests in Holdings (or Restricted Payments by Holdings to allow repurchases of Equity Interests in any direct or indirect parent of Holdings), the Borrower or any Restricted Subsidiary deemed to occur upon the exercise of stock options or warrants if such Equity Interests represent a portion of the exercise price of such options or warrants;

(v) Holdings may redeem, acquire, retire or repurchase its Equity Interests (or any options or warrants or stock appreciation rights issued with respect to any of such Equity Interests) (or make Restricted Payments to allow any of Holdings' direct or indirect parent companies or any Employee Holding Vehicle to so redeem, retire, acquire or repurchase Equity Interests of Holdings or such entity) held by current or former officers, managers, consultants, directors and employees or their permitted transferees (or their respective estates, executors, trustees, administrators, heirs, legatees or distributees) of Holdings (or any direct or indirect parent thereof), the Borrower and the Restricted Subsidiaries, or held by any Employee Holding Vehicle for the benefit of any of the foregoing, upon the death, disability, retirement or termination of employment of any such Person or otherwise in accordance with any stock

option or stock appreciation rights plan, any management, director and/or employee stock ownership or incentive plan, stock subscription plan, employment termination agreement or any other employment agreements or equity holders' agreement, in an aggregate amount after the Restatement Effective Date together with the aggregate amount of loans and advances to Holdings made pursuant to Section 6.04(l) in lieu of Restricted Payments permitted by this clause (v) not to exceed \$5,000,000 in any calendar year with unused amounts in any calendar year being carried over to succeeding calendar years subject to a maximum of \$15,000,000 in any calendar year (without giving effect to the following proviso); *provided* that such amount in any calendar year may be increased by an amount not to exceed the cash proceeds of key man life insurance policies received by the Borrower or its Restricted Subsidiaries after the Restatement Effective Date and not previously applied pursuant to this clause (v);

(vi) so long as the Borrower and Holdings are each treated as a pass-through or disregarded entity (a "**Flow-Through Entity**") for U.S. federal and state income tax purposes, Borrower may make distributions to Holdings and Holdings may make distributions to its members for Permitted Tax Distributions at such times and with respect to such periods as Tax Distributions (as defined in the Holdings LLC Agreement) are required to be made or designated pursuant to the Holdings LLC Agreement; *provided* that if Holdings is not a Flow-Through Entity, so long as Borrower is a Flow-Through Entity, Borrower may make Permitted Tax Distributions to Holdings on a quarterly basis and at the end of a Taxable Year (with the determination of the Permitted Tax Distributions to be made by substituting Borrower for Holdings in the applicable definitions); *provided further* that Restricted Payments under this clause (vi) in respect of any taxes attributable to the income of any Unrestricted Subsidiaries of the Borrower may be made only to the extent that such Unrestricted Subsidiaries have made cash payments for such purpose to the Borrower or its Restricted Subsidiaries;

(vii) any Intermediate Parent, the Borrower and the Restricted Subsidiaries may make Restricted Payments in cash to Holdings and any Intermediate Parent and, where applicable, Holdings and such Intermediate Parent may make Restricted Payments in cash:

(A) the proceeds of which shall be used by Holdings or any Intermediate Parent to pay (or to make Restricted Payments to allow any direct or indirect parent of Holdings to pay) (1) its operating expenses incurred in the ordinary course of business and other corporate overhead costs and expenses (including administrative, legal, accounting and similar expenses payable to third parties) that are reasonable and customary and incurred in the ordinary course of business, in an aggregate amount together with the aggregate amount of loans and advances to Holdings made pursuant to Section 6.04(l) in lieu of Restricted Payments permitted by this clause (a)(vii)(A) not to exceed \$4,000,000 in any fiscal year, plus any reasonable and customary indemnification claims made by directors or officers of

Holdings (or any parent thereof) attributable to the ownership or operations of Holdings and the Restricted Subsidiaries or otherwise payable by Holdings pursuant to the Holdings LLC Agreement and (2) fees and expenses (x) due and payable by any of the Restricted Subsidiaries and (y) otherwise permitted to be paid (but not paid) by such Restricted Subsidiary under this Agreement;

(B) the proceeds of which shall be used by Holdings or any Intermediate Parent to pay franchise taxes and other fees and expenses required to maintain its organizational existence;

(C) the proceeds of which shall be used by Holdings to make Restricted Payments permitted by Section 6.08(a)(iv) or Section 6.08(a)(v);

(D) to finance any Investment permitted to be made pursuant to Section 6.04; *provided* that (A) such Restricted Payment shall be made substantially concurrently with the closing of such Investment and (B) Holdings or any Intermediate Parent shall, immediately following the closing thereof, cause (1) all property acquired (whether assets or Equity Interests but not including any loans or advances made pursuant to Section 6.04(b)) to be contributed to the Borrower or the Restricted Subsidiaries or (2) the Person formed or acquired to merge into or consolidate with the Borrower or any of the Restricted Subsidiaries (to the extent such merger or consolidation is permitted under Section 6.03) in order to consummate such Investment, in each case in accordance with the requirements of Sections 5.11 and 5.12;

(E) the proceeds of which shall be used to pay (or to make Restricted Payments to allow any direct or indirect parent thereof to pay) fees and expenses related to any equity or debt offering permitted by this Agreement; and

(F) the proceeds of which shall be used to make payments permitted by clause (b)(iv) of this Section 6.08;

(viii) in addition to the foregoing Restricted Payments and so long as (x) no Default shall have occurred and be continuing or would result therefrom and (y) the Borrower would be in compliance with the Financial Performance Covenants on a Pro Forma Basis as of the end of the most recent Test Period for which financial statements are available (after giving Pro Forma Effect to such additional Restricted Payments), the Borrower and any Intermediate Parent may make additional Restricted Payments to any Intermediate Parent and Holdings the proceeds of which may be utilized by Holdings to make additional Restricted Payments, in an aggregate amount, together with the aggregate amount of (1) prepayments, redemptions, purchases, defeasances and other payments in respect of Junior Financings made pursuant to Section 6.08(b)(iv) and (2) loans and advances made pursuant to Section 6.04(1) in lieu of Restricted Payments

permitted by this clause (viii), in each case, after the Restatement Effective Date, not to exceed (x) \$25,000,000 (or, if the Escrow Assumption Date has occurred, \$50,000,000) plus (y) (I) prior to the Escrow Assumption Date, the aggregate amount of the Net Proceeds of the issuance of, or contribution in respect of existing, Qualified Equity Interests, in each case to the extent contributed to the Borrower as cash common equity after the Restatement Effective Date (other than any such issuance or contribution made pursuant to Section 7.02 or any issuance to or contribution from a Restricted Subsidiary) that are Not Otherwise Applied and (II) if the Escrow Assumption Date has occurred, the aggregate amount of the Net Proceeds of the issuance of, or contribution in respect of existing, Qualified Equity Interests, in each case to the extent contributed to the Borrower as cash common equity after the Escrow Assumption Date (other than any such issuance or contribution made pursuant to Section 7.02 or any issuance to or contribution from a Restricted Subsidiary) that are Not Otherwise Applied, plus (z) the amount of Cumulative Excess Cash Flow that is Not Otherwise Applied; *provided* that if the Escrow Assumption Date has occurred, the Total Leverage Ratio at such time, determined on a Pro Forma Basis, is less than or equal to (A) 4.25 to 1.00, in the case of any Restricted Payment prior to March 31, 2019, (B) 3.75 to 1.00, in the case of any Restricted Payment on or after March 31, 2019 but prior to March 31, 2020, (C) 3.00 to 1.00, in the case of any Restricted Payment on or after March 31, 2020 but prior to March 31, 2021 and (D) 2.50 to 1.00 in the case of any Restricted Payment on or after March 31, 2021;

(ix) redemptions in whole or in part of any of its Equity Interests for another class of its Equity Interests or with proceeds from substantially concurrent equity contributions or issuances of new Equity Interests; *provided* that such new Equity Interests contain terms and provisions at least as advantageous to the Lenders in all respects material to their interests as those contained in the Equity Interests redeemed thereby;

(x) Restricted Payments contemplated by the Merger Agreement; and

(xi) prior to the Escrow Assumption Date, Restricted Payments to be provided to the Escrow Borrower to fund interest and other amounts owing or required to be pre-funded with respect to the Escrow Term Loans and, to the extent applicable, interest and other amounts owing or required to be pre-funded in respect of the Second Lien Notes.

(b) Neither Holdings nor the Borrower will, nor will they permit any Restricted Subsidiary to, make or agree to pay or make, directly or indirectly, any payment or other distribution (whether in cash, securities or other property) of or in respect of principal of or interest on any Junior Financing, or any payment or other distribution (whether in cash, securities or other property), including any sinking fund or similar deposit, on account of the purchase, redemption, retirement, acquisition, cancellation or termination of any Junior Financing, or any other payment (including any payment under any Swap Agreement) that has a substantially similar effect to any of the foregoing, except:

(i) payment of regularly scheduled interest and principal payments as and when due in respect of any Indebtedness, other than payments in respect of any Junior Financing prohibited by the subordination provisions thereof;

(ii) refinancings of Indebtedness to the extent permitted by Section 6.01;

(iii) the conversion of any Junior Financing to Equity Interests (other than Disqualified Equity Interests) of Holdings or any of its direct or indirect parent companies or any Intermediate Parent; and

(iv) so long as (x) no Default shall have occurred and be continuing or would result therefrom and (y) the Borrower would be in compliance with the Financial Performance Covenants on a Pro Forma Basis as of the end of the most recent Test Period for which financial statements are available (after giving Pro Forma Effect to such prepayments, redemptions, purchases, defeasances and other payments), prepayments, redemptions, purchases, defeasances and other payments in respect of Junior Financings prior to their scheduled maturity in an aggregate amount, together with the aggregate amount of (1) Restricted Payments made pursuant to clause (a)(viii) and (2) loans and advances made pursuant to Section 6.04(l) in lieu thereof, in each case, after the Restatement Effective Date, not to exceed the sum of (I) prior to the Escrow Assumption Date, (x) \$25,000,000 plus (y) the amount of the Net Proceeds of issuances of, or contributions in respect of existing, Qualified Equity Interests, in each case to the extent contributed to the Borrower as cash common equity after the Restatement Effective Date (other than any such issuance or contribution made pursuant to Section 7.02 or any issuance to or contribution from a Restricted Subsidiary) that are Not Otherwise Applied plus (z) the amount of Cumulative Excess Cash Flow that is Not Otherwise Applied and (II) if the Escrow Assumption Date occurs, (x) \$50,000,000 plus (y) the amount of the Net Proceeds of issuances of, or contributions in respect of existing, Qualified Equity Interests, in each case to the extent contributed to the Borrower as cash common equity after the Escrow Assumption Date (other than any such issuance or contribution made pursuant to Section 7.02 or any issuance to or contribution from a Restricted Subsidiary) that are Not Otherwise Applied plus (z) the amount of Cumulative Excess Cash Flow that is Not Otherwise Applied; provided that that the Total Leverage Ratio at such time, determined on a Pro Forma Basis, is less than or equal to (I) 4.25 to 1.00, in the case of any payment prior to the March 31, 2019, (II) 3.75 to 1.00, in the case of any payment on or after March 31, 2019 but prior to March 31, 2020, (III) 3.00 to 1.00, in the case of any payment on or after March 31, 2020 but prior to March 31, 2021 and (IV) 2.50 to 1.00 with respect to any payment on or after March 31, 2021.

Section 6.09. *Transactions with Affiliates.* Neither Holdings nor the Borrower will, nor will they permit any Restricted Subsidiary to, sell, lease or otherwise transfer any property or assets to, or purchase, lease or otherwise acquire any property or assets from, or otherwise engage in any other transactions with, any of its Affiliates, except (a) transactions with Holdings, the Borrower or any Restricted Subsidiary, (b) on terms substantially as favorable to Holdings, the Borrower or such Restricted Subsidiary as



would be obtainable by such Person at the time in a comparable arm's-length transaction with a Person other than an Affiliate, (c) Holdings, the Borrower or any Restricted Subsidiary shall be permitted to enter any underwriting agreements, stock purchase agreements or other similar agreements in connection with offerings of securities and provide customary representations, warranties, covenants and indemnities in respect of Virtu Financial, Inc., its subsidiaries and such offering in connection therewith, (d) issuances of Equity Interests of Holdings to the extent otherwise permitted by this Agreement, (e) employment and severance arrangements between Holdings, the Borrower and the Restricted Subsidiaries and their respective officers and employees in the ordinary course of business (including loans and advances pursuant to Sections 6.04(b) and 6.04(n)), (f) payments by Holdings (and any direct or indirect parent thereof), the Borrower and the Restricted Subsidiaries pursuant to tax sharing agreements among Holdings (and any such parent thereof), the Borrower and the Restricted Subsidiaries on customary terms to the extent attributable to the ownership or operation of the Borrower and the Restricted Subsidiaries, to the extent payments are Permitted Tax Distributions, (g) the payment of customary fees and reasonable out-of-pocket costs to, and indemnities provided on behalf of, directors, officers and employees of Holdings, the Borrower and the Restricted Subsidiaries in the ordinary course of business to the extent attributable to the ownership or operation of Holdings, the Borrower and the Restricted Subsidiaries, (h) transactions pursuant to any permitted agreements in existence or contemplated on the Restatement Effective Date and set forth on Schedule 6.09 or any amendment thereto to the extent such an amendment is not adverse to the Lenders in any material respect, (i) Restricted Payments permitted under Section 6.08, (j) Investments, loans or advances that are permitted to be made in lieu of Restricted Payments pursuant to Section 6.04 and (k) transactions in connection with the establishment of the Escrow Term Loans.

Section 6.10. *Restrictive Agreements.* Neither Holdings nor the Borrower will, nor will they permit any Restricted Subsidiary to, directly or indirectly, enter into, incur or permit to exist any agreement or other arrangement that prohibits, restricts or imposes any condition upon (a) the ability of Holdings, the Borrower or any other Subsidiary Loan Party to create, incur or permit to exist any Lien upon any of its property or assets to secure the Secured Obligations or (b) the ability of any Restricted Subsidiary that is not a Loan Party to pay dividends or other distributions with respect to any of its Equity Interests or to make or repay loans or advances to any Restricted Subsidiary or to Guarantee Indebtedness of any Restricted Subsidiary; *provided* that the foregoing clauses (a) and (b) shall not apply to any such restrictions that (i)(x) exist on the Restatement Effective Date and (to the extent not otherwise permitted by this Section 6.10) are listed on Schedule 6.10 or in the indenture governing the Second Lien Notes and (y) any renewal or extension of a restriction permitted by clause (i)(x) or any agreement evidencing such restriction so long as such renewal or extension does not expand the scope of such restrictions, (ii)(x) are binding on a Restricted Subsidiary at the time such Restricted Subsidiary first becomes a Restricted Subsidiary, so long as such restrictions were not entered into solely in contemplation of such Person becoming a Restricted Subsidiary and (y) any renewal or extension of a restriction permitted by clause (ii)(x) or any agreement evidencing such restriction so long as such renewal or extension does not expand the scope of such restrictions, (iii) represent Indebtedness of a Restricted Subsidiary that is not a Loan Party that is permitted by Section 6.01, (iv) are customary restrictions that arise in connection with any Disposition permitted by Section

6.05 applicable pending such Disposition solely to the assets subject to such Disposition, (v) are customary provisions in joint venture agreements and other similar agreements applicable to joint ventures permitted under Section 6.04, (vi) are negative pledges and restrictions on Liens in favor of any holder of Indebtedness permitted under Section 6.01 but solely to the extent any negative pledge relates to the property financed by or securing such Indebtedness (and excluding in any event any Indebtedness constituting any Junior Financing), (vii) are imposed by Requirements of Law, (viii) are customary restrictions contained in leases, subleases, licenses or asset sale agreements otherwise permitted hereby so long as such restrictions relate only to the assets subject thereto, (ix) comprise restrictions imposed by any agreement relating to secured Indebtedness permitted pursuant to Section 6.01(a)(v) to the extent that such restrictions apply only to the property or assets securing such Indebtedness, (x) are customary provisions restricting subletting or assignment of any lease governing a leasehold interest of Holdings, any Intermediate Parent, the Borrower or any Restricted Subsidiary, (xi) are customary provisions restricting assignment of any license, lease or other agreement, (xii) are restrictions on cash (or Permitted Investments) or deposits imposed by customers under contracts entered into in the ordinary course of business (or otherwise constituting Permitted Encumbrances on such cash or Permitted Investments or deposits) or (xiii) are customary net worth provisions contained in real property leases or licenses of intellectual property entered into by the Borrower or any Restricted Subsidiary, so long as the Borrower has determined in good faith that such net worth provisions could not reasonably be expected to impair the ability of the Borrower and its subsidiaries to meet their ongoing obligations under the Loan Documents.

Section 6.11. *Amendment of Junior Financing.* Neither Holdings nor the Borrower will, nor will they permit any Restricted Subsidiary or any Intermediate Parent to, amend, modify, waive, terminate or release the documentation governing any Junior Financing, in each case if the effect of such amendment, modification, waiver, termination or release is materially adverse to the Lenders.

Section 6.12. *Interest Coverage Ratio.* Prior to the Escrow Assumption Date, Holdings will not permit the Interest Coverage Ratio for any period of four consecutive fiscal quarters of Holdings, beginning with the four fiscal quarter period ended June 30, 2017, to be less than 3.00:1.00. If the Escrow Assumption Date occurs, Holdings will not permit the Interest Coverage Ratio for any period of four consecutive fiscal quarters of Holdings, beginning with the first four fiscal quarter period ending after the Escrow Assumption Date, to exceed (I) for any four fiscal quarter period ending prior to March 31, 2019, 2.75:1.00 and (II) for any four fiscal quarter ending on or after March 31, 2019, 3.00:1.00.

Section 6.13. *Leverage Ratio.* Prior to the Escrow Assumption Date, Holdings will not permit the Total Net Leverage Ratio as of the last day of any fiscal quarter of the Borrower, beginning with the fiscal quarter ending June 30, 2017, to exceed 2.75:1.00. If the Escrow Assumption Date occurs, Holdings will not permit the Total Leverage Ratio as of the last day of any fiscal quarter of the Borrower, beginning with the first fiscal quarter ending after the Escrow Assumption Date, to exceed (I) for any fiscal quarter ending prior to March 31, 2019, 5.00:1.00, (II) for any fiscal quarter ending on or after March 31, 2019 but prior to March 31, 2020, 4.25:1.00, (III) for any fiscal quarter

ending on or after March 31, 2020 but prior to March 31, 2021, 3.50:1.00 and (IV) for any fiscal quarter ending on or after March 31, 2021, 3.25:1.00.

Section 6.14. *Equity Interests.* (a) Holdings and the Borrower will not permit any Restricted Subsidiary to be a non-Wholly Owned Subsidiary and be released from its Guarantee (if applicable), except (x) as a result of a Disposition of Equity Interests of such Subsidiary to a Person other than Holdings, the Borrower or any other Restricted Subsidiary that is permitted by the other terms of this Agreement or an Investment in any Person permitted under Section 6.04; *provided* that (i) no Default has occurred or is continuing on the date of such release or would result immediately after giving effect to such release, and the Administrative Agent has been furnished with a certificate of a Financial Officer confirming satisfaction of such condition, (ii) after such release is effected, such Restricted Subsidiary shall thereafter be treated as a Restricted Subsidiary that is not a Loan Party for purposes of this Agreement, (iii) the fair market value of such Restricted Subsidiary immediately after the release of such Guarantee, as reasonably determined by a Financial Officer, is deemed to be an Investment by a Loan Party on the date of such release in a Subsidiary that is not a Loan Party for purposes of either Section 6.04(c) or 6.04(m), as designated by Holdings to the Administrative Agent prior to such release, (iv) such Investment is permitted under such designated section, (v) after giving effect to such transaction on a Pro Forma Basis, not more than 10% of Consolidated EBITDA for the most recently ended Test Period for which financial statements are available shall be attributable to such Restricted Subsidiary together with all other Restricted Subsidiaries (or any successors thereto) that were released from being Loan Parties pursuant to the provisions of Sections 6.14(a) and 6.14(b) and (vi) the Borrower shall have provided the Administrative Agent such certifications or documents as the Administrative Agent shall reasonably request in order to demonstrate compliance with this Agreement or (y) so long as such Restricted Subsidiary continues to be a Subsidiary Loan Party, in which case the release provisions of Section 9.14 will not apply.

(b) Holdings may notify the Administrative Agent that it wishes to obtain the release of the Guarantee of, and grants of Liens by, any Subsidiary Loan Party under the Security Documents (any Subsidiary in respect of which such a release is given, a “**Released Subsidiary**”), and the Administrative Agent will, and is hereby authorized to, promptly release such Guarantee and grants of Liens of such Subsidiary Loan Party pursuant to a written notification thereof given to Holdings; *provided* that (i) no Default has occurred or is continuing on the date of such request or would result immediately after giving effect to such release, and the Administrative Agent has been furnished with a certificate of a Financial Officer confirming satisfaction of such condition, (ii) after such release is effected, such Restricted Subsidiary shall thereafter be treated as a Restricted Subsidiary that is not a Loan Party for purposes of this Agreement, (iii) the fair market value of such Released Subsidiary immediately after the release of such Guarantee, as reasonably determined by a Financial Officer, is deemed to be an Investment by a Loan Party on the date of such release in a Subsidiary that is not a Loan Party for purposes of either Section 6.04(c) or 6.04(m), as designated by Holdings to the Administrative Agent prior to such release, (iv) such Investment is permitted under such designated section, (v) after giving effect to such transaction on a Pro Forma Basis, not more than 10% of Consolidated EBITDA for the most recently ended Test Period for which financial statements are available shall be attributable to such Restricted Subsidiary together with all other Restricted Subsidiaries (or any successors thereto) that

were released from being Loan Parties pursuant to the provisions of Sections 6.14(a) and 6.14(b) and (vi) the Borrower shall have provided the Administrative Agent such certifications or documents as the Administrative Agent shall reasonably request in order to demonstrate compliance with this Agreement.

Section 6.15. *Changes in Fiscal Periods.* Neither Holdings nor the Borrower will make any change in fiscal year; *provided, however,* that Holdings and the Borrower may, upon written notice to the Administrative Agent, change its fiscal year to any other fiscal year reasonably acceptable to the Administrative Agent, in which case, Holdings, the Borrower and the Administrative Agent will, and are hereby authorized by the Lenders to, make any adjustments to this Agreement that are necessary to reflect such change in fiscal year.

## ARTICLE 7 EVENTS OF DEFAULT

Section 7.01. *Events of Default.* If any of the following events (any such event, an “**Event of Default**”) shall occur:

(a) any Loan Party shall fail to pay any principal of any Loan or any reimbursement obligation in respect of any LC Disbursement when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or otherwise;

(b) any Loan Party shall fail to pay any interest on any Loan or any fee or any other amount (other than an amount referred to in paragraph (a) of this Section) payable under any Loan Document, when and as the same shall become due and payable, and such failure shall continue unremedied for a period of five Business Days;

(c) any representation or warranty made or deemed made by or on behalf of Holdings, the Borrower or any of its Restricted Subsidiaries in or in connection with any Loan Document or any amendment or modification thereof or waiver thereunder, or in any report, certificate, financial statement or other document furnished pursuant to or in connection with any Loan Document or any amendment or modification thereof or waiver thereunder, shall prove to have been incorrect in any material respect when made or deemed made;

(d) Holdings, the Borrower or any of its Restricted Subsidiaries shall fail to observe or perform any covenant, condition or agreement contained in Sections 5.02, 5.04 (with respect to the existence of Holdings, the Borrower or such Restricted Subsidiaries), 5.10 or in Article 6 (other than Section 6.09); *provided* that any Event of Default under the Financial Performance Covenants is subject to the cure period provided in Section 7.02;

(e) Holdings, the Borrower or any of its Restricted Subsidiaries shall fail to observe or perform any covenant, condition or agreement contained in any Loan Document (other than those specified in paragraph (a), (b) or (d) of this Section), and such failure shall continue unremedied for a period of 30 days after notice thereof from the Administrative Agent to the Borrower;

(f) Holdings, the Borrower or any of its Restricted Subsidiaries shall fail to make any payment (whether of principal or interest and regardless of amount) in respect of any Material Indebtedness, when and as the same shall become due and payable (after giving effect to any applicable grace period);

(g) any event or condition occurs that results in any Material Indebtedness becoming due prior to its scheduled maturity or that enables or permits (with all applicable grace periods having expired) the holder or holders of any Material Indebtedness or any trustee or agent on its or their behalf to cause any Material Indebtedness to become due, or to require the prepayment, repurchase, redemption or defeasance thereof, prior to its scheduled maturity, *provided* that this paragraph (g) shall not apply to (i) secured Indebtedness that becomes due as a result of the sale, transfer or other disposition (including as a result of a casualty or condemnation event) of the property or assets securing such Indebtedness (to the extent such sale, transfer or other disposition is not prohibited under this Agreement), (ii) Trading Debt (it being understood that paragraph (f) of this Section will apply to any failure to make any payment in respect of any Trading Debt) or (iii) termination events or similar events occurring under any Swap Agreement that constitutes Material Indebtedness (it being understood that paragraph (f) of this Section will apply to any failure to make any payment required as a result of any such termination or similar event);

(h) an involuntary proceeding shall be commenced or an involuntary petition shall be filed seeking (i) liquidation, court protection, reorganization or other relief in respect of Holdings, the Borrower or any Material Subsidiary or its debts, or of a material part of its assets, under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect or (ii) the appointment of a receiver, trustee, custodian, examiner, sequestrator, conservator or similar official for Holdings, the Borrower or any Material Subsidiary or for a material part of its assets, and, in any such case, such proceeding or petition shall continue undismissed or unstayed for 60 days or an order or decree approving or ordering any of the foregoing shall be entered;

(i) Holdings, the Borrower or any other Material Subsidiary shall (i) voluntarily commence any proceeding or file any petition seeking liquidation, court protection, reorganization or other relief under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect, (ii) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or petition described in paragraph (h) of this Section, (iii) apply for or consent to the appointment of a receiver, trustee, examiner, custodian, sequestrator, conservator or similar official for Holdings, the Borrower or any Material Subsidiary or for a material part of its assets, (iv) file an answer admitting the material allegations of a petition filed against it in any such proceeding or (v) make a general assignment for the benefit of creditors;

(j) one or more enforceable judgments for the payment of money in an aggregate amount in excess of \$15,000,000 (to the extent not covered by insurance as to which the insurer has been notified of such judgment or order and has not denied coverage) shall be rendered against Holdings, the Borrower and any of its Restricted Subsidiaries or any combination thereof and the same shall remain undischarged for a

period of 60 consecutive days during which execution shall not be effectively stayed, or any judgment creditor shall legally attach or levy upon assets of any such Loan Party that are material to the businesses and operations of Holdings, the Borrower and its Restricted Subsidiaries, taken as a whole, to enforce any such judgment;

(k) (i) an ERISA Event occurs that has resulted or could reasonably be expected to result in liability of any Loan Party in an aggregate amount that could reasonably be expected to result in a Material Adverse Effect, or (ii) any Loan Party or any ERISA Affiliate fails to pay when due, after the expiration of any applicable grace period, any installment payment with respect to its withdrawal liability under Section 4201 of ERISA under a Multiemployer Plan in an aggregate amount that could reasonably be expected to result in a Material Adverse Effect;

(l) any Lien purported to be created under any Security Document shall cease to be, or shall be asserted by any Loan Party not to be, a valid and perfected Lien on any material portion of the Collateral, with the priority required by the applicable Security Document, except (i) as a result of the sale or other disposition of the applicable Collateral in a transaction permitted under the Loan Documents, (ii) as a result of the Administrative Agent's failure to (A) maintain possession of any stock certificates, promissory notes or other instruments delivered to it under the Security Documents or (B) file Uniform Commercial Code continuation statements, (iii) as to Collateral consisting of real property to the extent that such losses are covered by a lender's title insurance policy and such insurer has not denied coverage or (iv) as the direct exclusive result of acts or omissions of the Administrative Agent or any Lender within its sole control;

(m) any material provision of any Loan Document or any Guarantee of the Loan Document Obligations shall for any reason be asserted by any Loan Party not to be a legal, valid and binding obligation of any Loan Party party thereto or subject thereto other than as expressly permitted hereunder or thereunder;

(n) any Guarantee of the Loan Document Obligations by any Loan Party pursuant to the Guarantee Agreement shall cease to be in full force and effect (in each case, other than in accordance with the terms of the Loan Documents);

(o) a Change in Control shall occur;

(p) [Reserved];

(q) [Reserved];

(r) one or more Regulated Subsidiaries shall become subject to regulatory restrictions on its business as a result of falling below capital early warning levels and such restrictions are material and adverse to the business of Holdings, the Borrower and the Restricted Subsidiaries, taken as a whole; or

(s) any disqualification of the Borrower or Holdings from owning any Regulated Subsidiary which disqualification remains in effect and unwaived for a period of 30 days from receipt of notification thereof by the Borrower or Holdings; *provided,*

however, that if the Borrower or Holdings becomes the subject of a waiver application within such 30 day period, then such disqualification shall not constitute an Event Of Default for so long as such waiver application has not been denied; then, and in every such event (other than an event with respect to Holdings or the Borrower described in paragraph (h) or (i) of this Article), and at any time thereafter during the continuance of such event, the Administrative Agent may, and at the request of the Required Lenders shall, by notice to the Borrower, take either or both of the following actions, at the same or different times: (i) terminate the Commitments, and thereupon the Commitments shall terminate immediately, and (ii) declare the Loans then outstanding to be due and payable in whole (or in part, in which case any principal not so declared to be due and payable may thereafter be declared to be due and payable), and thereupon the principal of the Loans so declared to be due and payable, together with accrued interest thereon and all fees and other obligations of the Borrower accrued hereunder, shall become due and payable immediately, without presentment, demand, protest or other notice of any kind, all of which are hereby waived by the Borrower; and in case of any event with respect to Holdings or the Borrower described in paragraph (h) or (i) of this Article, the Commitments shall automatically terminate and the principal of the Loans then outstanding, together with accrued interest thereon and all fees and other obligations of the Borrower accrued hereunder, shall automatically become due and payable, without presentment, demand, protest or other notice of any kind, all of which are hereby waived by the Borrower.

Section 7.02. *Right to Cure.* (a) Notwithstanding anything to the contrary contained in Section 7.01, in the event that the Borrower and the Restricted Subsidiaries fail to comply with the requirements of either Financial Performance Covenant as of the last day of any fiscal quarter of the Borrower, then at any time after the beginning of such fiscal quarter until the expiration of the 10th day subsequent to the earlier of (i) the date on which a Compliance Certificate with respect to such fiscal quarter (or the fiscal year ended on the last day of such fiscal quarter) is delivered in accordance with Section 5.01(d) and (ii) the date on which the financial statements with respect to such fiscal quarter (or the fiscal year ended on the last day of such fiscal quarter) are required to be delivered pursuant to Section 5.01(a) or (b), as applicable, Holdings shall have the right to issue Qualified Equity Interests for cash or otherwise receive cash contributions to the capital of Holdings as cash common equity or other Qualified Equity Interests (which Holdings shall contribute through its Subsidiaries of which the Borrower is a Subsidiary to the Borrower as cash common equity) (collectively, the “**Cure Right**”), and upon the receipt by the Borrower of the Net Proceeds of such issuance that are Not Otherwise Applied (the “**Cure Amount**”) pursuant to the exercise by Holdings of such Cure Right such Financial Performance Covenant shall be recalculated giving effect to the following pro forma adjustment:

- (i) Consolidated EBITDA shall be increased with respect to such applicable fiscal quarter and any four fiscal quarter period that contains such fiscal quarter, solely for the purpose of measuring the Financial Performance Covenants and not for any other purpose under this Agreement, by an amount equal to the Cure Amount; and

(ii) if, after giving effect to the foregoing pro forma adjustment (without giving effect to any repayment of any Indebtedness with any portion of the Cure Amount or any portion of the Cure Amount on the balance sheet of the Borrower and its Restricted Subsidiaries, in each case, with respect to such fiscal quarter only), the Borrower and its Restricted Subsidiaries shall then be in compliance with the requirements of the Financial Performance Covenants, the Borrower and its Restricted Subsidiaries shall be deemed to have satisfied the requirements of the Financial Performance Covenants as of the relevant date of determination with the same effect as though there had been no failure to comply therewith at such date, and the applicable breach or default of the Financial Performance Covenants that had occurred shall be deemed cured for the purposes of this Agreement;

*provided* that the Borrower shall have notified the Administrative Agent of the exercise of such Cure Right within five (5) Business Days of the issuance of the relevant Qualified Equity Interests for cash or the receipt of the cash contributions by Holdings.

(b) Notwithstanding anything herein to the contrary, (i) in each four consecutive fiscal quarter period of the Borrower there shall be at least two fiscal quarters in which the Cure Right is not exercised, (ii) during the life of this Agreement, the Cure Right shall not be exercised more than four times and (iii) for purposes of this Section 7.02, the Cure Amount shall be no greater than the amount required for purposes of complying with the Financial Performance Covenants and any amounts in excess thereof shall not be deemed to be a Cure Amount. Notwithstanding any other provision in this Agreement to the contrary, the Cure Amount received pursuant to any exercise of the Cure Right shall be disregarded for purposes of determining any financial ratio based conditions or any available basket under Article 6 of this Agreement.

#### ARTICLE 8 ADMINISTRATIVE AGENT AND COLLATERAL AGENT

Each Lender hereby irrevocably appoints the Administrative Agent its agent and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to it by the terms of the Loan Documents, together with such actions and powers as are reasonably incidental thereto. The Administrative Agent shall also act as the “collateral agent” under the Loan Documents (and for purposes of this Article 8, the Administrative Agent acting in its capacity as such and acting in its capacity as collateral agent shall be referred to collectively as the “**Agent**” or the “**Agents**”), and each of the Lenders hereby irrevocably appoints and authorizes the Administrative Agent to act as the agent of such Lender for purposes of acquiring, holding and enforcing any and all Liens on Collateral granted by any of the Loan Parties to secure any of the Secured Obligations, together with such powers and discretion as are reasonably incidental thereto. In this connection, the Administrative Agent, as “collateral agent” and any co-agents, sub-agents and attorneys-in-fact appointed by the Administrative Agent hereunder for purposes of holding or enforcing any Lien on the Collateral (or any portion thereof) granted under the Security Documents, or for exercising any rights and remedies thereunder at the direction of the Administrative Agent, shall be entitled to the benefits of all provisions of this Article 8 and Article 9 (including Section 9.03 as though such co-agents, sub-agents and attorneys-in-fact were



the “collateral agent” under the Loan Documents) as if set forth in full herein with respect thereto.

Without limiting the generality of the foregoing, the Agents are hereby expressly authorized to (i) execute any and all documents (including releases) with respect to the Collateral and the rights of the Secured Parties with respect thereto, as contemplated by and in accordance with the provisions of this Agreement and the Security Documents and (ii) negotiate, enforce or settle any claim, action or proceeding affecting the Lenders in their capacity as such, at the direction of the Required Lenders, which negotiation, enforcement or settlement will be binding upon each Lender. In the event that any obligations (other than the Secured Obligations) are permitted to be incurred hereunder and secured by Liens permitted to be incurred hereunder on all or a portion of the Collateral, each Lender authorizes each Agent to enter into intercreditor agreements, subordination agreements and amendments to the Security Documents to reflect such arrangements on terms acceptable to such Agent.

The institution serving as the Administrative Agent and/or the Collateral Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not an Agent, and the term “Lender” or “Lenders” shall, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Agent hereunder in its individual capacity. Such bank and its Affiliates may accept deposits from, lend money to and generally engage in any kind of business with Holdings, the Borrower or any Subsidiary or other Affiliate thereof as if it were not an Agent hereunder.

Neither Agent shall have any duties or obligations except those expressly set forth in the Loan Documents. Without limiting the generality of the foregoing, (a) neither Agent shall be subject to any fiduciary or other implied duties, regardless of whether a Default has occurred and is continuing, (b) neither Agent shall have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby that such Agent is instructed in writing to exercise by the Required Lenders (or such other number or percentage of the Lenders as shall be necessary under the circumstances as provided in Section 9.02); *provided* that neither Agent shall be required to take any action that, in its opinion or the opinion of its counsel, may expose such Agent to liability or that is contrary to any Loan Document or applicable law, and (c) except as expressly set forth in the Loan Documents, neither Agent shall have any duty to disclose, nor shall it be liable for the failure to disclose, any information relating to Holdings, the Borrower or any of the Subsidiaries that is communicated to or obtained by the bank serving as Administrative Agent and/or Collateral Agent or any of its Affiliates in any capacity. Neither Agent shall be liable for any action taken or not taken by it with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary under the circumstances as provided in Section 9.02) or in the absence of its own gross negligence or willful misconduct as determined by a court of competent jurisdiction in a final and non-appealable judgment. Neither Agent shall be deemed to have knowledge of any Default unless and until written notice thereof is given to such Agent by Holdings, the Borrower or a Lender and neither Agent shall be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with any Loan Document, (ii) the contents of

any certificate, report or other document delivered thereunder or in connection therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth in any Loan Document, (iv) the validity, enforceability, effectiveness or genuineness of any Loan Document or any other agreement, instrument or document, (v) the creation, perfection or priority of any Lien purported to be created by the Security Documents, (vi) the value or the sufficiency of any Collateral, (vii) the financial condition or business affairs of any Loan Party or any other Person liable for the payment of any Secured Obligations or as to the use of the proceeds of the Loans, (viii) the properties, books or records of any Loan Party, (ix) the existence or possible existence of any Event of Default or Default or (x) the satisfaction of any condition set forth in Article 4 or elsewhere in any Loan Document, other than to confirm receipt of items expressly required to be delivered to such Agent.

Each Agent shall be entitled to rely upon, and shall not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed or sent by the proper Person. Each Agent may also rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and shall not incur any liability for relying thereon. Each Agent may consult with legal counsel (who may be counsel for the Borrower), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

Each Agent may perform any and all its duties and exercise its rights and powers by or through any one or more sub-agents appointed by it. Each Agent and any such sub-agent may perform any and all its duties and exercise its rights and powers by or through their respective Related Parties. The exculpatory provisions of the preceding paragraphs shall apply to any such sub-agent and to the Related Parties of each Agent and any such sub-agent, and shall apply to their respective activities in connection with the syndication of the credit facilities provided for herein as well as activities as Agent.

Subject to the appointment and acceptance of a successor Agent as provided below, either Agent may resign at any time upon 30 days' notice to the Lenders and the Borrower. If the Administrative Agent becomes the subject of a bankruptcy or insolvency proceeding, or has had a receiver, conservator, trustee or custodian appointed for it, or has consented to, approved of or acquiesced in any such proceeding or appointment or has a parent company that has become the subject of a bankruptcy or insolvency proceeding, or has had a receiver, conservator, trustee or custodian appointed for it, or has consented to, approved of or acquiesced in any such proceeding or appointment and the Administrative Agent is not performing its role hereunder as Administrative Agent, then the Administrative Agent may be removed as the Administrative Agent hereunder at the request of the Borrower and the Required Lenders. Upon receipt of any such notice of resignation or upon such removal, the Required Lenders shall have the right, with the Borrower's consent (such consent not to be unreasonably withheld or delayed) (provided that no consent of the Borrower shall be required if an Event of Default under Section 7.01(a), (b), (h) or (i) has occurred and is continuing), to appoint a successor. If no successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within 30 days after the

retiring Agent gives notice of its resignation, then the retiring Agent may, on behalf of the Lenders and each Issuing Bank, appoint a successor Agent which shall be a bank with an office in New York, New York, or an Affiliate of any such bank. If no successor Agent has been appointed pursuant to the immediately preceding sentence by the 30th day after the date such notice of resignation was given by such Agent, such Agent's resignation shall become effective and the Required Lenders shall thereafter perform all the duties of such Agent hereunder and/or under any other Loan Document until such time, if any, as the Required Lenders appoint a successor Administrative Agent and/or Collateral Agent, as the case may be. Upon the acceptance of its appointment as Agent hereunder by a successor, such successor shall succeed to and become vested with all the rights, powers, privileges and duties of the retiring Agent, and the retiring Agent shall be discharged from its duties and obligations hereunder. The fees payable by the Borrower to a successor Agent shall be the same as those payable to its predecessor unless otherwise agreed between the Borrower and such successor. After an Agent's resignation hereunder, the provisions of this Article and Section 9.03 shall continue in effect for the benefit of such retiring Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while acting as Agent. For the avoidance of doubt, the Former Agent shall have all the right, privileges and immunities provided to the "Administrative Agent" in the Loan Documents in connection with its acting as the Administrative Agent under the Existing Credit Agreement.

Each Lender acknowledges and represents and warrants that it has, independently and without reliance upon the Agents or any other Lender and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender also acknowledges that it will, independently and without reliance upon the Agents or any other Lender and based on such documents and information as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement or any other Loan Document, any related agreement or any document furnished hereunder or thereunder. Neither Agent shall have any duty or responsibility, either initially or on a continuing basis, to make any investigation or any appraisal on behalf of Lenders or to provide any Lender with any credit or other information with respect thereto, whether coming into its possession before the making of the Loans or at any time or times thereafter, and neither Agent shall have any responsibility with respect to the accuracy or completeness of any information provided to Lenders.

In case of the pendency of any proceeding under any Debtor Relief Law or any other judicial proceeding relative to any Loan Party, the Administrative Agent (irrespective of whether the principal of any Loan or outstanding Letter of Credit shall then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether the Administrative Agent shall have made any demand on the Borrower) shall be entitled and empowered, by intervention in such proceeding or otherwise:

(a) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans, outstanding Letters of Credit and all other Secured Obligations that are owing and unpaid and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders and the Agents

(including any claim for the reasonable compensation, expenses, disbursements and advances of the Lenders and the Agents and their respective agents and counsel and all other amounts due the Lenders and the Agents under Sections 2.12 and 9.03) allowed in such judicial proceeding; and

(b) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender to make such payments to the Administrative Agent and, if the Administrative Agent shall consent to the making of such payments directly to the Lenders to pay to each Agent any amount due for the reasonable compensation, expenses, disbursements and advances of such Agent and its agents and counsel, and any other amounts due such Agent under Sections 2.12 and 9.03.

Nothing contained herein shall be deemed to authorize the Administrative Agent to authorize or consent to or accept or adopt on behalf of any Lender any plan of reorganization, arrangement, adjustment or composition affecting the Secured Obligations or the rights of any Lender to authorize the Administrative Agent to vote in respect of the claim of any Lender in any such proceeding.

To the extent required by any applicable law, the Administrative Agent may deduct or withhold from any payment to any Lender an amount equivalent to any applicable withholding Tax. If the Internal Revenue Service or any other authority of the United States or other jurisdiction asserts a claim that the Administrative Agent did not properly withhold Tax from amounts paid to or for the account of any Lender for any reason (including, without limitation, because the appropriate form was not delivered or not properly executed, or because such Lender failed to notify the Administrative Agent of a change in circumstance that rendered the exemption from, or reduction of withholding Tax ineffective, or for any other reason), such Lender shall indemnify and hold harmless the Administrative Agent (to the extent that the Administrative Agent has not already been reimbursed by the Borrower pursuant to Section 2.15 and without limiting any obligation of the Borrower to do so pursuant to such Section) fully for all amounts paid, directly or indirectly, by the Administrative Agent as Taxes or otherwise, together with all expenses incurred, including legal expenses and any other out-of-pocket expenses, whether or not such Tax was correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under this Agreement or any other Loan Document against any amount due to the Administrative Agent under this Article 8. The agreements in this Article 8 shall survive the resignation and/or replacement of the Administrative Agent, any assignment of rights by, or the replacement of, a Lender, the termination of this Agreement and the repayment, satisfaction or discharge of all other obligations.

Notwithstanding any other provision of this Agreement or any provision of any other Loan Document, the Lead Arranger is named as such for recognition purposes

only, and in its capacity as such shall have no duties, responsibilities or liabilities with respect to this Agreement or any other Loan Document; it being understood and agreed that the Lead Arranger shall be entitled to all indemnification and reimbursement rights in favor of the Agents provided herein and in the other Loan Documents. Without limitation of the foregoing, the Lead Arranger in its capacity as such shall not, by reason of this Agreement or any other Loan Document, have any fiduciary relationship in respect of any Lender, any Loan Party or any other Person.

The term “Lender” in this Article 8 shall include any Issuing Bank.

ARTICLE 9  
MISCELLANEOUS

Section 9.01. *Notices.* (a) Except in the case of notices and other communications expressly permitted to be given by telephone, all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by fax or other electronic transmission, as follows:

(i) if to Holdings, the Borrower, the Administrative Agent or the Issuing Bank, to the address, fax number, e-mail address or telephone number specified for such Person on Schedule 9.01; and

(ii) if to any Lender, to it at its address (or fax number, telephone number or e-mail address) set forth in its Administrative Questionnaire (including, as appropriate, notices delivered solely to the Person designated by a Lender on its Administrative Questionnaire then in effect for the delivery of notices that may contain material non-public information relating to the Borrower).

Notices and other communications sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices and other communications sent by telecopier shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next business day for the recipient). Notices and other communications delivered through electronic communications to the extent provided in subsection (b) below shall be effective as provided in such subsection (b).

(b) *Electronic Communications.* Notices and other communications to the Lenders and the Issuing Bank hereunder may be delivered or furnished by electronic communication (including e-mail and Internet or intranet websites) pursuant to procedures reasonably approved by the Administrative Agent, *provided* that the foregoing shall not apply to notices to any Lender or the Issuing Bank pursuant to Article 2 if such Lender or the Issuing Bank, as applicable has notified the Administrative Agent that it is incapable of receiving notices under such Article by electronic communication.

Unless the Administrative Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender’s

receipt of an acknowledgement from the intended recipient (such as by the “return receipt requested” function, as available, return e-mail or other written acknowledgement), *provided* that if such notice or other communication is not sent during the normal business hours of the recipient, such notice or communication shall be deemed to have been sent at the opening of business on the next Business Day for the recipient, and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient at its e-mail address as described in the foregoing clause (i) of notification that such notice or communication is available and identifying the website address therefor.

*(c) The Platform.* THE PLATFORM IS PROVIDED “AS IS” AND “AS AVAILABLE.” THE AGENT PARTIES (AS DEFINED BELOW) DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE BORROWER MATERIALS OR THE ADEQUACY OF THE PLATFORM, AND EXPRESSLY DISCLAIM LIABILITY FOR ERRORS IN OR OMISSIONS FROM THE BORROWER MATERIALS. NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS OR FREEDOM FROM VIRUSES OR OTHER CODE DEFECTS, IS MADE BY ANY AGENT PARTY IN CONNECTION WITH THE BORROWER MATERIALS OR THE PLATFORM. In no event shall the Administrative Agent or any of its Related Parties (collectively, the “**Agent Parties**”) have any liability to Holdings, the Borrower, any Lender, the Issuing Bank or any other Person for losses, claims, damages, liabilities or expenses of any kind (whether in tort, contract or otherwise) arising out of the Borrower’s or the Administrative Agent’s transmission of Borrower Materials through the Internet, except to the extent that such losses, claims, damages, liabilities or expenses are determined by a court of competent jurisdiction by a final and non-appealable judgment to have resulted from the gross negligence or willful misconduct of such Agent Party; *provided, however*, that in no event shall any Agent Party have any liability to Holdings, the Borrower, any Lender, the Issuing Bank or any other Person for indirect, special, incidental, consequential or punitive damages (as opposed to direct or actual damages).

*(d) Public Lenders.* Each Public Lender agrees to cause at least one individual at or on behalf of such Public Lender to at all times have selected the “Private Side Information” or similar designation on the content declaration screen of the Platform in order to enable such Public Lender or its delegate, in accordance with such Public Lender’s compliance procedures and applicable law, including United States Federal and state securities laws, to make reference to communications that are not made available through the “Public Side Information” portion of the Platform and that may contain material non-public information with respect to the Borrower or its securities for purposes of United States Federal or state securities laws.

*(e) Change of Address, Etc.* Each of Holdings, the Borrower, the Administrative Agent and the Issuing Bank may change its address, electronic mail address, fax or telephone number for notices and other communications or website hereunder by notice to the other parties hereto. Each Lender may change its address, fax or telephone number for notices and other communications hereunder by notice to the Borrower, the Administrative Agent and the Issuing Bank. In addition, each Lender

agrees to notify the Administrative Agent from time to time to ensure that the Administrative Agent has on record (i) an effective address, contact name, telephone number, fax number and electronic mail address to which notices and other communications may be sent and (ii) accurate wire instructions for such Lender.

(f) *Reliance by Administrative Agent, Issuing Bank and Lenders.* The Administrative Agent, the Issuing Bank and the Lenders shall be entitled to rely and act upon any notices purportedly given by or on behalf of the Borrower even if (i) such notices were not made in a manner specified herein, were incomplete or were not preceded or followed by any other form of notice specified herein, or (ii) the terms thereof, as understood by the recipient, varied from any confirmation thereof. The Borrower shall indemnify the Administrative Agent, the Issuing Bank, each Lender and the Related Parties from all losses, costs, expenses and liabilities resulting from the reliance by such Person on each notice purportedly given by or on behalf of the Borrower in the absence of gross negligence or willful misconduct as determined in a final and non-appealable judgment by a court of competent jurisdiction. All telephonic notices to and other telephonic communications with the Administrative Agent may be recorded by the Administrative Agent and each of the parties hereto hereby consents to such recording.

Section 9.02. *Waivers; Amendments.* (a) No failure or delay by the Administrative Agent, any Issuing Bank or any Lender in exercising any right or power under this Agreement or any Loan Document shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the Administrative Agent, the Issuing Banks and the Lenders hereunder and under the other Loan Documents are cumulative and are not exclusive of any rights or remedies that they would otherwise have. No waiver of any provision of this Agreement or any Loan Document or consent to any departure by any Loan Party therefrom shall in any event be effective unless the same shall be permitted by paragraph (b) of this Section, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. Without limiting the generality of the foregoing, the making of a Loan or the issuance, amendment, renewal or extension of a Letter of Credit shall not be construed as a waiver of any Default, regardless of whether the Administrative Agent, any Lender or any Issuing Bank may have had notice or knowledge of such Default at the time. No notice or demand on the Borrower or Holdings in any case shall entitle the Borrower or Holdings to any other or further notice or demand in similar or other circumstances.

(b) Except as provided in Section 2.18 with respect to any Incremental Revolving Facility Amendment or Incremental Term Facility Amendment (including to provide for provisions relating to the issuance of letters of credit and swingline loans and provisions with respect to “defaulting lenders”), Section 2.19 with respect to any Refinancing Amendment ~~or~~, Section 6.15 with respect to a change in the fiscal year of Holdings and the Borrower or Section 2.12(b) with respect to an alternate rate of interest, neither this Agreement nor any Loan Document nor any provision hereof or thereof may be waived, amended or modified except, in the case of this Agreement, pursuant to an agreement or agreements in writing entered into by Holdings, the Borrower and the

Required Lenders or, in the case of any other Loan Document, pursuant to an agreement or agreements in writing entered into by the Administrative Agent and the Loan Party or Loan Parties that are parties thereto, in each case with the consent of the Required Lenders, *provided that* no such agreement shall (i) increase the Commitment of any Lender without the written consent of such Lender (it being understood that (x) a waiver of any condition precedent set forth in paragraphs (a) and (b) of Section 4.02 or the waiver of any Default, mandatory prepayment or mandatory reduction of the Commitments shall not constitute an extension or increase of any Commitment of any Lender and (y) a waiver of any condition precedent set forth in paragraph (c) of Section 4.02 shall require the consent of each Revolving Lender), (ii) reduce the principal amount of any Loan or LC Disbursement or reduce the rate of interest thereon, or reduce any fees payable hereunder, without the written consent of each Lender directly and adversely affected thereby (it being understood that any change to the definition of Total Leverage Ratio, Total Net Leverage Ratio or in the component definitions thereof shall not constitute a reduction of interest or fees), *provided that* only the consent of the Required Lenders shall be necessary to waive any obligation of the Borrower to pay default interest pursuant to Section 2.11(c), (iii) postpone the maturity of any Loan, or the date of any scheduled amortization payment of the principal amount of any Term Loan under Section 2.08 or the applicable Refinancing Amendment, or the reimbursement date with respect to any LC Disbursement, or any date for the payment of any interest or fees payable hereunder, or reduce the amount of, waive or excuse any such payment, or postpone the scheduled date of expiration of any Commitment, without the written consent of each Lender directly and adversely affected thereby, (iv) change Section 2.16(b) or (c) ~~or Section 2.23~~ in a manner that would alter the pro rata sharing of payments required thereby, without the written consent of the Lenders holding a Majority in Interest of the outstanding Loans and unused Commitments of each adversely affected Class, (v) change any of the provisions of this Section without the written consent of each Lender directly and adversely affected thereby, (vi) change the percentage set forth in the definition of “Required Lenders”, “Majority in Interest” or any other provision of any Loan Document specifying the number or percentage of Lenders (or Lenders of any Class) required to waive, amend or modify any rights thereunder or make any determination or grant any consent thereunder, without the written consent of each Lender (or each Lender of such Class, as the case may be), (vii) release all or substantially all the value of the Guarantees under the Guarantee Agreement (except as expressly provided in the Guarantee Agreement) without the written consent of each Lender (other than a Defaulting Lender) (except as expressly provided in the Security Documents), (viii) release all or substantially all the Collateral from the Liens of the Security Documents, without the written consent of each Lender (other than a Defaulting Lender), (ix) change any provisions of any Loan Document in a manner that by its terms adversely affects the rights in respect of payments due to Lenders holding Loans of any Class differently than those holding Loans of any other Class, without the written consent of Lenders (other than a Defaulting Lender) holding a Majority in Interest of the outstanding Loans and unused Commitments of each affected Class, or (x) change the rights of the Term Lenders to decline mandatory prepayments as provided in Section 2.09 or the rights of any Additional Lenders of any Class to decline mandatory prepayments of Term Loans of such Class as provided in the applicable Refinancing Amendment, without the written consent of a Majority in Interest of the Term Lenders or Additional Lenders of such Class, as applicable; *provided further that* (A) no such agreement shall amend, modify or otherwise affect the rights or duties of the



Administrative Agent or any Issuing Bank without the prior written consent of the Administrative Agent or such Issuing Bank, as the case may be, and (B) any provision of this Agreement or any other Loan Document may be amended by an agreement in writing entered into by Holdings, the Borrower and the Administrative Agent to cure any ambiguity, omission, defect or inconsistency so long as, in each case, the Lenders shall have received at least five Business Days' prior written notice thereof and the Administrative Agent shall not have received, within five Business Days of the date of such notice to the Lenders, a written notice from the Required Lenders stating that the Required Lenders object to such amendment. Notwithstanding the foregoing, (a) this Agreement may be amended (or amended and restated) with the written consent of the Required Lenders, the Administrative Agent, Holdings and the Borrower (i) to add one or more additional credit facilities to this Agreement and to permit the extensions of credit from time to time outstanding thereunder and the accrued interest and fees in respect thereof to share ratably in the benefits of this Agreement and the other Loan Documents and (ii) to include appropriately the Lenders holding such credit facilities in any determination of the Required Lenders on substantially the same basis as the Lenders prior to such inclusion and (b) guarantees, collateral security documents and related documents executed by Foreign Subsidiaries in connection with this Agreement may be in a form reasonably determined by the Administrative Agent and may be, together with this Agreement, amended and waived with the consent of the Administrative Agent at the request of the Borrower without the need to obtain the consent of any other Lender if such amendment or waiver is delivered in order (i) to comply with local law or advice of local counsel, (ii) to cure ambiguities or defects or (iii) to cause such guarantee, collateral security document or other document to be consistent with this Agreement and the other Loan Documents.

(c) In connection with any proposed amendment, modification, waiver or termination (a **"Proposed Change"**) requiring the consent of all Lenders or all directly and adversely affected Lenders, if the consent of the Required Lenders (and, to the extent any Proposed Change requires the consent of Lenders holding Loans of any Class pursuant to clause (iv), (ix) or (x) of paragraph (b) of this Section, the consent of a Majority in Interest of the outstanding Loans and unused Commitments of such Class) to such Proposed Change is obtained, but the consent to such Proposed Change of other Lenders whose consent is required is not obtained (any such Lender whose consent is not obtained as described in paragraph (b) of this Section being referred to as a **"Non-Consenting Lender"**), then, so long as the Lender that is acting as Administrative Agent is not a Non-Consenting Lender, the Borrower may, at its sole expense and effort, upon notice to such Non-Consenting Lender and the Administrative Agent, require such Non-Consenting Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in Section 9.04), all its interests, rights and obligations under this Agreement to an Eligible Assignee that shall assume such obligations (which Eligible Assignee may be another Lender, if a Lender accepts such assignment), *provided* that (a) the Borrower shall have received the prior written consent of the Administrative Agent to the extent such consent would be required under Section 9.04(b) for an assignment of Loans or Commitments, as applicable (and, if a Revolving Commitment is being assigned, each Issuing Bank), which consent shall not unreasonably be withheld, (b) such Non-Consenting Lender shall have received payment of an amount equal to the outstanding par principal amount of its Loans and participations in LC Disbursements, accrued interest thereon, accrued fees and all other

amounts payable to it hereunder (including pursuant to Section 2.09(a)(i)) from the Eligible Assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts) and (c) unless waived, the Borrower or such Eligible Assignee shall have paid to the Administrative Agent the processing and recordation fee specified in Section 9.04(b).

(d) [Reserved].

(e) Notwithstanding anything in this Agreement or the other Loan Documents to the contrary, the Revolving Commitments and Revolving Exposure of any Lender that is at the time a Defaulting Lender shall not have any voting or approval rights under the Loan Documents and shall be excluded in determining whether all Lenders (or all Lenders of a Class), all affected Lenders (or all affected Lenders of a Class), a Majority in Interest of Lenders of any Class or the Required Lenders have taken or may take any action hereunder (including any consent to any amendment or waiver pursuant to this Section 9.02); *provided* that (x) the Commitment of any Defaulting Lender may not be increased or extended without the consent of such Lender and (y) any waiver, amendment or modification requiring the consent of all Lenders or each affected Lender that affects any Defaulting Lender more adversely than other affected Lenders shall require the consent of such Defaulting Lender.

Section 9.03. *Expenses; Indemnity; Damage Waiver.* (a) The Borrower shall pay (i) all reasonable and documented or invoiced out-of-pocket costs and expenses incurred by the Administrative Agent, the Lead Arranger and their Affiliates (without duplication), including the reasonable fees, charges and disbursements of Cahill Gordon & Reindel LLP and to the extent reasonably determined by the Administrative Agent to be necessary, one local counsel in each applicable jurisdiction (exclusive of any reasonably necessary special counsel) for the Administrative Agent and, in the case of an actual or reasonably perceived conflict of interest, one additional counsel per affected party, and any other counsel retained with the Borrower's consent (such consent not to be unreasonably withheld or delayed), in connection with the syndication of the credit facilities provided for herein, and the preparation, execution, delivery and administration of the Loan Documents or any amendments, modifications or waivers of the provisions thereof (whether or not successful) (ii) all reasonable and documented or invoiced out-of-pocket costs and expenses incurred by each Issuing Bank in connection with the issuance, amendment, renewal or extension of any Letter of Credit or any demand for payment thereunder and (iii) all reasonable and documented or invoiced out-of-pocket expenses incurred by the Administrative Agent, each Issuing Bank or any Lender, including the fees, charges and disbursements of counsel for the Administrative Agent, the Issuing Banks and the Lenders, in connection with the enforcement or protection of any rights or remedies (A) in connection with the Loan Documents (including all such costs and expenses incurred during any legal proceeding, including any proceeding under any Debtor Relief Laws), including its rights under this Section or (B) in connection with the Loans made or Letters of Credit issued hereunder, including all such out-of-pocket costs and expenses incurred during any workout, restructuring or negotiations in respect of such Loans or Letters of Credit; *provided* that such counsel shall be limited to one lead counsel and such local counsel (exclusive of any reasonably necessary special counsel) as may reasonably be deemed necessary by the Administrative Agent in each relevant jurisdiction and, in the case of an actual or reasonably perceived conflict of

interest, one additional counsel per affected party, and any other counsel retained with the Borrower's consent (such consent not to be unreasonably withheld or delayed).

(b) The Borrower shall indemnify the Administrative Agent, each Issuing Bank, each Lender, the Lead Arranger, and each Related Party of any of the foregoing Persons (each such Person being called an "**Indemnitee**") against, and hold each Indemnitee harmless from, any and all losses, claims, damages, liabilities and reasonable and documented or invoiced out-of-pocket fees and expenses of any counsel for any Indemnitee (*provided* that such counsel shall be limited to one lead counsel and such local counsel (exclusive of any reasonably necessary special counsel) as may reasonably be deemed necessary by the Indemnitees in each relevant jurisdiction and, in the case of an actual or perceived conflict of interest, one additional counsel per affected party), incurred by or asserted against any Indemnitee by any third party or by the Borrower, Holdings or any Subsidiary arising out of, in connection with, or as a result of (i) the execution or delivery of this Agreement, any Loan Document or any other agreement or instrument contemplated hereby or thereby, the performance by the parties to the Loan Documents of their respective obligations thereunder or the consummation of the Transactions or any other transactions contemplated thereby, (ii) any Loan or Letter of Credit or the use of the proceeds therefrom (including any refusal by the Issuing Bank to honor a demand for payment under a Letter of Credit if the documents presented in connection with such demand do not strictly comply with the terms of such Letter of Credit), (iii) any actual or alleged presence or Release of Hazardous Materials on, at, to or from any Mortgaged Property or any other property currently or formerly owned or operated by Holdings, the Borrower or any Subsidiary, or any other Environmental Liability related in any way to Holdings, the Borrower or any Subsidiary, or (iv) any actual or prospective claim, litigation, investigation or proceeding relating to any of the foregoing, whether based on contract, tort or any other theory, whether brought by a third party or by the Borrower, Holdings or any Subsidiary and regardless of whether any Indemnitee is a party thereto; *provided* that such indemnity shall not, as to any Indemnitee, be available to the extent that such losses, claims, damages, liabilities, costs or related expenses (x) resulted from the gross negligence, bad faith or willful misconduct of such Indemnitee or its Related Parties (as determined by a court of competent jurisdiction in a final and non-appealable judgment), (y) resulted from a material breach of the Loan Documents by such Indemnitee or its Related Parties (as determined by a court of competent jurisdiction in a final and non-appealable judgment) or (z) arise from disputes between or among Indemnitees that do not involve an act or omission by Holdings, the Borrower or any Restricted Subsidiary, except that the Administrative Agent and the Lead Arranger shall be indemnified in their capacities as such with respect to any dispute under this clause (z).

(c) To the extent that the Borrower fails to pay any amount required to be paid by it to the Administrative Agent, any Issuing Bank or the Lead Arranger under paragraph (a) or (b) of this Section, each Lender severally agrees to pay to the Administrative Agent, such Issuing Bank or the Lead Arranger, as the case may be, such Lender's pro rata share (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought) of such unpaid amount, *provided* that the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against the Administrative Agent, such Issuing Bank or the Lead Arranger in its capacity as such. For purposes hereof, a

Lender's "pro rata share" shall be determined based upon its share of the aggregate Revolving Exposures, Term Loans and unused Commitments at such time. The obligations of the Lenders under this paragraph (c) are subject to the last sentence of Section 2.02(a) (which shall apply *mutatis mutandis* to the Lenders' obligations under this paragraph (c)).

(d) To the extent permitted by applicable law, neither Holdings nor the Borrower shall assert, and each hereby waives, any claim against any Indemnitee (i) for any direct or actual damages arising from the use by unintended recipients of information or other materials distributed to such unintended recipients by such Indemnitee through telecommunications, electronic or other information transmission systems (including the Internet) in connection with this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby; *provided* that such indemnity shall not, as to any Indemnitee, be available to the extent that such direct or actual damages are determined by a court of competent jurisdiction by final, non-appealable judgment to have resulted from the gross negligence or willful misconduct of, or a material breach of the Loan Documents by, such Indemnitee or its Related Parties or (ii) on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement, any other Loan Document or any agreement or instrument contemplated hereby or thereby, the Transactions, any Loan or Letter of Credit or the use of the proceeds thereof.

(e) All amounts due under this Section shall be payable not later than ten (10) Business Days after written demand therefor; *provided, however*, that any Indemnitee shall promptly refund an indemnification payment received hereunder to the extent that there is a final judicial determination that such Indemnitee was not entitled to indemnification with respect to such payment pursuant to this Section 9.03.

Section 9.04. *Successors and Assigns.* (a) The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby (including any Affiliate of the Issuing Bank that issues any Letter of Credit), except that, ~~other than as set forth in Section 2.23,~~ (i) the Borrower may not assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of each Lender (and any attempted assignment or transfer by the Borrower without such consent shall be null and void), (ii) no assignment shall be made to any Defaulting Lender or any of its Subsidiaries, or any Persons who, upon becoming a Lender hereunder, would constitute any of the foregoing Persons described in this clause (ii) and (iii) no Lender may assign or otherwise transfer its rights or obligations hereunder except in accordance with this Section. Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby (including any Affiliate of the Issuing Bank that issues any Letter of Credit), Participants (to the extent provided in paragraph (c) of this Section), the Indemnitees and, to the extent expressly contemplated hereby, the Related Parties of each of the Administrative Agent, the Issuing Bank and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) (i) Subject to the conditions set forth in paragraphs (b)(ii) and (f) below, any Lender may assign to one or more Eligible Assignees all or a portion of its rights and

obligations under this Agreement (including all or a portion of its Commitment and the Loans at the time owing to it) with the prior written consent (such consent not to be unreasonably withheld or delayed) of (A) the Borrower; *provided* that no consent of the Borrower shall be required for an assignment (x) solely in the case of Term Loans, to any Lender, an Affiliate of any Lender or an Approved Fund, (y) solely in the case of Revolving Loans and Revolving Commitments, to any Revolving Lender or (z) if an Event of Default under Section 7.01(a), (b), (h) or (i) has occurred and is continuing; *provided further* that if any such purported assignment is to a Competitor (other than any such assignment to the Lead Arranger (or any Affiliate of the Lead Arranger) for the purpose of facilitating bona fide trades of Term Loans to entities that are not Disqualified Lenders), the Borrower may unreasonably withhold its consent; and *provided further* that the Borrower shall have the right to withhold its consent to any assignment if in order for such assignment to comply with applicable law, the Borrower would be required to obtain the consent of, or make any filing or registration with, any Governmental Authority, (B) the Administrative Agent; *provided* that, solely in the case of Term Loans, no consent of the Administrative Agent shall be required for an assignment to any Lender, an Affiliate of any Lender or an Approved Fund and (C) solely in the case of Revolving Loans and Revolving Commitments, each Issuing Bank; *provided* that, for the avoidance of doubt, no consent of any Issuing Bank shall be required for an assignment of all or any portion of a Term Loan or Term Commitment. Notwithstanding anything in this Section 9.04 to the contrary, if the consent of the Borrower is required by this paragraph with respect to any assignment and the Borrower has not given the Administrative Agent written notice of its objection to such assignment within ~~ten (10) days~~ five (5) Business Days after written notice to the Borrower, the Borrower shall be deemed to have consented to such assignment.

(ii) Assignments shall be subject to the following additional conditions: (A) except in the case of an assignment to a Lender, an Affiliate of a Lender or an Approved Fund or an assignment of the entire remaining amount of the assigning Lender's Commitment or Loans of any Class, the amount of the Commitment or Loans of the assigning Lender subject to each such assignment (determined as of the trade date specified in the Assignment and Assumption with respect to such assignment or, if no trade date is so specified, as of the date the Assignment and Assumption with respect to such assignment is delivered to the Administrative Agent) shall in the case of Revolving Loans not be less than \$5,000,000 (and integral multiples of \$1,000,000 in excess thereof) or, in the case of a Term Loan \$250,000 (and integral multiples thereof), unless the Borrower and the Administrative Agent otherwise consent (such consent not to be unreasonably withheld or delayed); *provided* that no such consent of the Borrower shall be required if an Event of Default under Section 7.01(a), (b), (h) or (i) has occurred and is continuing, (B) each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement; *provided* that this clause (B) shall not be construed to prohibit assignment of a proportionate part of all the assigning Lender's rights and obligations in respect of one Class of Commitments or Loans, (C) the parties to each assignment shall execute and deliver to the Administrative Agent an Assignment and Assumption via an electronic settlement system acceptable to the Administrative Agent or, if previously agreed by the Administrative Agent, manually, in each case together (unless

waived by the Administrative Agent) with a processing and recordation fee of \$3,500; *provided* that the Administrative Agent, in its sole discretion, may elect to waive such processing and recordation fee; *provided further* that assignments made pursuant to Section 2.17(b) or Section 9.02(c) shall not require the signature of the assigning Lender to become effective (D) the assignee, if it shall not be a Lender, shall deliver to the Administrative Agent any tax forms required by Section 2.15(e) and an Administrative Questionnaire in which the assignee designates one or more credit contacts to whom all syndicate-level information (which may contain material non-public information about the Borrower, the Loan Parties and their Related Parties or their respective securities) will be made available and who may receive such information in accordance with the assignee's compliance procedures and applicable laws, including Federal and state securities laws and (E) unless the Borrower otherwise consents, no assignment of all or any portion of the Revolving Commitment of a Lender that is also the Issuing Bank may be made unless (1) the assignee shall be or become an Issuing Bank, and assume a ratable portion of the rights and obligations of such assignor in its capacity as Issuing Bank, or (2) the assignor agrees, in its discretion, to retain all of its rights with respect to and obligations to issue Letters of Credit hereunder in which case the Applicable Fronting Exposure of such assignor may exceed such assignor's Revolving Commitment for purposes of Section 2.22(a) by an amount not to exceed the difference between the assignor's Revolving Commitment prior to such assignment and the assignor's Revolving Commitment following such assignment; *provided* that no such consent of the Borrower shall be required if an Event of Default under Section 7.01(a), (b), (h) or (i) has occurred and is continuing.

(iii) Subject to acceptance and recording thereof pursuant to paragraph (b)(v) of this Section, from and after the effective date specified in each Assignment and Assumption, the assignee thereunder shall be a party hereto and, to the extent of the interest assigned by such Assignment and Assumption, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto but shall continue to be entitled to the benefits of (and subject to the obligations and limitations of) Sections 2.13, 2.14, 2.15 and 9.03 and to any fees payable hereunder that have accrued for such Lender's account but have not yet been paid). Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this Section 9.04 shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (c)(i) of this Section.

(iv) The Administrative Agent, acting for this purpose as an agent of the Borrower, shall maintain at one of its offices a copy of each Assignment and Assumption delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitment of, and principal and interest amounts of the Loans and LC Disbursements owing to, each Lender pursuant to

the terms hereof from time to time (the “**Register**”). The entries in the Register shall be conclusive absent manifest error, and Holdings, the Borrower, the Administrative Agent, the Issuing Banks and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. In addition, the Administrative Agent shall maintain on the Register information regarding the designation, and revocation of designation, of any Lender as a Defaulting Lender. The Register shall be available for inspection by the Borrower, the Issuing Banks and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

(v) Upon its receipt of a duly completed Assignment and Assumption executed by an assigning Lender and an assignee, the assignee’s completed Administrative Questionnaire and any tax forms required by Section 2.15(e) (unless the assignee shall already be a Lender hereunder), the processing and recordation fee referred to in paragraph (b) of this Section 9.04 and any written consent to such assignment required by paragraph (b) of this Section 9.04, the Administrative Agent shall accept such Assignment and Assumption and record the information contained therein in the Register. No assignment shall be effective for purposes of this Agreement unless it has been recorded in the Register as provided in this paragraph.

(vi) The words “execution,” “signed,” “signature” and words of like import in any Assignment and Assumption shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act or any other similar state laws based on the Uniform Electronic Transactions Act.

(c) (i) Any Lender may, without the consent of the Borrower, the Administrative Agent or the Issuing Banks, sell participations to one or more banks or other Persons other than a natural person, any VV Holder, any Affiliate of Vincent Viola (including any trust established for the benefit of his spouse or children), a Disqualified Lender, Holdings, any Intermediate Parent, the Borrower or any of the Borrower’s Subsidiaries (a “**Participant**”) in all or a portion of such Lender’s rights and obligations under this Agreement (including all or a portion of its Commitment and the Loans owing to it); *provided* that (A) such Lender’s obligations under this Agreement shall remain unchanged, (B) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (C) Holdings, the Borrower, the Administrative Agent, the Issuing Banks and the other Lenders shall continue to deal solely and directly with such Lender in connection with such Lender’s rights and obligations under this Agreement. Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and any other Loan Documents and to approve any amendment, modification or waiver of any provision of this Agreement and any other Loan Documents; *provided* that such agreement or instrument may provide that such

Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver described in the first proviso to Section 9.02(b) that directly and adversely affects such Participant. Subject to paragraph (c)(iii) of this Section, the Borrower agrees that each Participant shall be entitled to the benefits of Sections 2.13, 2.14 and 2.15 (subject to the obligations and limitations of such Sections, including Section 2.15(e), provided that any forms required to be delivered by any Participant pursuant to Section 2.15(e) shall be provided solely to the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (b) of this Section. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 9.08 as though it were a Lender; *provided* that such Participant agrees to be subject to Section 2.16(c) as though it were a Lender.

(ii) Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and related interest amounts) of each participant's interest in the Loans or other obligations under this Agreement (the "**Participant Register**"). The entries in the Participant Register shall be conclusive, absent manifest error, and such Lender shall treat each person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary.

(iii) A Participant shall not be entitled to receive any greater payment under Section 2.13 or Section 2.15 than the applicable Lender would have been entitled to receive with respect to the participation sold to such Participant, unless the sale of the participation to such Participant is made with the Borrower's prior written consent.

(d) Any Lender may, without the consent of the Borrower or the Administrative Agent, at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank or other "central" bank, and this Section shall not apply to any such pledge or assignment of a security interest, *provided* that no such pledge or assignment of a security interest shall release a Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

(e) In connection with any assignment of rights and obligations of any Defaulting Lender hereunder, no such assignment shall be effective unless and until, in addition to the other conditions thereto set forth herein, the parties to the assignment shall make such additional payments to the Administrative Agent in an aggregate amount sufficient, upon distribution thereof as appropriate (which may be outright payment, purchases by the assignee of participations or subparticipations, or other compensating actions, including funding, with the consent of the Borrower and the Administrative Agent, the applicable pro rata share of Loans previously requested but not funded by the Defaulting Lender, to each of which the applicable assignee and assignor hereby irrevocably consent), to (x) pay and satisfy in full all payment liabilities then owed by such Defaulting Lender to the Administrative Agent or any Lender hereunder (and interest accrued thereon) and (y) acquire (and fund as appropriate) its full pro rata share



of all Loans and participations in Letters of Credit in accordance with its Applicable Percentage. Notwithstanding the foregoing, in the event that any assignment of rights and obligations of any Defaulting Lender hereunder shall become effective under applicable law without compliance with the provisions of this paragraph then the assignee of such interest shall be deemed to be a Defaulting Lender for all purposes of this Agreement until such compliance occurs.

(f) [Reserved].

(g) [Reserved].

(h) Notwithstanding anything to the contrary contained in this Section 9.04 or any other provision of this Agreement, so long as no Default or Event of Default has occurred and is continuing or would result therefrom, each Lender shall have the right at any time to sell, assign or transfer all or a portion of its Term Commitments or Term Loans to Holdings or one of its Subsidiaries on a non pro rata basis through one or more open market purchases; *provided* that (i) the assigning Lender and the purchaser shall execute and deliver to the Administrative Agent a Borrower Assignment and Assumption which shall include a representation to the assigning Lender at the time of assignment that the it does not possess material non-public information (or, if Holdings or a parent company of Holdings is not at the time a public reporting company, material information of a type that would not reasonably be expected to be publicly available if Holdings or such parent company was a public reporting company) with respect to Holdings and its Subsidiaries that has not been disclosed to the assigning Lender or the Lenders generally (other than the Lenders that have elected not to receive material non-public information), (ii) any Loans so repurchased shall be immediately canceled, and (iii) no proceeds of Loans under the Revolving Facility shall be utilized to make such purchases.

Section 9.05. *Survival.* All covenants, agreements, representations and warranties made by the Loan Parties in the Loan Documents and in the certificates or other instruments delivered in connection with or pursuant to any Loan Document shall be considered to have been relied upon by the other parties hereto and shall survive the execution and delivery of the Loan Documents and the making of any Loans and issuance of an Letters of Credit, regardless of any investigation made by any such other party or on its behalf and notwithstanding that the Administrative Agent, any Issuing Bank or any Lender may have had notice or knowledge of any Default or incorrect representation or warranty at the time any credit is extended hereunder, and shall continue in full force and effect as long as the principal of or any accrued interest on any Loan or any fee or any other amount payable under this Agreement is outstanding and unpaid or any Letter of Credit is outstanding and so long as the Commitments have not expired or terminated. The provisions of Sections 2.13, 2.14, 2.15, 9.03, 9.08 and Article 8 shall survive and remain in full force and effect regardless of the consummation of the transactions contemplated hereby, the repayment of the Loans, the expiration or termination of the Letters of Credit and the Commitments or the termination of this Agreement or any provision hereof. Notwithstanding the foregoing or anything else to the contrary set forth in this Agreement, in the event that, in connection with the refinancing or repayment in full of the credit facilities provided for herein, an Issuing Bank shall have provided to the Administrative Agent a written consent to the release of the Revolving Lenders from their obligations hereunder with respect to any Letter of

Credit issued by such Issuing Bank (whether as a result of the obligations of the Borrower (and any other account party) in respect of such Letter of Credit having been collateralized in full by a deposit of cash with such Issuing Bank or being supported by a letter of credit that names such Issuing Bank as the beneficiary thereunder, or otherwise), then from and after such time such Letter of Credit shall cease to be a "Letter of Credit" outstanding hereunder for all purposes of this Agreement and the other Loan Documents, and the Revolving Lenders shall be deemed to have no participations in such Letter of Credit, and no obligations with respect thereto, under Section 2.22.

Section 9.06. *Counterparts; Integration; Effectiveness.* This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement, the other Loan Documents and any separate letter agreements with respect to fees payable to the Administrative Agent or the syndication of the Loans and Commitments constitute the entire contract among the parties relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Except as provided in Section 4.01, this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof that, when taken together, bear the signatures of each of the other parties hereto, and thereafter shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. Delivery of an executed counterpart of a signature page of this Agreement by facsimile or other electronic means shall be effective as delivery of a manually executed counterpart of this Agreement.

Section 9.07. *Severability.* Any provision of this Agreement held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction. Without limiting the foregoing provisions of this Section 9.07, if and to the extent that the enforceability of any provisions in this Agreement relating to Defaulting Lenders shall be limited by Debtor Relief Laws, as determined in good faith by the Administrative Agent or the Issuing Bank, as applicable, then such provisions shall be deemed to be in effect only to the extent not so limited. The parties hereto shall endeavor in good faith negotiations to replace any invalid, illegal or unenforceable provisions with valid, legal and enforceable provisions the economic effect of which comes as close as reasonably possible to that of the invalid, illegal or unenforceable provisions.

Section 9.08. *Right of Setoff.* If an Event of Default shall have occurred and be continuing, each Lender, each Issuing Bank and each of their respective Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by law, to set off and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) at any time held and other obligations (in whatever currency) at any time owing by such Lender, any such Issuing Bank or any such Affiliate to or for the credit or the account of the Borrower against any of and all the obligations of the Borrower then due and owing under this Agreement held by such

Lender or Issuing Bank, irrespective of whether or not such Lender or Issuing Bank shall have made any demand under this Agreement and although (i) such obligations may be contingent or unmatured and (ii) such obligations are owed to a branch or office of such Lender or Issuing Bank different from the branch or office holding such deposit or obligated on such Indebtedness; *provided* that in the event that any Defaulting Lender shall exercise any such right of setoff, (x) all amounts so set off shall be paid over immediately to the Administrative Agent for further application in accordance with the provisions of Section 2.21 and, pending such payment, shall be segregated by such Defaulting Lender from its other funds and deemed held in trust for the benefit of the Administrative Agent and the Lenders and (y) the Defaulting Lender shall provide promptly to the Administrative Agent a statement describing in reasonable detail the Secured Obligations owing to such Defaulting Lender as to which it exercised such right of setoff. The applicable Lender and applicable Issuing Bank shall notify the Borrower and the Administrative Agent of such setoff and application; *provided* that any failure to give or any delay in giving such notice shall not affect the validity of any such setoff and application under this Section. The rights of each Lender, each Issuing Bank and their respective Affiliates under this Section are in addition to other rights and remedies (including other rights of setoff) that such Lender, such Issuing Bank and their respective Affiliates may have.

Section 9.09. *Governing Law; Jurisdiction; Consent to Service of Process.* (a) This Agreement shall be construed in accordance with and governed by the laws of the State of New York.

(b) Each party hereto hereby irrevocably and unconditionally submits, for itself and its property, to the exclusive jurisdiction of the Supreme Court of the State of New York sitting in New York County and of the United States District Court of the Southern District of New York, and any appellate court from any thereof, in any action or proceeding arising out of or relating to any Loan Document, or for recognition or enforcement of any judgment, and each of the parties hereto hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such New York State or, to the extent permitted by law, in such Federal court. Each of the parties hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in any Loan Document shall affect any right that the Administrative Agent, any Issuing Bank or any Lender may otherwise have to bring any action or proceeding relating to any Loan Document against Holdings or the Borrower or their respective properties in the courts of any jurisdiction.

(c) Each party hereto hereby irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection that it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to any Loan Document in any court referred to in paragraph (b) of this Section. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

(d) Each party to this Agreement irrevocably consents to service of process in the manner provided for notices in Section 9.01. Nothing in any Loan Document will

affect the right of any party to this Agreement to serve process in any other manner permitted by law.

Section 9.10. *Waiver of Jury Trial.* EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO ANY LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

Section 9.11. *Headings.* Article and Section headings and the Table of Contents used herein are for convenience of reference only, are not part of this Agreement and shall not affect the construction of, or be taken into consideration in interpreting, this Agreement.

Section 9.12. *Confidentiality.* (a) Each of the Administrative Agent, the Issuing Banks and the Lenders agrees to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed (i) to its and its Affiliates' directors, officers, employees, trustees and agents, including accountants, legal counsel and other agents and advisors and numbering, administration and settlement service providers (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such Information and instructed to keep such Information confidential and any failure of such Persons acting on behalf of the Administrative Agent, any Issuing Bank or the relevant Lender to comply with this Section 9.12 shall constitute a breach of this Section 9.12 by the Administrative Agent, such Issuing Bank or the relevant Lender, as applicable), (ii) to the extent requested by any regulatory authority or self-regulatory authority, required by applicable law or by any subpoena or similar legal process; *provided* that solely to the extent permitted by law and other than in connection with routine audits and reviews by regulatory and self-regulatory authorities, each Lender and the Administrative Agent shall notify the Borrower as promptly as practicable of any such requested or required disclosure in connection with any legal or regulatory proceeding; *provided further* that in no event shall any Lender or the Administrative Agent be obligated or required to return any materials furnished by the Borrower or any Subsidiary of Holdings, (iii) to any other party to this Agreement, (iv) in connection with the exercise of any remedies hereunder or any suit, action or proceeding relating to this Agreement or the enforcement of rights hereunder, (v) subject to an agreement containing confidentiality undertakings substantially similar to those of this Section, to (A) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement, (B) any actual or prospective counterparty (or its advisors) to any Swap Agreement or derivative transaction relating to any Loan Party or its Subsidiaries and its obligations under the Loan Documents or (C) any pledgee referred to in Section 9.04(d)

(it being understood that each Person identified as a “Disqualified Lender” on Schedule 1.01 may be disclosed to any assignee or Participant, or prospective assignee or Participant, in reliance on this clause (v)), (vi) if required by any rating agency; *provided* that prior to any such disclosure, such rating agency shall have agreed in writing to maintain the confidentiality of such Information or (vii) to the extent such Information (x) becomes publicly available other than as a result of a breach of this Section or (y) becomes available to the Administrative Agent, any Issuing Bank, any Lender or any of their respective Affiliates on a nonconfidential basis from a source other than Holdings or the Borrower. In addition, the Administrative Agent and the Lead Arranger may disclose the existence of this Agreement and information about this Agreement (other than any Information) to market data collectors and similar services providers to the lending industry to the extent reasonably required by such market data collectors or service providers to enable such party to receive league table credit for such party’s role in connection with this Agreement and the Transactions. For the purposes hereof, “**Information**” means all information received from Holdings or the Borrower relating to Holdings, the Borrower, any other Subsidiary or their business, other than any such information that is available to the Administrative Agent, any Issuing Bank or any Lender on a nonconfidential basis prior to disclosure by Holdings, the Borrower or any Subsidiary and other than information pertaining to this Agreement routinely provided by arrangers to data service providers, including league table providers, that serve the lending industry; *provided* that, in the case of information received from Holdings, the Borrower or any Subsidiary after the date hereof, such information is clearly identified at the time of delivery as confidential. Any Person required to maintain the confidentiality of Information as provided in this Section shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person would accord to its own confidential information.

(b) EACH LENDER ACKNOWLEDGES THAT INFORMATION AS DEFINED IN SECTION 9.12(a) FURNISHED TO IT PURSUANT TO THIS AGREEMENT MAY INCLUDE MATERIAL NON-PUBLIC INFORMATION CONCERNING HOLDINGS, THE BORROWER, THE LOAN PARTIES AND THEIR RELATED PARTIES OR THEIR RESPECTIVE SECURITIES AND CONFIRMS THAT IT HAS DEVELOPED COMPLIANCE PROCEDURES REGARDING THE USE OF MATERIAL NON-PUBLIC INFORMATION AND THAT IT WILL HANDLE SUCH MATERIAL NON-PUBLIC INFORMATION IN ACCORDANCE WITH THOSE PROCEDURES AND APPLICABLE LAW, INCLUDING FEDERAL AND STATE SECURITIES LAWS.

(c) ALL INFORMATION, INCLUDING REQUESTS FOR WAIVERS AND AMENDMENTS FURNISHED BY THE BORROWER OR THE ADMINISTRATIVE AGENT PURSUANT TO, OR IN THE COURSE OF ADMINISTERING, THIS AGREEMENT, WILL BE SYNDICATE-LEVEL INFORMATION, WHICH MAY CONTAIN MATERIAL NON-PUBLIC INFORMATION ABOUT HOLDINGS, THE BORROWER, THE LOAN PARTIES AND THEIR RELATED PARTIES OR THEIR RESPECTIVE SECURITIES. ACCORDINGLY, EACH LENDER REPRESENTS TO THE BORROWER AND THE ADMINISTRATIVE AGENT THAT IT HAS IDENTIFIED IN ITS ADMINISTRATIVE QUESTIONNAIRE A CREDIT CONTACT WHO MAY RECEIVE INFORMATION THAT MAY CONTAIN MATERIAL

Section 9.13. *USA Patriot Act.* Each Lender that is subject to the USA Patriot Act and the Administrative Agent (for itself and not on behalf of any Lender) hereby notifies the Borrower that pursuant to the requirements of the USA Patriot Act, it is required to obtain, verify and record information that identifies each Loan Party, which information includes the name and address of each Loan Party and other information that will allow such Lender or the Administrative Agent, as applicable, to identify each Loan Party in accordance with the USA Patriot Act.

Section 9.14. *Release of Liens and Guarantees.* (a) A Subsidiary Loan Party shall automatically be released from its obligations under the Loan Documents, and all security interests created by the Security Documents in Collateral owned by such Subsidiary Loan Party shall be automatically released, (1) upon the consummation of any transaction permitted by this Agreement as a result of which such Subsidiary Loan Party ceases to be a Restricted Subsidiary (including pursuant to a merger with a Subsidiary that is not a Loan Party or designation as an Unrestricted Subsidiary), (2) upon the request of the Borrower in connection with a transaction permitted under Section 6.14(a), as a result of which such Subsidiary Loan Party ceases to be a Wholly Owned Subsidiary, (3) upon the request of the Borrower, if permitted pursuant to Section 6.14(b) or (4) upon the request of the Borrower, if such Subsidiary Loan Party becomes a Regulated Subsidiary or an Excluded Subsidiary. Upon any sale or other transfer by any Loan Party (other than to Holdings, the Borrower or any Subsidiary Loan Party) of any Collateral in a transaction permitted under this Agreement, or upon the effectiveness of any written consent to the release of the security interest created under any Security Document in any Collateral or the release of Holdings or any Subsidiary Loan Party from its Guarantee under the Guarantee Agreement pursuant to Section 9.02, the security interests in such Collateral created by the Security Documents or such guarantee shall be automatically released. Upon termination of the aggregate Commitments and payment in full of all Secured Obligations (other than contingent indemnification obligations) and the expiration or termination of all Letters of Credit (including as a result of obtaining the consent of the applicable Issuing Bank as described in Section 9.05), all obligations under the Loan Documents and all security interests created by the Security Documents shall be automatically released. In connection with any termination or release pursuant to this Section, the Administrative Agent shall execute and deliver to any Loan Party, at such Loan Party's expense, all documents that such Loan Party shall reasonably request to evidence such termination or release so long as the Borrower or applicable Loan Party shall have provided the Administrative Agent such certifications or documents as the Administrative Agent shall reasonably request in order to demonstrate compliance with this Agreement.

(b) The Administrative Agent will, at the Borrower's expense, execute and deliver to the applicable Loan Party such documents as such Loan Party may reasonably request to subordinate its Lien on any property granted to or held by the Administrative Agent under any Loan Document to the holder of any Lien on such property that is permitted by Section 6.02(iv).

(c) Each of the Lenders and the Issuing Bank irrevocably authorizes the Administrative Agent to provide any release or evidence of release, termination or subordination contemplated by this Section 9.14. Upon request by the Administrative Agent at any time, the Required Lenders will confirm in writing the Administrative Agent's authority to release or subordinate its interest in particular types or items of property, or to release any Loan Party from its obligations under any Loan Document, in each case in accordance with the terms of the Loan Document and this Section 9.14.

Section 9.15. *No Advisory or Fiduciary Responsibility.* In connection with all aspects of each transaction contemplated hereby (including in connection with any amendment, waiver or other modification hereof or of any other Loan Document), each of the Borrower and Holdings acknowledges and agrees that (i) (A) the arranging and other services regarding this Agreement provided by the Administrative Agent, the Lenders and the Lead Arranger are arm's-length commercial transactions between the Borrower, Holdings and their respective Affiliates, on the one hand, and the Administrative Agent, the Lenders and the Lead Arranger, on the other hand, (B) each of the Borrower and Holdings has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate, and (C) each of the Borrower and Holdings is capable of evaluating, and understands and accepts, the terms, risks and conditions of the transactions contemplated hereby and by the other Loan Documents; (ii) (A) each of the Administrative Agent, the Lenders and the Lead Arranger is and has been acting solely as a principal and, except as expressly agreed in writing by the relevant parties, has not been, is not and will not be acting as an advisor, agent or fiduciary for the Borrower, Holdings, any of their respective Affiliates or any other Person and (B) none of the Administrative Agent, the Lenders and the Lead Arranger has any obligation to the Borrower, Holdings or any of their respective Affiliates with respect to the transactions contemplated hereby except those obligations expressly set forth herein and in the other Loan Documents; and (iii) the Administrative Agent, the Lenders and the Lead Arranger and their respective Affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Borrower, Holdings and their respective Affiliates, and none of the Administrative Agent, the Lenders and the Lead Arranger has any obligation to disclose any of such interests to the Borrower, Holdings or any of their respective Affiliates. To the fullest extent permitted by law, each of the Borrower and Holdings hereby waives and releases any claims that it may have against the Administrative Agent, the Lenders and the Lead Arranger with respect to any breach or alleged breach of agency or fiduciary duty in connection with any aspect of any transaction contemplated hereby.

Section 9.16. *Interest Rate Limitation.* Notwithstanding anything to the contrary contained in any Loan Document, the interest paid or agreed to be paid under the Loan Documents shall not exceed the maximum rate of non-usurious interest permitted by applicable law (the "**Maximum Rate**"). If the Administrative Agent or any Lender shall receive interest in an amount that exceeds the Maximum Rate, the excess interest shall be applied to the principal of the Loans or, if it exceeds such unpaid principal, refunded to the Borrower. In determining whether the interest contracted for, charged or received by the Administrative Agent or a Lender exceeds the Maximum Rate, such Person may, to the extent permitted by applicable law, (a) characterize any payment that is not principal as an expense, fee or premium rather than interest, (b) exclude voluntary prepayments and the effects thereof, and (c) amortize, prorate, allocate

and spread in equal or unequal parts the total amount of interest throughout the contemplated term of the obligations hereunder.

Section 9.17. *Lender Action.* Each Lender and the Issuing Bank agrees that it shall not take or institute any actions or proceedings, judicial or otherwise, for any right or remedy against any Loan Party or any other obligor under any of the Loan Documents (including the exercise of any right of setoff, rights on account of any banker's lien or similar claim or other rights of self-help), or institute any actions or proceedings, or otherwise commence any remedial procedures, with respect to any Collateral or any other property of any such Loan Party, unless expressly provided for herein or in any other Loan Document, without the prior written consent of the Administrative Agent. The provisions of this Section 9.17 are for the sole benefit of the Lenders and the Issuing Bank and shall not afford any right to, or constitute a defense available to, any Loan Party.

Section 9.18. *Marshalling; Payments Set Aside.* Neither the Administrative Agent nor any Lender shall be under any obligation to marshal any assets in favor of any Loan Party or any other Person or against or in payment of any or all of the Secured Obligations. To the extent that any Loan Party makes a payment or payments to the Administrative Agent or Lenders (or to the Administrative Agent, on behalf of Lenders), or the Administrative Agent or Lenders enforce any security interests or exercise their rights of setoff, and such payment or payments or the proceeds of such enforcement or setoff or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside and/or required to be repaid to a trustee, receiver or any other party under any bankruptcy law, any other state or federal law, common law or any equitable cause, then, to the extent of such recovery, the obligation or part thereof originally intended to be satisfied, and all Liens, rights and remedies therefor or related thereto, shall be revived and continued in full force and effect as if such payment or payments had not been made or such enforcement or setoff had not occurred.

Section 9.19. *Margin Stock; Collateral.* Each of the Lenders represents to the Administrative Agent and each of the other Lenders that it in good faith is not relying upon any margin stock (within the meaning of Regulation U of the Board of Governors) as collateral in the extension or maintenance of the credit provided in this Agreement.

Section 9.20. *Acknowledgement and Consent to Bail-in of EEA Financial Institutions.* Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any EEA Financial Institution arising under any Loan Document may be subject to the Write-Down and Conversion Powers of an EEA Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

- (a) the application of any Write-Down and Conversion Powers by an EEA Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an EEA Financial Institution; and
- (b) the effects of any Bail-In Action on any such liability, including, to the extent applicable:



(i) reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such EEA Financial Institution, its parent entity, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of any EEA Resolution Authority.

Section 9.21. *Certain ERISA Matters.*

(a) Each Lender (x) represents and warrants, as of the date such Person

became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and the Lead Arranger and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that at least one of the following is and will be true:

(i) such Lender is not using “plan assets” (within the meaning of 29 CFR § 2510.3-101, as modified by Section 3(42) of ERISA) of one or more Benefit Plans in connection with the Loans, the Letters of Credit or the Commitments,

(ii) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91 -38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender’s entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement,

(iii) (A) such Lender is an investment fund managed by a “Qualified Professional Asset Manager” (within the meaning of Part VI of PTE 84-14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Loans, the Letters of Credit, the Commitments and this Agreement, (C) the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender’s entrance into,

participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement, or

(iv) (iv) such other representation, warranty and covenant as may be agreed in writing between the Administrative Agent, in its sole discretion, and such Lender.

(b) In addition, unless sub-clause (i) in the immediately preceding clause (a) is true with respect to a Lender or such Lender has not provided another representation, warranty and covenant as provided in sub-clause (iv) in the immediately preceding clause (a), such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and the Lead Arranger and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that:

(i) none of the Administrative Agent or the Lead Arranger or any of their respective Affiliates is a fiduciary with respect to the assets of such Lender (including in connection with the reservation or exercise of any rights by the Administrative Agent under this Agreement, any Loan Document or any documents related hereto or thereto),

(ii) the Person making the investment decision on behalf of such Lender with respect to the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement is independent (within the meaning of 29 CFR § 2510.3-21) and is a bank, an insurance carrier, an investment adviser, a broker-dealer or other person that holds, or has under management or control, total assets of at least \$50 million, in each case as described in 29 CFR § 2510.3-21(c)(1)(i)(A)-(E),

(iii) the Person making the investment decision on behalf of such Lender with respect to the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement is capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies (including in respect of the Obligations),

(iv) the Person making the investment decision on behalf of such Lender with respect to the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement is a fiduciary under ERISA or the Code, or both, with respect to the Loans, the Letters of Credit, the Commitments and this Agreement and is responsible for exercising independent judgment in evaluating the transactions hereunder, and

(v) no fee or other compensation is being paid directly to the Administrative Agent or the Lead Arranger or any of their respective Affiliates

for investment advice (as opposed to other services) in connection with the Loans, the Letters of Credit, the Commitments or this Agreement.

(c) The Administrative Agent and the Lead Arranger hereby informs the Lenders that each such Person is not undertaking to provide impartial investment advice, or to give advice in a fiduciary capacity, in connection with the transactions contemplated hereby, and that such Person has a financial interest in the transactions contemplated hereby in that such Person or an Affiliate thereof (i) may receive interest or other payments with respect to the Loans, the Letters of Credit, the Commitments and this Agreement, (ii) may recognize a gain if it extended the Loans, the Letters of Credit or the Commitments for an amount less than the amount being paid for an interest in the Loans, the Letters of Credit or the Commitments by such Lender or (iii) may receive fees or other payments in connection with the transactions contemplated hereby, the Loan Documents or otherwise, including structuring fees, commitment fees, arrangement fees, facility fees, upfront fees, underwriting fees, ticking fees, agency fees, administrative agent or collateral agent fees, utilization fees, minimum usage fees, letter of credit fees, fronting fees, deal-away or alternate transaction fees, amendment fees, processing fees, term out premiums, banker's acceptance fees, breakage or other early termination fees or fees similar to the foregoing.

THIRD AMENDMENT (this “Amendment”), dated as of January 5, 2018, to the THIRD AMENDED AND RESTATED LIMITED LIABILITY COMPANY AGREEMENT OF VIRTU FINANCIAL LLC, a Delaware limited liability company (the “Company”), dated as of April 15, 2015, as amended (the “LLC Agreement”), by and among the Company, Virtu Financial, Inc., a Delaware corporation (the “Managing Member”), and the other Persons listed on the signature pages thereto. Capitalized or other terms used and not defined herein shall have the meanings ascribed to them in the LLC Agreement.

WHEREAS, pursuant to Section 12.10 of the LLC Agreement, subject to certain exceptions, the LLC Agreement can be amended at any time and from time to time by the Managing Member;

WHEREAS, pursuant to Section 12.10 of the LLC Agreement, no amendment to the LLC Agreement may adversely modify in any material respect the Units (or the rights, preferences or privileges of the Units) then held by any Members in any materially disproportionate manner to those then held by any other Members without the prior written consent of a majority in interest of such disproportionately affected Member or Members (the “Required Interests”);

WHEREAS, the amendment to the term “Tax Rate” in Section 1.01(a) of the LLC Agreement described in this Amendment could be interpreted as adversely modifying the Units held by Members other than the Managing Member in a materially disproportionate manner to those held by the Managing Member; and

WHEREAS, TJMT Holdings LLC is the holder of the Required Interests.

NOW, THEREFORE, the LLC Agreement is hereby amended as follows:

1. Amendments to Section 1.01(a) “Tax Rate”: Section 1.01(a) “Tax Rate” is hereby replaced in its entirety with the following provision:

“Tax Rate” means the highest marginal tax rates for an individual or corporation that is resident in New York City applicable to ordinary income, qualified dividend income or capital gains, as appropriate, taking into account the holding period of the assets disposed of and the year in which the taxable net income is recognized by the Company, and taking into account the deductibility of state and local income taxes as applicable at the time for federal income tax purposes and any limitations thereon including pursuant to Section 68 of the Code, which Tax Rate shall be the same for all Members, except that the Managing Member may in its sole discretion determine to utilize a different Tax Rate for one or more Members, including utilizing the highest marginal tax rate for a corporation that is resident in New York City for purposes of calculating the Tax Distribution Amount for Pubco, notwithstanding that the highest marginal tax rate for an individual resident in New York City may be higher and may be utilized for purposes of calculating the Tax Distribution Amount for Members other than Pubco.

2. Amendment to Section 5.03(e)(iv). Section 5.03(e)(iv) is hereby replaced in its entirety with the following provision:

- (A) All distributions of Tax Distribution Amounts made to a Member pursuant to Section 5.03(e) shall be treated as advances and shall reduce, as the Managing Member shall determine in its sole judgment, on a dollar for dollar basis, the amount of future distributions (for the avoidance of doubt, not including distributions of other Tax Distribution Amounts) that would otherwise have been paid to such Member, or, if such distributions are not sufficient for that purpose, the proceeds of liquidation otherwise payable to such Member; provided that the Managing Member may in its sole discretion determine which future distribution or distributions to such Member shall be reduced.
- (B) To the extent that an amount otherwise distributable to a Member is reduced pursuant to Section 5.03(e)(iv) (A) above, it shall be treated for all purposes hereof (other than Section 5.03(e)) as if such amount had actually been distributed to such Member pursuant to Section 5.03(b).

Except as explicitly set forth in this Amendment, the LLC Agreement is and shall be unmodified and remain in full force and effect, and nothing contained in this Amendment shall constitute or be deemed a waiver of any of the rights or obligations of any of the parties thereto. This Amendment shall become effective when executed by each of the signatories hereto and may be executed in one or more counterparts and each such counterpart hereof shall be deemed to be an original instrument but all such counterparts together shall constitute but one agreement. This Amendment shall be governed by, and construed in accordance with, the laws of the State of Delaware, without regard to any conflict of laws rule or principle thereof.

**[signature page follows]**

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IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed as of the day and year first written above.

**VIRTU FINANCIAL INC.**

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer

**VIRTU FINANCIAL LLC**

By: /s/ Joseph Molluso  
Name: Joseph Molluso  
Title: Chief Financial Officer

**TJMT HOLDINGS LLC**

By: /s/ Michael Viola  
Name: Michael Viola  
Title: Managing Member

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AMENDED AND RESTATED EMPLOYMENT AGREEMENT (this "Agreement"), dated as of November 15, 2017 (the "Effective Date"), between Virtu Financial, Inc., a Delaware corporation (the "Company"), and Douglas A. Cifu ("Executive").

WHEREAS, the Company and Executive are party to that certain Employment Agreement, dated as of April 15, 2015 (the "Existing Agreement"); and

WHEREAS, the Company and Executive desire to amend and restate the Existing Agreement as herein provided; and

WHEREAS, Executive's agreement to enter into this Agreement and be bound by the terms hereof, including the restrictive covenants described herein, is a material inducement to the Company's willingness to provide equity-based compensation to Executive as described herein, and the Company would not otherwise grant such equity-based compensation to Executive if Executive did not agree to enter into this Agreement.

NOW, THEREFORE, in consideration of the mutual agreements, provisions and covenants contained herein, and intending to be legally bound hereby, the parties hereto agree as set forth below:

1. Term. (a) The term of Executive's employment under this Agreement shall be effective as of the Effective Date, and shall continue until the five (5)-year anniversary of the Effective Date (the "Initial Expiration Date"), provided that on the Initial Expiration Date and each subsequent anniversary of the Initial Expiration Date, the term of Executive's employment under this Agreement shall be extended for one (1) additional year unless either party provides written notice to the other party at least ninety (90) days prior to the Initial Expiration Date (or any such anniversary, as applicable) that Executive's employment hereunder shall not be so extended (in which case, Executive's employment under this Agreement shall terminate on the Initial Expiration Date or expiration of the extended term, as applicable); provided, however, that Executive's employment under this Agreement may be terminated at any time pursuant to the provisions of Section 5. The period of time from the Effective Date through the termination of this Agreement and Executive's employment hereunder pursuant to its terms is herein referred to as the "Term"; and the date on which the Term is scheduled to expire (i.e., the Initial Expiration Date or the scheduled expiration of the extended term, if applicable) is herein referred to as the "Expiration Date." Notwithstanding anything contained herein to the contrary, if upon the effective date of a Change in Control, the Expiration Date is less than two (2) years from the date of such Change in Control, the Term shall automatically be renewed so that the Expiration Date is two (2) years from the effective date of such Change in Control.

(b) Executive agrees and acknowledges that the Company has no obligation to extend the Term or to continue Executive's employment following the Expiration Date, and Executive expressly acknowledges that no promises or understandings to the contrary have been made or reached. Executive also agrees and acknowledges that, should Executive and the Company choose to continue Executive's employment for any period of time following the Expiration Date without extending the term of Executive's employment under this Agreement or entering into a new written employment agreement, Executive's employment with the Company shall be "at will," such that the Company may terminate Executive's employment at any time, with or without reason and with or without notice, and Executive may resign at any time, with or without reason and with or without notice (for the sake of clarity, the provisions of this Agreement shall not apply following the expiration of the Term (except as otherwise expressly provided herein)).

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2. Definitions. For purposes of this Agreement, the following terms, as used herein, shall have the definitions set forth below.

(a) “Affiliate” means, with respect to any specified Person, any other Person that directly or indirectly, through one or more intermediaries, Controls, is Controlled by, or is under common Control with, such specified Person; provided, that in no event shall any entity Controlled by Vincent Viola but in which the Company does not have a direct or indirect ownership interest be treated as an Affiliate of the Company.

(b) “Change in Control” has the meaning set forth in the Plan.

(c) “Cause” means (i) Executive’s willful engagement in illegal conduct or gross misconduct that is materially and demonstrably injurious to the Company, which action is not cured (if curable) within thirty (30) days after a written demand for substantial performance is received by Executive from the Company that specifically identifies in reasonable detail the action(s) that it believes Executive has engaged in and the related effect on the Company; (ii) conviction of (by a court of competent jurisdiction), or entry of a plea of guilty or no contest by, Executive with respect to, a felony of which fraud or dishonesty is a material element or which involves a violation of securities laws or the rules and regulations of a self-regulatory organization applicable to Executive in connection with his position at the Company; or (iii) the willful and material breach of this Agreement or any Noncompetition Restrictions (as defined below) by Executive which breach is not cured (if curable) within thirty (30) days after a written notice from the Company that specifically identifies in reasonable detail the willful and material breach. Any act, or failure to act, based upon authority given pursuant to a resolution duly adopted by the Board or upon the instructions of the Board or reasonably based upon the advice of outside counsel for the Company shall be conclusively presumed to be done, or omitted to be done, by Executive in good faith and in the best interests of the Company and, for the purposes of clauses (i) and (iii) of the preceding sentence, no act or failure to act on the part of Executive shall be considered “willful,” so long as Executive reasonably believed that such action, or failure to act, was in the best interests of the Company. Cause shall not exist unless and until (A) the Board has delivered to Executive written notice (a “Removal Notice”) that (x) indicates the specific provision of the definition of “Cause” relied upon, (y) sets forth in reasonable detail the facts and circumstances claimed to provide a basis for Cause under the provision so indicated and (z) includes a copy of a resolution duly adopted by a majority of the Board (excluding Executive) at a meeting of the Board called and held for such purpose (after reasonable notice to Executive and an opportunity for Executive, together with counsel, to be heard before the Board), finding that, in the opinion of the Board, Cause has occurred and setting forth in reasonable detail the facts and circumstances thereof and (B) Executive has been afforded the right to cure (if curable) any such action in accordance with clauses (i) or (iii) of the definition of Cause, as applicable. A removal of Executive for Cause shall be effective only if the Board delivers to Executive a Removal Notice within ninety (90) days after the Company first learns of the existence of the circumstances giving rise to Cause if, and only if, a reasonable Person could have determined that Cause exists upon learning of the circumstances that the Company was actually aware of at such time.

(d) “Control” (including, with correlative meanings, the terms “Controlled by” and “under common Control with”), as used with respect to any Person, means the direct or indirect possession of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities or by contract.

(e) “Disability” means Executive would be entitled to long-term disability benefits under the Company’s long-term disability plan as in effect from time to time, without regard to any waiting or elimination period under such plan and assuming for the purpose of such determination that Executive is actually participating in such plan at such time. If the Company does not maintain a long-



term disability plan, “Disability” means Executive’s inability to perform Executive’s duties and responsibilities hereunder on a full-time basis for a consecutive period of one hundred eighty (180) days in any three hundred sixty-five (365)-day period due to physical or mental illness or incapacity that is determined to be total and permanent by a physician selected by the Company or its insurers and reasonably acceptable to the Executive or his legal representative.

(f) “Good Reason” means the termination of Executive’s employment at his initiative after, without Executive’s prior written consent, one (1) or more of the following events: (i) a reduction in the Base Salary, or the uncured failure by the Company to fulfill its obligations under this Agreement within thirty (30) days after written notice thereof from Executive to the Company; (ii) the failure to elect Executive to or the removal of Executive (other than for Cause) from any of the positions described in Section 3; any material diminution or adverse change in the duties, authority, responsibilities, or positions of Executive from those contemplated by Section 3(a); any attempt to remove Executive from any executive management position in a manner contrary to this Agreement or the Company’s then effective Certificate of Incorporation or By-Laws; (iii) the assignment to Executive of duties or responsibilities which are materially inconsistent with or different from those contemplated by Section 3(a) or requiring Executive to report to an officer or employee instead of the Board; (iv) the Company’s requiring Executive to be based at a location in excess of fifty (50) miles from the location of Executive’s principal job location or office specified in Section 3(b), except for required travel on the Company’s business to an extent substantially consistent with Executive’s position; or (v) the failure of the Company to obtain the assumption in writing of its obligation to perform this Agreement by any successor to all or substantially all of the assets or business of the Company after a merger, consolidation, sale, or similar transaction; provided, however, that prior to resigning for Good Reason, Executive shall give written notice to the Company of the facts and circumstances claimed to provide a basis for such resignation not more than sixty (60) days following his knowledge of such facts and circumstances, and the Company shall have thirty (30) days after receipt of such notice to cure such facts and circumstances (and if so cured then Executive shall not be permitted to resign for Good Reason in respect thereof). Any termination of employment by Executive for Good Reason shall be communicated to the Company by written notice, which shall include Executive’s date of termination of employment (which, except as set forth in the preceding sentence, shall be a date not later than thirty (30) days after delivery of such notice).

(g) “Governmental Entity” means any national, state, county, local, municipal or other government or any court of competent jurisdiction, administrative agency or commission or other governmental authority or instrumentality.

(h) “Person” means any individual, firm, corporation, partnership, limited liability company, trust, joint venture, association, unincorporated entity or other entity.

(i) “Plan” means the Virtu Financial, Inc. Amended and Restated 2015 Management Incentive Plan.

3. Duties and Responsibilities. (a) The Company hereby employs Executive and Executive hereby accepts employment, subject to the terms and conditions contained herein, during the Term, as Chief Executive Officer. During the Term, Executive agrees to be employed by and devote substantially all of Executive’s business time and attention to the Company and the promotion of its interests and to use his best efforts to faithfully and diligently serve the Company; provided, however, that, to the extent such activities do not significantly interfere with the performance of his duties, services and responsibilities under this Agreement, Executive shall be permitted to (i) manage his personal, financial and legal affairs, (ii) serve on civic or charitable boards and committees of such boards and (iii) to the extent approved by the Board pursuant to a duly authorized resolution of the Board, serve on corporate boards and committees of such boards; provided, further, that Executive (x) shall be permitted to continue

to be engaged in, or provide services to, the businesses and activities set forth on Exhibit A, and (y) to the extent that such activities do not significantly interfere with the performance of his duties, services and responsibilities under this Agreement, shall be permitted to become engaged in, or provide services to, any other business or activity, whether as owner, partner, investor, consultant, agent, employee, co-venturer or otherwise, in which Vincent Viola is permitted to become engaged in during the Term, to the extent that Executive's level of participation in such businesses or activities are consistent with Executive's participation in the businesses or activities set forth on Exhibit A prior to the Effective Date. Executive will report solely to the Board of Directors of the Company (the "Board"). Executive will perform such lawful duties and responsibilities as are commensurate with Executive's titles and positions and as are generally consistent with those exercised by Executive prior to the Effective Date, and such other duties and responsibilities commensurate with Executive's titles and positions as may be reasonably requested by the Board from time to time. Executive will have the authority customarily exercised by an individual serving as Chief Executive Officer of a corporation of the size and nature of the Company and as is generally consistent with Executive's authority prior to the Effective Date. During the Term, Executive shall serve as a member of the Board, and upon request shall serve as a director or an officer of one or more subsidiaries of the Company, or of an Affiliate of the Company. Executive shall not be compensated additionally in Executive's capacity as a member of the Board or as a director or officer of a subsidiary or Affiliate of the Company.

(b) During the Term, Executive's principal place of employment shall be in the Company's principal office in Manhattan, New York. Executive acknowledges that Executive's duties and responsibilities shall require Executive to travel on business to the extent reasonably necessary to fully perform Executive's duties and responsibilities hereunder.

4. Compensation and Related Matters. (a) Base Salary. During the Term, for all services rendered under this Agreement, Executive shall receive an aggregate annual base salary ("Base Salary") at an initial rate of \$1,000,000, payable in accordance with the Company's applicable payroll practices. Base Salary may be increased (but not decreased) on an annual basis as determined by the Board in its sole discretion. References in this Agreement to Base Salary shall be deemed to refer to the most recently effective annual base salary rate.

(b) Annual Bonus. For calendar year 2017, Executive shall have the opportunity to earn a discretionary annual bonus based on the satisfaction of such business objectives and/or business performance as determined by the non-employee members of the Board or the Compensation Committee of the Board in their or its sole discretion (the "2017 Annual Bonus"). During the Term, for each calendar year beginning with 2018, the Executive shall be eligible to receive an annual bonus (the "Annual Bonus"), with a target Annual Bonus amount equal to \$2,500,000 (the "Target Bonus") and a maximum Annual Bonus amount equal to \$5,000,000 (the "Maximum Bonus"). Eighty percent (80%) of the Annual Bonus will be based on the achievement of annual quantitative targets comprised of specific components of the Company's annual budget established by the Board (the "Quantitative Goals") and the remaining twenty percent (20%) of the Annual Bonus will be based on annual qualitative targets established by the Board (the "Qualitative Goals"). Accordingly, up to \$2,000,000 of the Target Bonus and \$4,000,000 of the Maximum Bonus may be earned based on the achievement of the Quantitative Goals and up to \$500,000 of the Target Bonus and \$1,000,000 of the Maximum Bonus may be earned based on the achievement of the Qualitative Goals. Fifty percent (50%) of the Annual Bonus, if any, shall be paid in cash, thirty percent (30%) of the Annual Bonus, if any, shall be paid in the form of restricted shares of Class A common stock of the Company (the "Stock") that vest in equal annual installments on each the first three (3) anniversaries of the date of grant, and the remaining twenty percent (20%) shall be paid in the form of fully-vested shares of Stock; provided, that, the form, manner and timing of payment (including vesting of any payment in equity or equity-based awards) with respect to the Annual Bonus is subject to change in the event of (and consistent with) any change to the payout

schedule formulations that is made applicable to the senior executives of the Company. The Annual Bonus, if any, shall be payable within the period required by Section 409A of the Code such that it qualifies as a “short-term deferral” pursuant to Section 1.409A-1(b)(4) of the Department of Treasury Regulations (or any successor thereto). For purposes of this Agreement, prior to January 1, 2018, the Annual Bonus means the 2017 Annual Bonus.

(c) Equity Awards. Commencing with calendar year 2018, the Executive shall be eligible to receive an equity award at the beginning of each calendar year during the Term (each such grant, an “Annual Equity Award”). It is the current intention of the Board that such Annual Equity Award will be in the form of 150,000 restricted shares of Stock, and that any such award shall be earned and vest in accordance with the terms hereof.

(i) The number of shares earned with respect to each Annual Equity Award shall be determined based on the percentage of the Company’s budgeted EBITDA achieved in the calendar year to which such award relates in accordance with the following table:

<b>Percentage of Budgeted EBITDA Achieved</b>	<b>Number of Shares Earned</b>
75% or more	150,000
74%	135,000
73%	120,000
72%	105,000
71%	90,000
70%	75,000
Less than 70%	0

If the percentage of the Company’s budgeted EBITDA achieved is greater than 70% but less than 75%, then the amount of earned shares in the table above will be determined based on linear interpolation.

(ii) If the Board determines that the number of shares of Stock subject to the Annual Equity Award will be greater or less than 150,000, then the amounts reflected in the table above shall be adjusted proportionally to reflect such number of shares.

(iii) To the extent any shares of Stock are earned with respect to any Annual Equity Award in accordance with Section 4(c)(i), 50% of such shares shall vest on the last day of the calendar year to which such award relates and the remaining 50% shall vest on the last day of the subsequent calendar year, subject in all cases to the Executive’s continued employment through the applicable vesting date.

(d) Benefits and Perquisites. During the Term, Executive shall be entitled to participate in the benefit plans and programs (including, without limitation, four (4) weeks’ vacation per calendar year, health insurance and a 401(k) plan) and receive perquisites, commensurate with Executive’s position, that are provided by the Company from time to time for its senior executives generally, subject to the terms and conditions of such plans and programs. In addition, during the Term,

the Company shall provide the Executive a car and driver consistent with past practice prior to the Effective Date.

(e) Business Expense Reimbursements. During the Term, the Company shall promptly reimburse Executive for Executive's reasonable and necessary business expenses in accordance with the Company's then-prevailing policies and procedures for expense reimbursement (which shall include appropriate itemization and substantiation of expenses incurred).

(f) Indemnification. The Company shall indemnify and hold harmless Executive, to the fullest extent permitted by law and the Company's governing documents, against all claims, expenses, damages, liabilities and losses incurred by Executive by reason of the fact that Executive is or was, or had agreed to become, a director, officer, employee, agent or fiduciary of the Company or any of its subsidiaries or Affiliates, or is or was serving at the request of the Company as a director, officer, partner, venturer, proprietor, trustee, employee, agent or similar functionary of another corporation, partnership, joint venture, business, person, trust, employee benefit plan or other entity. The indemnification obligations of the Company shall survive from the Effective Date of this Agreement and continue until six (6) years following his cessation of service with the applicable entity or, if longer, one (1) year after the expiration of any applicable statute of limitations for any potential claim. During the Term and for a period of six (6) years thereafter, the Company shall cause Executive to be covered by and named as an insured under any policy or contract of insurance obtained by it to insure its directors and officers against personal liability for acts, errors or omissions in connection with service as an officer or director of the Company or any of its subsidiaries or Affiliates or service in any other capacities at the request of the Company. The coverage provided to Executive shall be of a scope and on terms and conditions at least as favorable as the most favorable coverage provided to any other officer or director of the Company (or any successor). Anything in this Agreement to the contrary notwithstanding, this Section 4(f) shall survive the termination of this Agreement for any reason. Nothing in this Agreement shall limit or reduce any other rights to indemnification that apply to Executive, whether pursuant to contract or otherwise.

5. Termination of Employment. (a) Executive's employment under this Agreement may be terminated by either party at any time and for any reason; provided, however, that Executive shall be required to give the Company at least sixty (60) days' advance written notice of any voluntary resignation of Executive's employment hereunder (other than resignation for Good Reason) (and in such event the Company in its sole discretion may elect to accelerate Executive's date of termination of employment, it being understood that such termination shall still be treated as a voluntary resignation for purposes of this Agreement). Notwithstanding the foregoing, Executive's employment shall automatically terminate upon Executive's death.

(b) Following any termination of Executive's employment under this Agreement, except for as provided for under this Section 5, the obligations of the Company to pay or provide Executive with compensation and benefits under Section 4 shall cease, and the Company shall have no further obligations to provide compensation or benefits to Executive hereunder, except (i) for payment of any accrued but unpaid Base Salary and for payment of any unreimbursed expenses under Section 4(e), in each case accrued or incurred through the date of termination of employment, payable as soon as practicable and in all events within thirty (30) days following the date of termination of employment, (ii) for payment of any earned but unpaid Annual Bonus, if any, for the calendar year prior to the calendar year in which such termination of employment occurs, (iii) continued indemnification pursuant to Section 4(f), (iv) as explicitly set forth in any other benefit plans, programs or arrangements applicable to terminated employees in which Executive participates, other than severance plans or policies and (v) as otherwise expressly required by applicable law. For the avoidance of doubt, any unpaid Annual Bonus for the year of termination of employment is forfeited if Executive's employment is terminated for any reason.

(c) If Executive's employment under this Agreement is terminated (i) by the Company without Cause, (ii) due to death or Disability, (iii) by Executive for Good Reason, or (iv) due to expiration of the Term on the Expiration Date as a result of the Company delivering a notice of non-renewal as contemplated by Section 1, in addition to the payments and benefits specified in Section 5(b), Executive shall be entitled to receive (A) severance pay in an aggregate amount (the "Severance Amount") equal to the greater of (x) one (1) times Executive's Base Salary and (y) an amount equal to the total amount of Base Salary that Executive would have been entitled to receive had Executive continued to be employed through the Expiration Date; and (B) continued health, dental, vision and life insurance benefits under the terms of the applicable Company benefit plans for (x) twelve (12) months or (y) the period from Executive's termination of employment through the Expiration Date, whichever is longer (the "Benefits Continuation Period"), subject to Executive's payment of the cost of such benefits to the same extent that active employees of the Company are required to pay for such benefits from time to time; provided, however, that such continuation coverage shall end earlier upon Executive's becoming eligible for comparable coverage under another employer's benefit plans; provided, further, that following the expiration of the Benefits Continuation Period (which was not terminated as a result of Executive becoming eligible for comparable coverage under another employer's benefit plans), Executive shall be eligible to continue his health, dental, vision and life insurance benefits for Executive and his spouse and eligible dependents under the terms of the applicable Company benefit plans until the earlier of (X) Executive's dependents reaching the age of 26, (Y) Executive or his spouse become eligible for Medicare, or (Z) Executive becoming eligible for comparable coverage under another employer's benefit plans, subject to Executive's payment of the full cost of such benefits; and provided, further, that to the extent the provision of such continuation coverage is not permitted under the terms of the Company benefit plans or would result in an adverse tax consequence to the Company, the Company may alternatively provide Executive with a cash payment (the "COBRA Cash Payment") in an amount equal to the applicable COBRA premium that Executive would otherwise be required to pay to obtain COBRA continuation coverage for such benefits for such period (minus the cost of such benefits to the same extent that active employees of the Company are required to pay for such benefits from time to time); provided, further, that the Company will use reasonable best efforts to continue coverage under the Company benefit plans to the extent legally possible without suffering any adverse consequences to the Company or other participants in such plans. In addition, if the Executive's employment is terminated in accordance with the provisions of this Section 5(c), (I) the Executive shall remain eligible to earn shares of Stock under his then-current Annual Equity Award in accordance with the criteria set forth in Section 4(c)(i) and, to the extent earned, the product of such earned shares multiplied by a fraction, the numerator of which is the number of calendar days the Executive was employed in the calendar year of termination, and the denominator of which is 365, shall be deemed vested on the last day of the calendar year to which such award relates, (II) any earned but unvested shares of Stock under the Annual Equity Award granted in the calendar year prior to the calendar year of the Executive's termination shall be deemed vested as of the date of termination and (III) the Executive shall receive 150,000 fully-vested shares of Stock (clauses (I), (II) and (III), the "Equity Acceleration"). The Severance Amount (and the COBRA Cash Payment, if applicable) shall be paid in cash in a lump sum within thirty (30) days following the execution of the Release (defined below) that has become irrevocable by its terms, subject to any required delay of payment pursuant to Section 23.

(d) Notwithstanding anything herein to the contrary, if at any time within sixty (60) days before, or twenty-four (24) months following, a Change in Control, Executive's employment under this Agreement is terminated (i) by the Company without Cause, (ii) due to death or Disability, (iii) by Executive for Good Reason, or (iv) due to expiration of the Term on the Expiration Date as a result of the Company delivering a notice of non-renewal as contemplated by Section 1, then (A) in lieu of the Severance Amount described in Section 5(c)(A) the Executive shall be entitled to receive two and a half (2.5) times the sum of (x) Executive's Base Salary and (y) the Annual Bonus (including any amounts deferred or satisfied through the grant of equity awards) most recently awarded to Executive for completed

fiscal years of the Company (the “CIC Severance Amount”), (B) the Benefits Continuation Period shall be extended to (x) twenty-four (24) months or (y) the period from Executive’s termination of employment through the Expiration Date, whichever is longer, and (C) in lieu of the Equity Acceleration described in Section 5(c), (I) the product of the number of shares of Stock under the Executive’s then-current Annual Equity Award multiplied by a fraction, the numerator of which is the number of calendar days the Executive was employed in the calendar year of termination, and the denominator of which is 365, shall be deemed vested as of the date of termination, (II) any earned but unvested shares of Stock under the Annual Equity Award granted in the calendar year prior to the calendar year of the Executive’s termination, shall be deemed vested as of the date of termination and (III) the Executive shall receive 150,000 fully-vested shares of Stock (clauses (I), (II) and (III), the “CIC Equity Acceleration”); provided, that if the Executive’s employment is terminated prior to a Change in Control and a Change in Control occurs within sixty (60) days of such termination triggering this Section 5(d), then any amounts paid prior to the Change in Control pursuant to the Equity Acceleration shall reduce the amount required to be paid pursuant to the CIC Equity Acceleration. The CIC Severance Amount shall be paid in cash in a lump sum within thirty (30) days following the execution of the Release that has become irrevocable by its terms, subject to any required delay of payment pursuant to Section 23. In addition, Executive shall be entitled to the payments and benefits specified in Section 5(b). For purposes of determining the Severance Amount and CIC Severance Amount, Base Salary shall be the Base Salary as in effect prior to any reduction giving rise to a termination for Good Reason.

(e) Executive’s entitlement to the payment and benefits and certain rights set forth in Sections 5(c) and 5(d) shall be conditioned upon Executive having provided an irrevocable waiver and release of claims in favor of the Company, its Affiliates, their respective predecessors and successors, and all of the respective current or former directors, officers, employees, shareholders, partners, members, agents or representatives of any of the foregoing (collectively, the “Released Parties”), substantially in the form attached hereto as Exhibit B (the “Release”), that has become effective in accordance with its terms. Simultaneous with the delivery of the signed Release by Executive, the Company shall deliver an irrevocable waiver and release of claims in favor of Executive and his heirs, agents and representatives substantially in the form attached hereto as Exhibit C, and if the Company fails to timely deliver its release, Executive’s obligation to deliver the Release shall lapse and be void for all purposes hereof, including for purposes of the Company’s obligation to pay or provide the payments and benefits under Sections 5(c) and 5(d).

(f) Upon termination of Executive’s employment for any reason, and regardless of whether Executive continues as a consultant to the Company, upon the Company’s request Executive agrees to resign, as of the date of such termination of employment or such other date requested, from the Board and any committees thereof, and, if applicable, from the board of directors (and any committees thereof) of any Affiliate of the Company to the extent Executive is then serving thereon.

(g) The payment of any amounts accrued under any benefit plan, program or arrangement in which Executive participates shall be subject to the terms of the applicable plan, program or arrangement, and any elections Executive has made thereunder. The Company’s obligation to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense, or other claim, right or action that the Company may have against Executive or others.

(h) Following any termination of Executive’s employment, Executive shall have no obligation to seek other employment or take any other action by way of mitigation of the amounts payable to Executive under any of the provisions of this Agreement. There shall be no offset against amounts due Executive under this agreement on account of any remuneration attributable to later employment, consultancy or other remunerative activity of Executive.

6. 280G Matters.

(a) If any payment to or in respect of Executive by the Company or any Affiliate, whether pursuant to this Agreement or otherwise (a "Payment"), is determined by the Auditor (as defined below) to be a "parachute payment" as defined in Section 280G(b)(2) of the Code (as defined below) (a "Parachute Payment") and also to be subject to the excise tax imposed by Section 4999 of the Code, or any interest or penalties are incurred by Executive with respect to such excise tax (such excise tax, together with any such interest and penalties, being herein collectively referred to as the "Excise Tax"), then the aggregate amount of the Parachute Payments otherwise payable to Executive under this Agreement (unless otherwise agreed by Executive) shall be reduced if and to the extent that such reduction would result in Executive retaining a greater net after-tax amount than Executive would have retained had he received the full amount of the Parachute Payments (and paid the applicable Excise Tax), with such reductions coming first from amounts that are exempt from Section 409A and, thereafter, from amounts that are subject to Section 409A, in each case in reverse chronological order of their scheduled distributions.

(b) All determinations required to be made under this Section 6, including whether an Excise Tax is payable by Executive, the amount of such Excise Tax and the determination of which Parachute Payments shall be reduced, shall be made by the Company's regular auditor, unless Executive objects to the use of that auditor, in which event the auditor shall be an independent auditor or other independent professional services organization that is a certified public accounting firm recognized as an expert in determinations and calculations for purposes of Section 280G of the Code selected by the Company and reasonably acceptable to Executive, which auditor shall not, without Executive's consent, be a firm serving as accountant or auditor for the individual, entity or group effecting the Change in Control (the "Auditor"). If the Auditor determines that the aggregate Payments to Executive under this Agreement should be reduced in accordance with Section 6(a), the Company shall promptly give Executive notice to that effect and a copy of the detailed calculation thereof. All determinations made by the Auditor under this Section 6 shall be binding upon the Company and Executive and shall be made as soon as reasonably practicable and in no event later than 10 days following the date of Executive's termination of employment. All fees and expenses of the Auditor shall be borne solely by the Company.

(c) For purposes of this Agreement, the term "Code" shall mean the Internal Revenue Code of 1986, as amended, including all final regulations promulgated thereunder and any reference to a particular section of the Code shall include any provision that modifies, replaces or supersedes such section. The parties acknowledge that Executive's continuing agreement to be bound by the confidentiality and restrictive covenant provisions set forth in the Third Amended and Restated Limited Liability Company Agreement of Virtu Financial LLC, a Delaware limited liability company, dated as of April 15, 2015, as amended (collectively, the "Noncompetition Restrictions") are partial consideration for the Company's entering into this Agreement, and that at the request of Executive, the Company shall cause the Auditor to take into account the value of any reasonable compensation for services to be rendered by Executive before or after a Change in Control, including the Noncompetition Restrictions, in computing the amount of Parachute Payments under Section 280G of the Code, and the Company shall cooperate with Executive and the Auditor in performing such valuation.

7. Confidential Information; Restrictive Covenants. For purposes of Sections 7, 8, 9 and 10, references to the Company shall include its subsidiaries and any Affiliates of the Company that are Controlled by the Company. Executive acknowledges and agrees that Executive shall be bound by the Noncompetition Restrictions, in accordance with the terms and conditions thereof; provided, however, that the Executive shall not be held criminally or civilly liable under any federal or state trade secret law for any disclosure of a trade secret that is made: (A) in confidence to a federal, state or local government official, either directly or indirectly, or to an attorney; and (B) solely for the purpose of

reporting or investigating a suspected violation of law; or is made in a complaint or other document that is filed under seal in a lawsuit or other proceeding. If the Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, the Executive may disclose the Company's trade secrets to the Executive's attorney and use the trade secret information in the court proceeding if the Executive: (1) files any document containing the trade secret under seal; and (2) does not disclose the trade secret, except pursuant to court order.

8. Return of Property. Executive acknowledges that all notes, memoranda, specifications, devices, formulas, records, files, lists, drawings, documents, models, equipment, property, computer, software or intellectual property relating to the businesses of the Company, in whatever form (including electronic), and all copies thereof, that are received or created by Executive while an employee of the Company or its subsidiaries or Affiliates (including but not limited to Confidential Information and Inventions (as defined below)) are and shall remain the property of the Company, and Executive shall immediately return such property to the Company upon the termination of Executive's employment and, in any event, at the Company's request and subject to inspection in accordance with applicable Company employee policies generally, except as may otherwise be agreed by Executive and the Company at the time of termination; provided, that Executive shall be permitted to retain a copy of his contacts/rolodex, including in electronic form.

9. Intellectual Property Rights. (a) Executive agrees that the results and proceeds of Executive's services for the Company (including, but not limited to, any trade secrets, products, services, processes, know-how, designs, developments, innovations, analyses, drawings, reports, techniques, formulas, methods, developmental or experimental work, improvements, discoveries, inventions, ideas, source and object codes, programs, matters of a literary, musical, dramatic or otherwise creative nature, writings and other works of authorship) resulting from services performed while an employee of the Company and any works in progress, whether or not patentable or registrable under copyright or similar statutes, that were made, developed, conceived or reduced to practice or learned by Executive, either alone or jointly with others (collectively, "Inventions"), shall be works-made-for-hire and the Company shall be deemed the sole owner throughout the universe of any and all trade secret, patent, copyright and other intellectual property rights (collectively, "Proprietary Rights") of whatsoever nature therein, whether or not now or hereafter known, existing, contemplated, recognized or developed, with the right to use the same in perpetuity in any manner the Company determines in its sole discretion, without any further payment to Executive whatsoever. If, for any reason, any of such results and proceeds shall not legally be a work-made-for-hire and/or there are any Proprietary Rights which do not accrue to the Company under the immediately preceding sentence, then Executive hereby irrevocably assigns and agrees to assign any and all of Executive's right, title and interest thereto, including any and all Proprietary Rights of whatsoever nature therein, whether or not now or hereafter known, existing, contemplated, recognized or developed, to the Company, and the Company shall have the right to use the same in perpetuity throughout the universe in any manner determined by the Company without any further payment to Executive whatsoever. As to any Invention that Executive is required to assign, Executive shall promptly and fully disclose to the Company all information known to Executive concerning such Invention.

(b) Executive agrees that, from time to time, as may be requested by the Company and at the Company's sole cost and expense, Executive shall do any and all things that the Company may reasonably deem useful or desirable to establish or document the Company's exclusive ownership throughout the United States of America or any other country of any and all Proprietary Rights in any such Inventions, including the execution of appropriate copyright and/or patent applications or assignments. To the extent Executive has any Proprietary Rights in the Inventions that cannot be assigned in the manner described above, Executive unconditionally and irrevocably waives the enforcement of such Proprietary Rights. This Section 9(b) is subject to and shall not be deemed to limit, restrict or constitute any waiver by the Company of any Proprietary Rights of ownership to which the



Company may be entitled by operation of law by virtue of the Company's being Executive's employer. Executive further agrees that, from time to time, as may be requested by the Company and at the Company's sole cost and expense, Executive shall assist the Company in every proper and lawful way to obtain and from time to time enforce Proprietary Rights relating to Inventions in any and all countries. Executive shall execute, verify and deliver such documents and perform such other acts (including appearances as a witness) as the Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining, and enforcing such Proprietary Rights and the assignment thereof. In addition, Executive shall execute, verify and deliver assignments of such Proprietary Rights to the Company or its designees. Executive's obligations under this Section 9 shall continue beyond the termination of Executive's employment with the Company.

(c) Executive hereby waives and quitclaims to the Company any and all claims, of any nature whatsoever, that Executive now or may hereafter have for infringement of any Proprietary Rights assigned hereunder to the Company.

10. Remedies and Injunctive Relief. Executive acknowledges that a violation by Executive of any of the covenants contained in Sections 7, 8 or 9 would cause irreparable damage to the Company in an amount that would be material but not readily ascertainable, and that any remedy at law (including the payment of damages) would be inadequate. Accordingly, Executive agrees that, notwithstanding any provision of this Agreement to the contrary, the Company shall be entitled (without the necessity of showing economic loss or other actual damage) to injunctive relief (including temporary restraining orders, preliminary injunctions and/or permanent injunctions) in any court of competent jurisdiction for any actual or threatened breach of any of the covenants set forth in Sections 7, 8 or 9 in addition to any other legal or equitable remedies it may have. The preceding sentence shall not be construed as a waiver of the rights that the Company may have for damages under this Agreement or otherwise, and all of the Company's rights shall be unrestricted.

11. Representations of Executive; Advice of Counsel. (a) Executive represents, warrants and covenants that as of the date hereof: (i) Executive has the full right, authority and capacity to enter into this Agreement and perform Executive's obligations hereunder, (ii) Executive is not bound by any agreement that conflicts with or prevents or restricts the full performance of Executive's duties and obligations to the Company hereunder during or after the Term, and (iii) the execution and delivery of this Agreement shall not result in any breach or violation of, or a default under, any existing obligation, commitment or agreement to which Executive is subject.

(b) Prior to execution of this Agreement, Executive was advised by the Company of Executive's right to seek independent advice from an attorney of Executive's own selection regarding this Agreement. Executive acknowledges that Executive has entered into this Agreement knowingly and voluntarily and with full knowledge and understanding of the provisions of this Agreement after being given the opportunity to consult with counsel. Executive further represents that in entering into this Agreement, Executive is not relying on any statements or representations made by any of the Company's directors, officers, employees or agents which are not expressly set forth herein, and that Executive is relying only upon Executive's own judgment and any advice provided by Executive's attorney.

12. Cooperation. Executive agrees that, upon reasonable notice and without the necessity of the Company obtaining a subpoena or court order, Executive shall provide reasonable cooperation in connection with any suit, action or proceeding (or any appeal from any suit, action or proceeding), and any investigation and/or defense of any claims asserted against the Company or its Affiliates, which relates to events occurring during Executive's employment with the Company and its Affiliates as to which Executive may have relevant information (including but not limited to furnishing relevant information and materials to the Company or its designee and/or providing testimony at

depositions and at trial); provided that with respect to such cooperation occurring following termination of employment, the Company shall reimburse Executive for expenses reasonably incurred in connection therewith, and further provided that any such cooperation occurring after the termination of Executive's employment shall be scheduled so as not to unreasonably interfere with Executive's business or personal affairs.

13. Withholding. The Company may deduct and withhold from any amounts payable under this Agreement such Federal, state, local, non-U.S. or other taxes as are required to be withheld pursuant to any applicable law or regulation.

14. Assignment. (a) This Agreement is personal to Executive and without the prior written consent of the Company shall not be assignable by Executive, except for the assignment by will or the laws of descent and distribution of any accrued pecuniary interest of Executive, and any assignment in violation of this Agreement shall be void. The Company may only assign this Agreement, and its rights and obligations hereunder, in accordance with the terms of Section 14(b).

(b) This Agreement shall be binding on, and shall inure to the benefit of, the parties to it and their respective heirs, legal representatives, successors and permitted assigns (including, without limitation, successors by merger, consolidation, sale or similar transaction, and, in the event of Executive's death or Disability, Executive's estate, successors, heirs and assigns in the case of any payments due to Executive hereunder). The Company will require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company to assume expressly and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place. "Company" means the Company as hereinbefore defined and any successor to its business and/or assets as aforesaid that assumes and agrees to perform this Agreement by operation of law or otherwise.

Following a Change in Control, if the Company is not the ultimate parent corporation and the Company's common stock is not publicly traded, the "Board of Directors" or "Board" as used in this Agreement shall refer to the board of directors of the ultimate parent of the Company.

(c) Executive acknowledges and agrees that all of Executive's covenants and obligations to the Company, as well as the rights of the Company hereunder, shall run in favor of and shall be enforceable by the Company and its successors and assigns.

15. Governing Law; No Construction Against Drafter. This Agreement shall be deemed to be made in the State of New York, and the validity, interpretation, construction, and performance of this Agreement in all respects shall be governed by the laws of the State of New York without regard to its principles of conflicts of law. No provision of this Agreement or any related document will be construed against or interpreted to the disadvantage of any party hereto by any court or other governmental or judicial authority by reason of such party having or being deemed to have structured or drafted such provision.

16. Consent to Jurisdiction; Waiver of Jury Trial. (a) Except as otherwise specifically provided herein, Executive and the Company each hereby irrevocably submits to the exclusive jurisdiction of the federal courts located within the Borough of Manhattan (or, if subject matter jurisdiction in such courts are not available, in any state court located within the Borough of Manhattan) over any dispute arising out of or relating to this Agreement. Except as otherwise specifically provided in this Agreement, the parties undertake not to commence any suit, action or proceeding arising out of or relating to this Agreement in a forum other than a forum described in this Section 16(a); provided, however, that nothing herein shall preclude either party from bringing any suit, action or proceeding in any other court

for the purpose of enforcing the provisions of this Section 16 or enforcing any judgment obtained by either party.

(b) The agreement of the parties to the forum described in Section 16(a) is independent of the law that may be applied in any suit, action, or proceeding and the parties agree to such forum even if such forum may under applicable law choose to apply non-forum law. The parties hereby waive, to the fullest extent permitted by applicable law, any objection which they now or hereafter have to personal jurisdiction or to the laying of venue of any such suit, action or proceeding brought in an applicable court described in Section 16(a), and the parties agree that they shall not attempt to deny or defeat such personal jurisdiction by motion or other request for leave from any such court. The parties agree that, to the fullest extent permitted by applicable law, a final and non-appealable judgment in any suit, action or proceeding brought in any applicable court described in Section 16(a) shall be conclusive and binding upon the parties and may be enforced in any other jurisdiction.

(c) The parties hereto irrevocably consent to the service of any and all process in any suit, action or proceeding arising out of or relating to this Agreement by the mailing of copies of such process to such party at such party's address specified in Section 20.

(d) Each party hereto hereby waives, to the fullest extent permitted by applicable law, any right it may have to a trial by jury in respect of any suit, action or proceeding arising out of or relating to this Agreement. Each party hereto (i) certifies that no representative, agent or attorney of any other party has represented, expressly or otherwise, that such party would not, in the event of any action, suit or proceeding, seek to enforce the foregoing waiver, and (ii) acknowledges that it and the other party hereto has been induced to enter into this Agreement by, among other things, the mutual waiver and certifications in this Section 16(d).

(e) Each party shall bear its own costs and expenses (including reasonable attorneys' fees and expenses) incurred in connection with any dispute arising out of or relating to this Agreement, except as provided in the following sentence. The Company agrees to pay as incurred (within ten (10) days following the Company's receipt of an invoice from Executive), to the fullest extent permitted by law, all legal fees and expenses that Executive may reasonably incur as a result of any contest (regardless of the outcome thereof) by the Company, Executive or others of the validity or enforceability of, or liability under, any provision of this Agreement or any guarantee of performance thereof (including as a result of any contest by Executive about the amount of any payment pursuant to this Agreement) that arises in connection with or following a Change in Control, plus, in each case, interest on any delayed payment at the applicable federal rate provided for in Section 7872(f)(2)(A) of the Code ("Interest"), based on the applicable rate on the date such legal fees and expenses were incurred.

17. Amendment; No Waiver; Severability. (a) No provisions of this Agreement may be amended, modified, waived or discharged except by a written document signed by Executive and a duly authorized officer of the Company (other than Executive). The failure of a party to insist upon strict adherence to any term of this Agreement on any occasion shall not be considered a waiver of such party's rights or deprive such party of the right thereafter to insist upon strict adherence to that term or any other term of this Agreement. No failure or delay by either party in exercising any right or power hereunder will operate as a waiver thereof, nor will any single or partial exercise of any such right or power, or any abandonment of any steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power.

(b) If any term or provision of this Agreement is invalid, illegal or incapable of being enforced by any applicable law or public policy, all other conditions and provisions of this Agreement shall nonetheless remain in full force and effect so long as the economic and legal substance of the

transactions contemplated by this Agreement is not affected in any manner materially adverse to any party; provided, that in the event that any court of competent jurisdiction shall finally hold in a non-appealable judicial determination that any provision of Section 7, 8 or 9 (whether in whole or in part) is void or constitutes an unreasonable restriction against Executive, such provision shall not be rendered void but shall be deemed to be modified to the minimum extent necessary to make such provision enforceable for the longest duration and the greatest scope as such court may determine constitutes a reasonable restriction under the circumstances. Subject to the foregoing, upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the parties hereto shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in a mutually acceptable manner in order that the transactions contemplated hereby be consummated as originally contemplated to the fullest extent possible.

18. Entire Agreement. This Agreement constitutes the entire agreement and understanding between the Company and Executive with respect to the subject matter hereof and supersedes all prior agreements and understandings (whether written or oral), between Executive and the Company, relating to such subject matter. None of the parties shall be liable or bound to any other party in any manner by any representations and warranties or covenants relating to such subject matter except as specifically set forth herein.

19. Survival. The rights and obligations of the parties under the provisions of this Agreement shall survive, and remain binding and enforceable, notwithstanding the expiration of the Term, the termination of this Agreement, the termination of Executive's employment hereunder or any settlement of the financial rights and obligations arising from Executive's employment hereunder, to the extent necessary to preserve the intended benefits of such provisions.

20. Notices. All notices or other communications required or permitted to be given hereunder shall be in writing and shall be delivered by hand or sent by facsimile or sent, postage prepaid, by registered, certified or express mail or overnight courier service and shall be deemed given when so delivered by hand or facsimile, or if mailed, three days after mailing (one (1) business day in the case of express mail or overnight courier service) to the parties at the following addresses or facsimiles (or at such other address for a party as shall be specified by like notice):

If to the Company:

Virtu Financial, Inc.  
300 Vesey Street New York, NY 10282  
Attn: Legal Department Fax: (212) 418-0010  
E-mail: Legal@virtu.com

With a copy (which shall not constitute notice) to:

Paul, Weiss, Rifkind, Wharton & Garrison LLP 1285 Avenue of the Americas  
New York, NY 10019-6064  
Telephone: (212) 373-3000  
Facsimile: (212) 757-3990 Attention: John C. Kennedy  
Jeffrey D. Marell

If to Executive:

At the most recent address on file in the Company's records

Notices delivered by facsimile shall have the same legal effect as if such notice had been delivered in person.

21. Headings and References. The headings of this Agreement are inserted for convenience only and neither constitute a part of this Agreement nor affect in any way the meaning or interpretation of this Agreement. When a reference in this Agreement is made to a Section, such reference shall be to a Section of this Agreement unless otherwise indicated.

22. Counterparts. This Agreement may be executed in one or more counterparts (including via facsimile and electronic image scan (.pdf)), each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties.

23. Section 409A. (a) For purposes of this Agreement, "Section 409A" means Section 409A of the Code, and the Treasury Regulations promulgated thereunder (and such other Treasury or Internal Revenue Service guidance) as in effect from time to time. The parties intend that any amounts payable hereunder that could constitute "deferred compensation" within the meaning of Section 409A will be compliant with Section 409A or exempt from Section 409A.

(b) Notwithstanding anything in this Agreement to the contrary, the following special rule shall apply, if and to the extent required by Section 409A, in the event that (i) Executive is deemed to be a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) (as determined in accordance with the methodology established by the Company as in effect on the date of Executive's "separation from service" (within the meaning of Treasury Regulations Section 1.409A-1(h)), (ii) amounts or benefits under this Agreement or any other program, plan or arrangement of the Company or a controlled group affiliate thereof are due or payable on account of separation from service and (iii) Executive is employed by a public company or a controlled group affiliate thereof: no payments hereunder that are "deferred compensation" subject to Section 409A shall be made to Executive prior to the date that is six (6) months after the date of Executive's separation from service or, if earlier, ten (10) days following Executive's date of death; following any applicable six (6)-month delay, all such delayed payments, plus Interest based on the applicable rate as of the date payment would have been made but for the Section 409A delay, will be paid in a single lump sum on the earliest permissible payment date.

(c) Any payment or benefit due or payable on account of Executive's separation from service that represents a "deferral of compensation" within the meaning of Section 409A shall commence to be paid or provided to Executive sixty-one (61) days following Executive's separation from service; provided that Executive executes, if required by Section 5(e), the Release described therein, within sixty (60) days following his "separation from service." Each payment made under this Agreement (including each separate installment payment in the case of a series of installment payments) shall be deemed to be a separate payment for purposes of Section 409A. Amounts payable under this Agreement shall be deemed not to be a "deferral of compensation" subject to Section 409A to the extent provided in the exceptions in Treasury Regulations §§ 1.409A-1(b)(4) ("short-term deferrals") and (b)(9) ("separation pay plans," including the exception under subparagraph (iii)) and other applicable provisions of Section 409A, and shall be paid under any such exception to the maximum extent permitted. For purposes of this Agreement, with respect to payments of any amounts that are considered to be "deferred compensation" subject to Section 409A, references to "termination of employment," "termination," or words and phrases of similar import, shall be deemed to refer to Executive's "separation from service" as defined in Section 409A, and shall be interpreted and applied in a manner that is consistent with the requirements of Section 409A. In no event may Executive, directly or indirectly, designate the calendar year of any payment under this Agreement.

(d) Notwithstanding anything to the contrary in this Agreement, any payment or benefit under this Agreement or otherwise that is eligible for exemption from Section 409A pursuant to Treasury Regulation § 1.409A-1(b)(9)(v)(A) or (C) (relating to certain reimbursements and in-kind benefits) shall be paid or provided to Executive only to the extent that the expenses are not incurred, or the benefits are not provided, beyond the last day of the second calendar year following the calendar year in which Executive's "separation from service" occurs; and provided further that such expenses are reimbursed no later than the last day of the third calendar year following the calendar year in which Executive's "separation from service" occurs. To the extent any indemnification payment, expense reimbursement, or the provision of any in-kind benefit is determined to be subject to Section 409A (and not exempt pursuant to the prior sentence or otherwise), the amount of any such indemnification payment or expenses eligible for reimbursement, or the provision of any in-kind benefit, in one (1) calendar year shall not affect the indemnification payment or provision of in-kind benefits or expenses eligible for reimbursement in any other calendar year (except for any lifetime or other aggregate limitation applicable to medical expenses), and in no event shall any indemnification payment or expenses be reimbursed after the last day of the calendar year following the calendar year in which Executive incurred such indemnification payment or expenses, and in no event shall any right to indemnification payment or reimbursement or the provision of any in-kind benefit be subject to liquidation or exchange for another benefit.

*[Signature Page Follows]*

IN WITNESS WHEREOF, this Agreement has been duly executed by the parties as of the date first written above.

VIRTU FINANCIAL, INC.

By: /s/ Robert Greifeld  
Name: Robert Greifeld  
Title: Chairman 11/17/2017

DOUGLAS A. CIFU

/s/ DOUGLAS A. CIFU

*[Signature Page to Cifu Employment Agreement]*

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## EXHIBIT A PERMITTED ACTIVITIES

- Sunrise Sports & Entertainment, including role as Vice Chairman & Alternative Governor of Florida Panthers
  - Director of Independent Bank Group, Inc.
  - Director and investor in Swift Aviation Group
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## EXHIBIT B

### WAIVER AND RELEASE OF CLAIMS

In connection with the termination of employment of Douglas A. Cifu (the "Executive") from Virtu Financial, Inc. (the "Company"), the Executive agrees as follows:

1. Waiver and Release by the Executive.

(a) As used in this Waiver and Release of Claims (this "Agreement"), the term "Related Parties" means, as to any Person (as such term is defined in the amended and restated employment agreement between the Executive and the Company, dated as of November 15, 2017 (the "Employment Agreement")), such Person's successors, assigns, agents, attorneys, servants, representatives, employees, independent contractors, trustees, administrators, predecessors-in-interest, insurers, partners, joint venturers, stockholders, directors, officers, parent companies, associated companies, holding companies, divisions, Affiliates (as such term is defined in the Employment Agreement), associates, managers, licensees, accountants and consultants and any other Person claiming through or under such Person or each or all of the foregoing.

(b) As used in this Agreement, the term "claims" shall include all claims, actions, arbitrations, charges, complaints (including, without limitation, complaints or allegations to any bar association or similar professional governing body), grievances, hearings, causes of action, actions, suits, damages, costs, expenses, judgments, losses, liabilities, demands, derivative claims, inquiries, investigations, proceedings or suits.

(c) For and in consideration of the payments described in Section 5(c) or 5(d) of the Employment Agreement, the Executive, individually and jointly, for himself and each of his Related Parties, in each case in such Related Party's representative capacity (collectively, the "Executive Release Parties"), effective as of the Effective Date (as defined below), hereby acquits, releases and discharges, of and from any and all Executive Released Claims (as defined below), each of the following Persons: the Company, its direct and indirect parents, subsidiaries and Affiliates, their predecessors and successors and assigns, together with the respective officers, directors, partners, shareholders, employees, members, and agents of the foregoing and each of their respective past and present Related Parties (collectively, the "Company Group").

(d) As used in this Agreement, the term "Executive Released Claims" shall mean all claims of every kind and nature whatsoever, whether known or unknown, suspected or unsuspected, previously existing, or now existing, in law or in equity, which the Executive Release Parties or any of them had, may have had, or now has, from the beginning of time through the execution of this Agreement, against the Company Group collectively or any member of the Company Group, individually, for or by reason of any matter whatsoever, including, but not limited to, any claims relating to, arising out of or attributable to the Executive's employment or the termination of the Executive's employment with the Company, the Employment Agreement, and also including but not limited to claims of breach of contract, wrongful termination, unjust dismissal, defamation, libel or slander, or under any federal, state or local law dealing with discrimination based on age, race, sex, national origin, handicap, religion,

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disability or sexual preference. This release of claims includes, but is not limited to, all claims arising under the Age Discrimination in Employment Act of 1967 (the "ADEA"), Title VII of the Civil Rights Act, the Americans with Disabilities Act, the Civil Rights Act of 1991, the Family Medical Leave Act, the Equal Pay Act, the New York Human Rights Law, the New York City Administrative Code and all other federal, state and local labor and anti-discrimination laws, the common law and any other purported restriction on an employer's right to terminate the employment of employees.

(e) The Executive, individually and jointly, for himself and each of the Executive Release Parties, specifically releases all claims against the Company Group and each member thereof under the ADEA relating to the Executive's employment and its termination.

(f) The Executive represents that neither the Executive nor any of the Executive Release Parties has filed or permitted to be filed against the Company Group, any member of the Company Group individually or the Company Group collectively, any lawsuit, complaint, charge, proceeding or the like, before any local, state or federal agency, court or other body (each, a "Proceeding"), and the Executive covenants and agrees that neither the Executive nor any of the Executive Release Parties will do so at any time hereafter with respect to the subject matter of this Agreement and claims released pursuant to this Agreement (including, without limitation, any claims relating to the termination of the Executive's employment), except as may be necessary to enforce this Agreement, to obtain benefits described in or granted under this Agreement, or to seek a determination of the validity of the waiver of the Executive's rights under the ADEA, or initiate or participate in an investigation or proceeding conducted by the Equal Employment Opportunity Commission ("EEOC"). Except as otherwise provided in the preceding sentence, (i) neither the Executive nor any of the Executive Release Parties will initiate or cause to be initiated on the Executive's behalf any Proceeding, or will participate (except as required by law) in any Proceeding of any nature or description against any member of the Company Group individually or the Company Group collectively that in any way involves the allegations and facts that the Executive could have raised against any member of the Company Group individually or collectively as of the date hereof and (ii) the Executive, individually and jointly, for himself and each of the Executive Release Parties, waives any right the Executive or any of the Executive Release Parties may have to benefit in any manner from any relief (monetary or otherwise) arising out of any Proceeding.

(g) Notwithstanding anything in this Agreement to the contrary, the Executive Released Claims do not include any claims (i) for indemnification in accordance with Section 4(f) of the Employment Agreement, (ii) for unemployment compensation benefits, (iii) any claims by Executive in respect of any vested benefits under any Company tax-qualified benefit plans or other Company retirement plans of any type that Executive is entitled to pursuant to the terms thereof as a result of his employment with the Company, (iv) any rights of the Executive in his capacity as an equity holder in the Company or any of its Affiliates, (v) any right or claim that arises against the Company after the date of this Agreement, or (vi) any right the Executive may have to obtain contribution as permitted by law in the event of entry of judgment against the Executive and the Company as a result of any act or failure to act for which the Executive and the Company are jointly liable.

2. Acknowledgment of Consideration.

The Executive is specifically agreeing to the terms of this release because the Company has agreed to pay the Executive money and other benefits to which the Executive was not otherwise entitled under the Company's policies or under the Employment Agreement (in the absence of providing this release). The Company has agreed to provide this money and other benefits because of the Executive's agreement to accept it in full settlement of all possible claims the Executive might have or ever had, and because of the Executive's execution of this Agreement.

3. Acknowledgments Relating to Waiver and Release; Revocation Period.

(a) The Executive acknowledges that the Executive has read this Agreement in its entirety, fully understands its meaning and is executing this Agreement voluntarily and of the Executive's own free will with full knowledge of its significance. The Executive acknowledges and warrants that the Executive has been advised by the Company to consult with an attorney prior to executing this Agreement. The offer to accept the terms of the Agreement is open for twenty-one (21) days from the date the Executive receives the Agreement. The Executive shall have the right to revoke this Agreement for a period of seven days following the Executive's execution of this Agreement, by giving written notice of such revocation to the Company. This Agreement shall not become effective until the eighth day following the Executive's execution of it (without prior revocation) (the "Effective Date").

(b) It is the intention of the Executive Release Parties that this Agreement shall be effective as a full and final accord and satisfaction, and release, of the Executive Released Claims and that the releases herein extend to any and all claims of whatsoever kind or character, known or unknown. In connection with such waiver and relinquishment, the Executive Release Parties acknowledge that they are aware that they may later discover facts in addition to or different from those which they now know or believe to be true with respect to the subject matter of this Agreement, but that it is their intention hereby fully, finally and forever to settle and release all of the Executive Released Claims, known or unknown, suspected or unsuspected, which now exist, or previously existed. In furtherance of such intention, the releases given herein shall be, and shall remain, in effect as a full and complete release of the Executive Released Claims, notwithstanding the discovery or existence of any such additional or different facts. Nothing herein shall be construed as a release of the obligations under this Agreement or claims which may arise from the breach hereof.

4. Remedies.

Moreover, the Executive understands and agrees that if the Executive breaches any provisions of this Agreement, in addition to any other legal or equitable remedy the Company may have, the Company shall be entitled to cease making any payments or providing any benefits to the Executive agreed hereunder. The remedies set forth in this paragraph shall not apply to any challenge to the validity of the waiver and release of the Executive's rights under the ADEA. In the event the Executive challenges the validity of the waiver and release of the Executive's rights under the ADEA, then the Company's right to attorneys' fees and costs shall be governed by the provisions of the ADEA, so that the Company may recover such fees and

costs if the lawsuit is brought by the Executive in bad faith. Any such action permitted to the Company by this paragraph, however, shall not affect or impair any of the Executive's obligations under this Agreement, including without limitation, the release of claims in paragraph 1 hereof. The Executive further agrees that nothing herein shall preclude the Company from recovering attorneys' fees, costs or any other remedies specifically authorized under applicable law.

5. No Admission.

Nothing herein shall be deemed to constitute an admission of wrongdoing by any member of the Company Group. Neither this Agreement nor any of its terms shall be used as an admission or introduced as evidence as to any issue of law or fact in any proceeding, suit or action, other than an action to enforce this Agreement.

6. Governing Law.

**THE TERMS OF THIS AGREEMENT AND ALL RIGHTS AND OBLIGATIONS OF THE PARTIES HERETO, INCLUDING ITS ENFORCEMENT, SHALL BE INTERPRETED AND GOVERNED BY THE LAWS OF THE STATE OF DELAWARE WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAWS OF THE STATE OF DELAWARE OR THOSE OF ANY OTHER JURISDICTION WHICH COULD CAUSE THE APPLICATION OF THE LAWS OF ANY JURISDICTION OTHER THAN THE STATE OF DELAWARE.**

*[Remainder of Page Intentionally Left Blank]*

IN WITNESS WHEREOF, Executive has executed this Agreement as of the date set forth opposite the Executive's signature below.

---

DATE

(not to be signed prior to  
termination of employment)

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Douglas A. Cifu

## EXHIBIT C

### WAIVER AND RELEASE OF CLAIMS

In connection with the termination of employment of Douglas A. Cifu (the "Executive") from Virtu Financial, Inc. (the "Company"), the Company agrees as follows:

1. Waiver and Release by the Company.

(a) As used in this Waiver and Release of Claims (this "Agreement"), the term "Related Parties" means, as to any Person (as such term is defined in the amended and restated employment agreement between the Executive and the Company, dated as of November 15, 2017 (the "Employment Agreement")), such Person's successors, assigns, agents, attorneys, servants, representatives, employees, independent contractors, trustees, administrators, predecessors-in-interest, insurers, partners, joint venturers, stockholders, directors, officers, parent companies, associated companies, holding companies, divisions, Affiliates (as such term is defined in the Employment Agreement), associates, managers, licensees, accountants and consultants and any other Person claiming through or under such Person or each or all of the foregoing.

(b) As used in this Agreement, the term "claims" shall include all claims, actions, arbitrations, charges, complaints (including, without limitation, complaints or allegations to any bar association or similar professional governing body), grievances, hearings, causes of action, actions, suits, damages, costs, expenses, judgments, losses, liabilities, demands, derivative claims, inquiries, investigations, proceedings or suits.

(c) The Company on behalf of itself and its subsidiaries, predecessors, successors and assigns (hereinafter collectively referred to as the "Company Release Parties") effective as of the Effective Date (as defined in Exhibit C of the Employment Agreement), hereby acquits, releases and discharges the Executive, individually and jointly, for himself and each of his Related Parties, in each case in such Related Party's representative capacity (collectively, the "Executive Release Parties") of and from any and all claims of every kind and nature whatsoever, whether known or unknown, suspected or unsuspected, previously existing, or now existing, in law or in equity, which the Company Release Parties or any of them had, may have had, or now has, from the beginning of time through the execution of this Agreement, against the Executive Release Parties, collectively or individually, for or by reason of any matter whatsoever including, but not limited to, any claims relating to, arising out of or attributable to the Executive's employment or the termination of the Executive's employment with the Company (collectively, the "Company Released Claims"). Notwithstanding anything in this Agreement to the contrary, the Company Release Parties shall not acquit, release or discharge, and the Company Released Claims shall not include (a) any claims relating to fraud or willful misconduct of the Executive or (b) any claims to enforce (i) this Agreement, (ii) the Employment Agreement, or (iii) any restrictive covenant agreements, which claims may include but are not limited to the enforcement of any agreements by the Executive not to compete with the Company Group or solicit its employees.

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2. Acknowledgment of Consideration.

The Company is specifically agreeing to the terms of this release because the Executive has agreed to release the Company Release Parties from all possible claims the Executive might have or ever had.

3. Acknowledgments Relating to Waiver and Release.

It is the intention of the Company Release Parties that this Agreement shall be effective as a full and final accord and satisfaction, and release, of the Company Released Claims and that the releases herein extend to any and all claims of whatsoever kind or character, known or unknown. In connection with such waiver and relinquishment, the Company Release Parties acknowledge that they are aware that they may later discover facts in addition to or different from those which they now know or believe to be true with respect to the subject matter of this Agreement, but that it is their intention hereby fully, finally and forever to settle and release all of the Company Released Claims, known or unknown, suspected or unsuspected, which now exist, or previously existed. In furtherance of such intention, the releases given herein shall be, and shall remain, in effect as a full and complete release of the Company Released Claims, notwithstanding the discovery or existence of any such additional or different facts. Nothing herein shall be construed as a release of the obligations under this Agreement or claims which may arise from the breach hereof.

4. No Admission.

Nothing herein shall be deemed to constitute an admission of wrongdoing by any member of the Executive Release Parties. Neither this Agreement nor any of its terms shall be used as an admission or introduced as evidence as to any issue of law or fact in any proceeding, suit or action, other than an action to enforce this Agreement.

5. Governing Law.

**THE TERMS OF THIS AGREEMENT AND ALL RIGHTS AND OBLIGATIONS OF THE PARTIES HERETO, INCLUDING ITS ENFORCEMENT, SHALL BE INTERPRETED AND GOVERNED BY THE LAWS OF THE STATE OF DELAWARE WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAWS OF THE STATE OF DELAWARE OR THOSE OF ANY OTHER JURISDICTION WHICH COULD CAUSE THE APPLICATION OF THE LAWS OF ANY JURISDICTION OTHER THAN THE STATE OF DELAWARE.**

*[Remainder of Page Intentionally Left Blank]*

IN WITNESS WHEREOF, the Company has executed this Agreement as of the date set forth opposite the Company's signature below.

\_\_\_\_\_  
DATE

(not to be signed prior to  
termination of employment)

\_\_\_\_\_  
Virtu Financial, Inc.

By: \_\_\_\_\_

Title: \_\_\_\_\_  
\_\_\_\_\_



**CONFIDENTIAL SEPARATION AGREEMENT,  
INTEREST REPURCHASE  
AND GENERAL RELEASE OF CLAIMS**

THIS CONFIDENTIAL SEPARATION AGREEMENT, INTEREST REPURCHASE AND GENERAL RELEASE OF CLAIMS (“Agreement”), dated September 11, 2017 is made and entered into by and between Venu Palaparathi (“Employee”) and Virtu Financial Operating LLC and Virtu Financial, Inc. and all of its and their current or former parents, successors, predecessors, affiliates, subsidiaries and related entities, divisions, departments, partnerships, corporations, limited liability partnerships and limited liability companies, and each of its and their former, present and future directors, officers, employees, shareholders, fiduciaries, insurers, managers and agents (collectively, the “Company”). Capitalized terms used but not defined herein shall have the meanings assigned to them in the At-Will Agreement (as defined below).

RECITALS:

A. Employee and the Company (or one of the Company’s affiliates) are party to an offer letter (the “Employment Letter”) and employment agreement (the “At-Will Agreement”).

B. Employee’s employment with the Company will end as of September 11, 2017 (the “Termination Date”).

C. Regardless of whether Employee signs this Agreement, Employee will receive all accrued salary, wages, vacation, expenses, and all other monies owed to Employee through the Termination Date.

D. This Agreement is intended to assist employee in his transition in connection with his separation of employment. Also, by this Agreement, Employee and the Company want to settle fully and finally all potential and/or actual differences between them, including all actual or potential differences which arise out of or relate to Employee’s employment or separation of employment with the Company.

E. This preamble and recitals set forth herein, and **Schedule A** attached hereto, are hereby incorporated in and made a part of this Agreement.

NOW, THEREFORE, Employee and the Company understand and agree as follows:

1. Non-Admission of Discrimination or Wrongdoing.

This Agreement shall not in any way be construed as an admission by the Company or Employee that they acted wrongfully with respect to the other, or any other person. The Company and Employee specifically disclaim any liability to, or wrongful acts against each other,

or any other person or entity, on the part of themselves, their parents, subsidiaries, affiliates, predecessors, successors, officers, employees, or agents.

2. Separation of Employment.

Employee acknowledges that his employment with the Company has permanently ended as of the Termination Date and that such employment will not be resumed again at any time. In addition, Employee will not apply for, or otherwise seek employment with the Company and/or any of the Company Releasees at any time in the future.

3. Return of Company Property; Developments.

(a) Employee represents, warrants, and affirms to the Company that: (i) Employee has returned, destroyed, or will destroy (unless as otherwise directed by the Company) all property of the Company and its affiliates to the Company, including, without limitation, keys and key cards to the Company's business premises, credit cards, documents, memoranda, notes, records, source code, correspondence, handwritten notes, computer and physical files, passwords, access codes, records of developments, tapes, disks and other electronic, optical or other media, computers, including the monitors and all related hardware and software and all other tangible property in Employee's possession or control; (ii) Employee did not delete, copy, download or transfer any data from any of the Company's or its affiliates' computers or any of their business documents or records except in the normal course of Employee's duties, and to the extent he/she did, all such information shall be destroyed or has been destroyed; and (iii) any Confidential Information (as defined in the Employment Letter, At-Will Agreement or any agreement to which Employee and the Company are parties) or data in Employee's possession that resides on personal computers or other electronic media will be deleted.

(b) Employee represents, warrants, and affirms that Employee has irrevocably sold, assigned and transferred to the Company and its successors and assigns all of Employee's legal and equitable right, title and interest throughout the world in and to Employee's ideas, inventions, trademarks and other developments or improvements conceived by Employee, either alone or with others, during Employee's employment, whether or not during working hours, that are within the scope of the Company's business operations or that relate to any Company work or projects.

4. No Lawsuits.

(a) Employee promises never to file a lawsuit, administrative complaint, or charge of any kind with any court, governmental or administrative agency, or arbitrator in any jurisdiction against the Company, or any of its current or former officers, directors, agents or employees, or any of the Releasees as defined below, asserting any claims that are released in this Agreement.

(b) Employee represents and agrees that, prior to signing this Agreement, Employee has not filed, or pursued any complaints, charges or lawsuits of any kind with any court, governmental or administrative agency, or arbitrator against the Company, or any of its current or former officers, directors, agents, or employees, or any of the Releasees as defined below, asserting any claims that are released in this Agreement.

5. Payments by the Company; No Obligation To Make Payment Under Normal Policies; Consideration.

(a) The Company agrees that, on next regularly scheduled payday following the eighth calendar day after the later of (i) its receipt of this Agreement signed by Employee and (ii) the Termination Date, (such date, the “Effective Date”) and provided that Employee has delivered a signed copy of the Agreement in accordance with section (d) of this Paragraph 5, does not revoke this Agreement as described herein, and complies with the terms and conditions set forth herein, the Company will pay Employee the following benefits (collectively, the “Consideration”) contained in **Schedule A** attached hereto in accordance with the schedule set forth thereon.

(b) The Company will arrange to pay directly the premiums relating to Employee’s coverage under COBRA for the period of time set forth in **Schedule A** attached hereto, and, thereafter, continued coverage will be at Employee’s full expense. No such premium contribution will be paid for any period of coverage after Employee is eligible to elect for comparable coverage on another employer’s group health plan. Payment of the Company’s portion of the premiums of Employee’s coverage under COBRA for the period of time set forth in **Schedule A** is contingent upon Employee’s initial and continuing eligibility for such coverage (and associated costs) as determined by, and subject to Employee’s present eligibility for such coverage.

(c) The Company will provide Employee with Outplacement Services, for the period set forth in **Schedule A** attached hereto, to cover Employee in conducting a job search for replacement employment, provided that such services are provided on or before the date set forth in **Schedule A** attached hereto, and arranged through the Company’s outplacement assistance vendor. The Company will be billed directly for the expenses, up to the stated maximum, by the outplacement assistance vendor.

(d) Employee understands that, in order to receive and retain the Consideration, Employee must sign this Agreement and comply with the terms herein, in addition to the applicable terms of the Employment Letter, the At-Will Agreement, the terms of any equity or option award issued pursuant to the Virtu Financial, Inc. 2015 Management Incentive Plan (as amended or amended and restated from time to time) (collectively, the “Pubco Award Documents”), the terms of any equity or option award issued pursuant to any pre-IPO equity incentive plan maintained by any affiliate of Virtu Financial LLC, including the terms of the limited liability company agreement of Virtu Employee Holdco LLC (to the extent Employee is a member thereof) (collectively, the “Pre-IPO Award Documents” and together with the Pubco Award Documents, the “Virtu Award Documents”), or any other agreement to which the Employee and the Company are parties, which explicitly or by their nature survive the termination of Employee’s employment with the Company. Employee also must not rescind his agreement hereto during the seven-day revocation period following the receipt of the signed Agreement by the Company.

(e) As provided in Paragraph 15 below, Employee shall have up to 45 days to consider whether to sign this Agreement. If Employee does not sign this Agreement within 45 days, it shall be withdrawn without further notice. If Employee signs this Agreement within 45 days, he shall then have seven days to revoke his release of claims for age discrimination. If

Employee signs this Agreement within 45 days, and does not revoke this Agreement as to any claims for age discrimination within seven days, then the Consideration payments shall be provided to Employee in accordance with the terms of this Agreement.

(f) The payment of the Consideration shall be subject to applicable payroll tax deductions and withholdings as required by federal and state law.

**6. Forfeiture and Repurchase of Certain Interests; Forfeiture of Titles**

(a) The Employee and the Company acknowledge that, in accordance with the terms of the Virtu Financial, Inc. 2015 Management Incentive Plan (the "2015 MIP"), any and all unvested Options to purchase shares of Class A Common Stock are automatically forfeited without the payment of any consideration and are rendered null and void as of the Termination Date, and the Employees vested Options to purchase shares of Class A Common Stock will automatically expire on the 90<sup>th</sup> day after the Termination Date.

(b) The Employee and the Company acknowledge that, in accordance with the terms of the 2015 MIP, any and all unvested Restricted Stock Units previously granted to Employee are automatically forfeited and cancelled without the payment of any consideration and are rendered null and void as of the Termination Date.

(c) Employee Holdco hereby exercises its rights pursuant to the terms of the Employee Holdco Operating Agreement to repurchase all of Employee's vested Common Units (the "Repurchased Interests") in consideration of the payments described above. By executing this Agreement, Employee hereby delivers the Repurchased Interests, free and clear of all liens, to Employee Holdco in exchange for the applicable payments identified on **Schedule A**. All of Employee's unvested Common Units are automatically forfeited and cancelled without the payment of any consideration and are rendered null and void as of the Termination Date.

(d) As of the Termination Date, any and all titles, designations, appointments, directorships and offices held by the Employee with respect to the Company or any of its affiliates, are forfeited and the Employee agrees to execute promptly upon request by the Company or its affiliates, attorneys or advisors, any additional documents necessary to effectuate the provisions of this clause (d).

**7. General and Complete Release.**

(a) As a material inducement for the Company to enter into this Agreement, and in exchange for the Consideration provided herein, Employee knowingly and voluntarily waives and releases all rights and claims, known and unknown, which Employee may have against the Company, and/or any of the Company's current or former parents (including Virtu Financial Inc.), successors, predecessors, affiliates, subsidiaries or related entities, or any of their current or former officers, directors, members, shareholders, managers, human resources representatives, employees, agents, contractors, insurance carriers, representatives, or attorneys ("Releasees"), including any and all charges, complaints, claims, liabilities, obligations, promises, agreements, including but not limited to the Employment Letter, the At-Will Agreement, the Virtu Award Documents, and any other contracts, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses of any kind. Employee further agrees to execute

and comply with additional documentation giving effect to such releases as required by the Company.

(b) This includes, but is not limited to, claims for employment discrimination, harassment, wrongful termination, constructive termination, violation of public policy, breach of any express or implied contract, breach of any implied covenant, fraud, intentional or negligent misrepresentation, emotional distress, defamation, libel, slander, or any other claims relating to Employee's relationship with the Company. However, any recovery Employee may obtain as a whistleblower under federal or state law or regulation is excluded from this general and complete release.

(c) This also includes a release of any claims under any federal, state or local laws or regulations, including, but not limited to: (1) Title VII of the Civil Rights Act of 1964, 42 U.S.C. §§ 2000(e), *et seq.* and the Civil Rights Act of 1991, 2 U.S.C. §§ 601, *et seq.* (race, color, religion, sex, and national origin discrimination or harassment); (2) the Age Discrimination in Employment Act, 29 U.S.C. §§ 621, *et seq.* (age discrimination); (3) Section 1981 of the Civil Rights Act of 1866, 42 U.S.C. § 1981 (race discrimination); (4) the Equal Pay Act of 1963, 29 U.S.C. § 206 (equal pay); (5) the Fair Labor Standards Act, 29 U.S.C. §§ 201, *et seq.* (wage and hour matters, including overtime pay); (6) the Consolidated Omnibus Budget Reconciliation Act of 1985 ("COBRA"), 42 U.S.C. § 1395(c) (insurance matters); (7) Executive Order 11141 (age discrimination); (8) Section 503 of the Rehabilitation Act of 1973, 29 U.S.C. §§ 701, *et seq.* (disability discrimination); (9) the Employee Retirement Income Security Act of 1974, 29 U.S.C. §§ 1001, *et seq.* (employee benefits); (10) Title I or Title III of the Americans with Disabilities Act (disability discrimination); (11) the Economic Dislocation and Worker Adjustment Assistance Act, 41 U.S.C. §§ 701, *et seq.* or the Worker Adjustment and Retraining Notification Act ("WARN" Act), 29 U.S.C. §§ 2101-09; (12) the Family and Medical Leave Act of 1993, 29 U.S.C. §§ 2601, *et seq.* (leaves of absence); (13) the Older Worker Benefit Protection Act, 29 U.S.C. §§ 621, *et seq.* (age discrimination issues); (14) the Fair Credit Reporting Act, 15 U.S.C. §§ 1681, *et seq.* (issues involving gathering information from third parties); (15) the New York State and City Human Rights Laws, the New York Executive Law, the New York Labor Laws, the New York Workers' Compensation Law, the New York City Administrative Code and the New York State Worker Adjustment and Retraining Notification Act.

8. Unknown Claims.

Employee acknowledges and agrees that, as a condition of this Agreement, Employee expressly releases all rights and claims against the Company that Employee knows about as well as that Employee may not know about.

9. Ownership of Claims.

Employee represents and agrees that Employee has not assigned or transferred, or attempted to assign or transfer, to any person or entity, any of the claims Employee is releasing in this Agreement.

10. No Representations.

Employee represents and agrees that no promises, statements or inducements have been made to Employee that caused Employee to sign this Agreement other than those expressly stated in this Agreement. Employee represents and agrees that this Agreement is a fully integrated contract and that there are no terms, conditions or clauses that exist outside of what is written in this Agreement.

11. Confidentiality of this Agreement.

(a) Except as expressly stated in this Agreement, Employee agrees to keep the fact, terms and amount of this Agreement completely confidential, and not to disclose such information to anyone other than Employee's spouse or domestic partner, if any, or Employee's attorneys and licensed tax and/or professional investment advisor (hereafter referred to as "Employee's Confidants"), all of whom will be informed of, and be bound by, this confidentiality provision.

(b) Neither Employee nor Employee's Confidants shall disclose the fact, amount or terms of this Agreement to anyone including, but not limited to, any representative of any Internet site, Blog site, print, radio or television media, to any past, present or prospective applicant for employment with the Company, executive recruiter or "headhunter," to any counsel for any current or former employee of the Company, to any other counsel or third party, or to the public at large.

(c) Employee understands and agrees that any disclosure of information in violation of this confidentiality provision by Employee or by any of Employee's Confidants would cause the Company injury and damage, the actual amount of which would be impractical or extremely difficult to determine. Accordingly, Employee agrees that the Company, in addition to any and all other remedies to which it may be entitled, shall be entitled to recover from Employee liquidated damages in the amount of Five Thousand Dollars (\$5,000) for each occasion on which Employee, or any of Employee's Confidants disclose any information in violation of the terms of this confidentiality provision.

(d) Any alleged violation of this confidentiality provision shall be resolved in accordance with the arbitration provisions herein. If any proceeding is brought concerning an alleged violation of this confidentiality provision, the prevailing party shall recover from the losing party all reasonable attorneys' fees and costs incurred in connection with such proceeding. The Company shall have the burden of proving such violation by a preponderance of the evidence. The parties understand and agree that only the Company would be damaged by a violation of this confidentiality provision and for that reason the arbitrator shall have no authority to award any damages against the Company if it does not prevail.

12. Confidential Information.

Employee understands and agrees that in the course of employment with the Company he has acquired Confidential Information and acknowledges that the obligations with respect to such Confidential Information continue in full force beyond the Termination Date in accordance with the terms of the At-Will Agreement.

13. Future Obligations.

(a) Employee will not voluntarily assist any party engaged in current or future litigation or arbitration involving the Company, by furnishing information, declarations, affidavits, statements, letters, oral assistance, documents, or depositions. Employee, however, may respond to a valid and legally enforceable subpoena or other discovery request, provided that such subpoena or discovery request also has been served on the Company. Nothing in any code, agreement, manual or in any other policies, procedures or agreements of the Company shall prohibit or restrict Employee or Employee's counsel from providing information in connection with: (i) any disclosure of information required by law or legal process; (ii) reporting possible violations of federal or state law or regulation to any governmental agency, commission or entity, including but not limited to, the Department of Justice, the Commodities Futures Trading Commission, the Securities and Exchange Commission, the Department of Labor, the Congress, any state Attorney General, self-regulatory organization and any agency Inspector General (collectively "Government Agencies") (iii) filing a charge or complaint with Government Agencies; (iv) making disclosures that are protected under the whistleblower provisions of federal or state law or regulation (collectively the "Whistleblower Statutes"); or (v) from initiating communications directly with, responding to any inquiry from, volunteering information to, testifying or otherwise participating in or assisting in any inquiry, investigation or proceeding brought by Government Agencies in connection with (i) through (v). You are not required to advise or seek permission from the Company before engaging in any activity set forth in (i) through (v). Further, the Company does not in any manner limit your right to receive an award from Government Agencies for information provided to Government Agencies or pursuant to the Whistleblower Statutes.

(b) If any subpoena or discovery request is served on Employee, Employee agrees to notify the Company of such a subpoena or discovery request, so that the Company may challenge its validity, at the Company's expense. If such a challenge is not successful and a court or arbitrator rules that a valid subpoena or discovery request has been served, and Employee is required to provide information, Employee agrees to provide truthful information or testimony. If thereafter required by judicial process to provide testimony or other discovery, Employee agrees that he will not object to a representative of the Company being present for such testimony, or being served with all responses to discovery, if not otherwise prohibited by the court or arbitrator having jurisdiction.

(c) Upon reasonable notice and based on Employee's reasonable availability, Employee also agrees to meet with counsel for the Company or Company representative to gather information in connection with any current or future investigation, lawsuit or arbitration in which Employee is asked to participate, and to prepare for any deposition, or any other form of testimony sought from Employee in connection therewith.

(d) Employee agrees that (i) Employee will comply with Employee's obligations with respect to Confidential Information; and (ii) Employee will comply with the restrictive covenants (including Employee's non-interference and non-solicitation obligations) as set forth in the Employment Letter, At Will Agreement, the Virtu Award Documents or any other agreement to which the Employee and the Company are parties. Employee acknowledges that if Employee does fail to comply with the terms thereof the Company may, in addition to exercising

any other remedies available to it under the Agreement or otherwise in contract or at law, immediately cease paying the Consideration and shall be entitled to a full recovery of any and all installments of the Consideration previously paid.

14. Successors.

This Agreement shall be binding upon Employee and upon Employee's heirs, administrators, representatives, executors, successors and assigns, and shall inure to the benefit of the Company and the other Releasees, and to their heirs, administrators, representatives, executors, successors and assigns.

15. Release of Age Discrimination Claims.

(a) Age discrimination is specifically intended to be included as a Released Action: Employee specifically intends that this Agreement shall include a complete release of claims under the Age Discrimination in Employment Act of 1967 (the "ADEA," 29 U.S.C. §§ 621, *et seq.*), as amended by the Older Workers' Benefit Protection Act of 1990, except for any allegation that a breach of this Act occurred following the Effective Date of this Agreement.

(b) Additional Consideration: Employee agrees and promises that this Agreement by the Company represents obligations by the Company to Employee that are in addition to anything of value to which Employee was otherwise entitled from the Company. In addition, Employee agrees and acknowledges that additional consideration has been provided by the Company, beyond that which would have otherwise been provided, in the form of continued COBRA payments as identified above, in order to effect a valid waiver of Employee's claims under the federal age discrimination laws.

(c) Advice To Consult An Attorney: Employee is hereby advised to consult with an attorney prior to signing this Agreement, because Employee is waiving significant legal rights. Employee acknowledges that he has been so advised and has, in fact, considered whether to consult with an attorney prior to signing this Agreement.

(d) Reasonable Time To Consider Settlement Agreement: Employee acknowledges that he has been given a reasonable period of time (a maximum of 45 days, if Employee so chooses) to consider this Agreement prior to signing this Agreement. Employee understands that he has seven days following his signing of this Agreement to rescind it, but only insofar as it effects a release of a claim for violation of the ADEA, in which case it shall remain fully effective in all other respects. To rescind this Agreement as to the ADEA, Employee agrees to send a letter via electronic mail signed by Employee to the Company's legal department, electronic mail address legal@virtu.com, by the end of the seven-day period. The remainder of this Agreement shall remain in full force and effect.

(e) Non-Release of Future Claims: Employee is hereby advised that this Agreement does not waive or release any rights or claims that Employee may have under the ADEA, or otherwise, which arise after the date Employee signs this Agreement, including any right or claim Employee may have as a whistleblower under federal or state law or regulation.



(f) Employee has received, together with this Agreement a **Schedule B**, a listing of the job titles and ages of employees selected and not selected for involuntary termination in connection with the Company's group termination program.

16. Remedies.

The Employee understands and agrees that if he breaches any provision of this Agreement, including but not limited to those in Paragraph 4, 7, 11, 12, 13 and 15 of this Agreement, as determined by the Company in good faith, such breach will be considered a material breach and, in addition to any other legal or equitable remedy the Company may have, the Company shall be entitled to cease making any payments of Consideration or providing any benefits to the Employee agreed hereunder and shall be entitled to a full recovery of any and all installments of the Consideration previously paid. Any such action permitted to the Company by this paragraph, however, shall not affect or impair any of the Employee's obligations under this Agreement, including without limitation, the release of claims in Paragraph 7 hereof or the obligation to maintain the confidentiality of Confidential Information in Paragraph 11 (as defined therein). The Employee further agrees that nothing herein shall preclude the Company from recovering attorneys' fees, costs or any other remedies specifically authorized under applicable law.

17. Severability; Governing Law; Exclusive Jurisdiction; Arbitration; fees and expenses.

(a) Should any of the provisions in this Agreement be declared, or be determined to be illegal or invalid, all remaining parts, terms or provisions shall be valid, and the illegal or invalid part, term or provision shall be deemed not to be a part of this Agreement.

(b) This Agreement is made and entered into in the State of New York and shall in all respects be interpreted, enforced and governed under the laws of New York.

(c) The parties knowingly and voluntarily agree to a pre-dispute arbitration clause so that should any controversy or dispute arise in connection with this Agreement, Employee and the Company agree to arbitrate any and all such claims at a site in New York, before a neutral panel of the American Arbitration Association or JAMS, as dictated by the underlying facts and circumstances giving rise to the claim(s). Where no such forum is required by regulatory rules or directed by a court of competent jurisdiction, such forum shall be selected at the sole discretion of the Company. In the course of any arbitration pursuant to this Agreement, the Employee and the Company agree: (a) to request that a written award be issued by the panel, and (b) that each side is entitled to receive any and all relief they would be entitled to receive in a court proceeding. Employee and the Company knowingly and voluntarily agree to enter into this arbitration clause and to waive any rights that might otherwise exist to request a jury trial or other court proceeding, except that the Company may seek and obtain from a court any injunctive or equitable relief necessary to maintain (and/or to restore) the status quo or to prevent the possibility of irreversible or irreparable harm pending final resolution of mediation, arbitration or court proceedings, as applicable. However, this Agreement does not prohibit you or restrict you from filing an arbitration claim a FINRA arbitration forum as specified in FINRA rules.

(d) In the event that the Company prevails in any action related to this Agreement, the Company shall have the right to collect from Employee the Company's legal or other fees, costs and expenses incurred in connection therewith.

**(e) THE PARTIES HEREBY VOLUNTARILY, KNOWINGLY, IRREVOCABLY AND UNCONDITIONALLY WAIVE THEIR RESPECTIVE RIGHT TO TRIAL BY JURY.**

(f) To the extent applicable, it is intended that this Agreement comply with or as applicable, constitute a short-term deferral or otherwise be exempt from the provisions of Section 409A. This Agreement will be administered and interpreted in a manner consistent with this intent, and any provision that would cause this Agreement to fail to satisfy Section 409A will have no force and effect until amended to comply therewith (which amendment may be retroactive to the extent permitted by Section 409A). Employee and the Company agree that Employee's termination of employment shall be considered a "separation from service" from the Company within the meaning of Section 409A. To the extent required in order to avoid accelerated taxation and/or tax penalties under Section 409A, amounts that would otherwise be payable and benefits that would otherwise be provided pursuant to this Agreement during the six-month period immediately following your separation from service shall instead be paid on the first business day after the date that is six months following Employee's termination of employment (or upon Employee's death, if earlier). In addition, for purposes of this Agreement, each amount to be paid or benefit to be provided to you pursuant to this Agreement shall be construed as a separate identified payment for purposes of Section 409A. With respect to expenses eligible for reimbursement under the terms of this Agreement, (i) the amount of such expenses eligible for reimbursement in any taxable year shall not affect the expenses eligible for reimbursement in another taxable year and (ii) any reimbursements of such expenses shall be made no later than the end of the calendar year following the calendar year in which the related expenses were incurred, except, in each case, to the extent that the right to reimbursement does not provide for a "deferral of compensation" within the meaning of Section 409A. The Company makes no representation that any or all of the payments described in this Agreement will be exempt from or comply with Section 409A and makes no undertaking to preclude Section 409A from applying to any such payment. Employee understands and agrees that Employee shall be solely responsible for the payment of any taxes and penalties incurred under Section 409A.

**18. Proper Construction.**

(a) The language of all parts of this Agreement shall in all cases be construed as a whole according to its fair meaning, and not strictly for or against any of the parties. The Parties acknowledge and agree that they have participated fully in the preparation of this Agreement and that neither this Agreement nor any provision shall be construed for or against Employee or the Company.

(b) As used in this Agreement, the term "or" shall be deemed to include the term "and/or" and the singular or plural number shall be deemed to include the other whenever the context so indicates or requires.

(c) The paragraph headings used in this Agreement are intended solely for convenience of reference and shall not in any manner amplify, limit, modify or otherwise be used in the interpretation of any of the provisions hereof.

19. Entire Agreement.

This Agreement is the entire agreement between Employee and the Company and fully supersedes any and all prior agreements or understandings between the parties pertaining to its subject matter.

20. Confirmation of Employee's Understanding of the Terms of This Agreement.

(a) Employee represents that he has read this Agreement, in full, and understands each of its terms. Employee also represents that he has had sufficient time and opportunity to obtain legal advice, if desired, before signing this Agreement.

(b) Employee understands that Employee has been given a reasonable time to consider whether to sign this Agreement, up to a period of 45 days. If Employee fails to sign and deliver this Agreement back to the Company within 45 days, this Agreement shall automatically be revoked without further notice.

(c) If Employee chooses to sign this Agreement, Employee represents that he is signing this Agreement voluntarily, without any form of duress or coercion. Employee understands that this Agreement shall be final and binding on Employee and the Company.

[Signature pages to follow]

**PLEASE READ CAREFULLY. THIS CONFIDENTIAL SEVERANCE AGREEMENT AND GENERAL  
RELEASE OF CLAIMS INCLUDES A RELEASE OF ALL KNOWN AND UNKNOWN CLAIMS.**

Executed on 10/2, 2017.

/s/ Venu Palaparthi (EMPLOYEE)

By: Venu Palaparthi

Executed on October 2, 2017.

**VIRTU FINANCIAL OPERATING LLC**

By: /s/ Justin Waldie

Name: Justin Waldie

Title: SVP & General Counsel

Executed on October 2, 2017.

**VIRTU FINANCIAL, INC.**

By: /s/ Justin Waldie

Name: Justin Waldie

Title: SVP & General Counsel

Executed on October 2, 2017.

**SCHEDULE A -- TERMS AND CONDITIONS**

<b>I. General Information</b>	
<b>Employee</b>	Venu Palaparathi
<b>Notice Date</b>	September 11, 2017
<b>Termination Date</b>	September 11, 2017
<b>II. Final Compensation</b>	
<i>Whether or not Employee signs the Agreement, the Company will make the following payments.</i>	
<b>Outstanding Salary</b>	You will receive a payment equaling any outstanding salary, if any, as of the Termination Date.
<b>Accrued But Unused Vacation Days</b>	You will receive a payment equaling any outstanding vacation, if any, as of the Termination Date.
<b>III. Separation Benefits</b>	
<i>In consideration for Employee's execution, non-revocation of, and compliance with the Agreement, including the General Release of Claims, the Company agrees to provide the following Termination Benefits.</i>	
<b>Termination Payments</b>	<p><u>In consideration of Repurchased Interests</u></p> <p>\$65,437.68 on November 1, 2017</p> <p>\$65,437.68 on February 1, 2018</p> <p>\$65,437.68 on May 1, 2018</p> <p>\$65,437.68 on August 1, 2018</p> <p>\$65,437.68 on November 1, 2018</p> <p>\$65,437.68 on February 1, 2019</p> <p>\$65,437.68 on May 1, 2019</p> <p>\$65,437.68 on August 1, 2019</p> <p>\$65,437.68 on November 1, 2019</p> <p>\$65,437.68 on February 1, 2020</p> <p>\$65,437.68 on May 1, 2020</p> <p>\$65,437.68 on August 1, 2020</p> <p><u>Additional Payments</u></p>

	\$64,635.91 on November 1, 2017
	\$64,635.91 on February 1, 2018
	\$64,635.91 on May 1, 2018
	\$64,635.91 on August 1, 2018
	\$64,635.91 on November 1, 2018
	\$64,635.91 on February 1, 2019
	\$64,635.91 on May 1, 2019
	\$64,635.91 on August 1, 2019
	\$64,635.91 on November 1, 2019
	\$64,635.91 on February 1, 2020
	\$64,635.91 on May 1, 2020
	\$64,635.91 on August 1, 2020
<b>COBRA Benefits</b>	In accordance with Paragraph 5(b), the Company will arrange to pay Employee's coverage under COBRA for the period of September 11, 2017 to the six month anniversary thereof.
<b>Outplacement Benefits</b>	A total of 3 months to be used within six months of Termination Date.

**VIRTU FINANCIAL, INC.**  
**2015 MANAGEMENT INCENTIVE PLAN EMPLOYEE**  
**RESTRICTED STOCK UNIT AND COMMON STOCK AWARD AGREEMENT**

THIS RESTRICTED STOCK UNIT AND COMMON STOCK AWARD AGREEMENT (the "Agreement"), is entered into as of January 23, 2018 (the "Date of Grant"), by and between Virtu Financial, Inc., a Delaware corporation (the "Company"), and Joseph Molluso (the "Participant").

WHEREAS, the Company has adopted the Virtu Financial, Inc. 2015 Amended and Restated Management Incentive Plan (the "Plan"), pursuant to which shares of Class A Common Stock and Restricted Stock Units ("RSUs") may be granted; and

WHEREAS, the Compensation Committee of the Board of Directors of the Company has determined that it is in the best interests of the Company and its stockholders to grant the shares of Class A Common Stock in recognition of Participant's service to the Company and its Affiliates from January 1, 2017 through December 31, 2017, and RSUs provided for herein to the Participant subject to the terms set forth herein.

NOW, THEREFORE, for and in consideration of the premises and the covenants of the parties contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereto, for themselves, their successors and assigns, hereby agree as follows:

**1. Grant of Common Stock and Restricted Stock Units.**

(a) Grant. The Company hereby grants to the Participant a total number of shares of Class A Common Stock equal to approximately \$420,000.00 divided by the Issue Price (the "Shares"), and a total number of RSUs equal to approximately \$630,000.00 divided by the Issue Price, in each case on the terms and conditions set forth in this Agreement and as otherwise provided in the Plan. The RSUs shall be credited to a separate book-entry account maintained for the Participant on the books of the Company, which may be maintained by a third party. The "Issue Price" shall mean the volume weighted average price of shares of the Company's Class A Common Stock traded during the three days preceding the Date of Grant, as determined by the Company.

(b) Incorporation by Reference. The provisions of the Plan are incorporated herein by reference. Except as otherwise expressly set forth herein, this Agreement shall be construed in accordance with the provisions of the Plan and any interpretations, amendments, rules and regulations promulgated by the Committee from time to time pursuant to the Plan. Any capitalized terms not otherwise defined in this Agreement shall have the definitions set forth in the Plan. The Committee shall have final authority to interpret and construe the Plan and this Agreement and to make any and all determinations under them, and its decision shall be binding and conclusive upon the Participant and his legal representative in respect of any questions arising under the Plan or this Agreement. The Participant acknowledges that he has received a copy of the Plan and has had an opportunity to review the Plan and agrees to be bound by all the terms and provisions of the Plan.

**2. Vesting and Settlement.**

(a) The Shares shall be one hundred percent (100%) vested as of the Date of Grant.

(b) Except as may otherwise be provided herein, subject to the Participant's continued employment or service with the Company or an Affiliate, the RSUs shall vest in equal installments on each of the first three (3) anniversaries of the Date of Grant (each such date, a "Vesting Date"). Upon

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each Vesting Date, such portion of the RSUs that vest on such date shall no longer be subject to the transfer restrictions pursuant to Section 9(a) hereof or cancellation pursuant to Section 4 hereof. Any fractional RSUs resulting from the application of the vesting schedule shall be aggregated and the RSUs resulting from such aggregation shall vest on the final Vesting Date.

(c) Vested RSUs shall be settled within ten (10) days following the Vesting Date for such RSUs in shares of Class A Common Stock, or cash, as determined by the Committee in its sole discretion.

**3. Dividend Equivalents.** In the event of any issuance of a cash dividend on the shares of Class A Common Stock (a “Dividend”), the Participant shall be entitled to receive, with respect to each RSU granted pursuant to this Agreement and outstanding as of the record date for such Dividend, payment of an amount equal to the Dividend at the same time as the Dividend is paid to holders of shares of Class A Common Stock generally.

**4. Termination of Employment or Service.** If the Participant’s employment or service with the Company and its Affiliates terminates for any reason, all unvested RSUs shall be cancelled immediately and the Participant shall not be entitled to receive any payments with respect thereto.

**5. Rights as a Stockholder.** The Participant shall not be deemed for any purpose to be the owner of any shares of Class A Common Stock constituting the Shares or underlying the RSUs unless, until and to the extent that (i) the Company shall have issued and delivered to the Participant the shares of Class A Common Stock constituting the Shares or underlying the RSUs and (ii) the Participant’s name shall have been entered as a stockholder of record with respect to such shares of Class A Common Stock on the books of the Company. The Company shall cause the actions described in clauses (i) and (ii) of the preceding sentence to occur promptly following settlement as contemplated by this Agreement, subject to compliance with applicable laws.

**6. Compliance with Legal Requirements.**

(a) Generally. The granting of the Shares and the granting and settlement of the RSUs, and any other obligations of the Company under this Agreement, shall be subject to all applicable U.S. federal, state and local laws, rules and regulations, all applicable non-U.S. laws, rules and regulations and to such approvals by any regulatory or governmental agency as may be required. The Participant agrees to take all steps the Committee or the Company determines are reasonably necessary to comply with all applicable provisions of U.S. federal and state securities law and non-U.S. securities law in exercising his rights under this Agreement.

(b) Taxes and Withholding. The grant of the Shares and the vesting and settlement of the RSUs shall be subject to the Participant satisfying any applicable U.S. federal, state and local tax withholding obligations and non-U.S. tax withholding obligations. The Participant shall be required to pay to the Company, and the Company shall have the right and is hereby authorized to withhold any cash, shares of Class A Common Stock, other securities or other property or from any compensation or other amounts owing to the Participant, the amount (in cash, Class A Common Stock, other securities or other property) of any required withholding taxes in respect of the Shares or in respect of the RSUs, settlement of the RSUs or any payment or transfer of the RSUs, and to take any such other action as the Committee or the Company deem necessary to satisfy all obligations for the payment of such withholding taxes. In its sole discretion, the Company may permit the Participant to satisfy, in whole or in part, the tax obligations by (A) withholding shares of Class A Common Stock from the Shares having a Fair Market Value equal to such withholding liability and (B) withholding shares of Class A Common Stock that would otherwise be deliverable to the Participant upon settlement of the RSUs with a Fair Market Value equal to such withholding liability.



7. **Clawback.** Notwithstanding anything to the contrary contained herein, the Committee may cancel the Shares and RSU award if the Participant, without the consent of the Company, has engaged in or engages in activity that is in conflict with or adverse to the interest of the Company or any Affiliate while employed by or providing services to the Company or any Affiliate, including fraud or conduct contributing to any financial restatements or irregularities, or violates a non-competition, non-solicitation, non-disparagement, non-disclosure or confidentiality covenant or agreement with the Company or any Affiliate, as determined by the Committee. In such event, the Participant will forfeit any compensation, gain or other value realized thereafter on the vesting or settlement of the RSUs, the sale or other transfer of the Shares and the RSUs, or the sale of shares of Class A Common Stock acquired in respect of the RSUs, and must promptly repay such amounts to the Company. If the Participant receives any amount in excess of what the Participant should have received with respect to the Shares or under the terms of the RSUs for any reason (including without limitation by reason of a financial restatement, mistake in calculations or other administrative error), all as determined by the Committee, then the Participant shall be required to promptly repay any such excess amount to the Company. To the extent required by applicable law and/or the rules and regulations of NASDAQ or any other securities exchange or inter-dealer quotation system on which the Class A Common Stock is listed or quoted, or if so required pursuant to a written policy adopted by the Company, the Shares and the RSUs shall be subject (including on a retroactive basis) to clawback, forfeiture or similar requirements (and such requirements shall be deemed incorporated by reference into this Agreement).

## 8. **Contractual Obligations.**

(a) Nothing in this Agreement shall supersede, modify, replace or cancel any existing contractual obligations, including but not limited to restrictive covenants, applicable to you in *any* employment agreement, offer letter, prior equity award agreement or any other agreement or contract with the Company or its Affiliates.

(b) In the event that the Participant violates any of the contractual obligations referred to in this Section 8, in addition to any other remedy which may be available at law or in equity, the RSUs shall be automatically forfeited effective as of the date on which such violation first occurs. The foregoing rights and remedies are in addition to any other rights and remedies that may be available to the Company and shall not prevent (and the Participant shall not assert that they shall prevent) the Company from bringing one or more actions in any applicable jurisdiction to recover damages as a result of the Participant's breach of such restrictive covenants.

## 9. **Miscellaneous.**

(a) Transferability. The RSUs may not be assigned, alienated, pledged, attached, sold or otherwise transferred or encumbered (a "Transfer") by the Participant other than by will or by the laws of descent and distribution, pursuant to a qualified domestic relations order or as otherwise permitted under Section 15(b) of the Plan. Any attempted Transfer of the RSUs contrary to the provisions hereof, and the levy of any execution, attachment or similar process upon the RSUs, shall be null and void and without effect.

(b) Waiver. Any right of the Company contained in this Agreement may be waived in writing by the Committee. No waiver of any right hereunder by any party shall operate as a waiver of any other right, or as a waiver of the same right with respect to any subsequent occasion for its exercise, or as a waiver of any right to damages. No waiver by any party of any breach of this Agreement shall be held to constitute a waiver of any other breach or a waiver of the continuation of the same breach.

(c) Section 409A. The RSUs are intended to be exempt from, or compliant with, Section 409A of the Internal Revenue Code (“Code”). Notwithstanding the foregoing or any provision of the Plan or this Agreement, if any provision of the Plan or this Agreement contravenes Section 409A of the Code or could cause the Participant to incur any tax, interest or penalties under Section 409A of the Code, the Committee may, in its sole discretion and without the Participant’s consent, modify such provision to (i) comply with, or avoid being subject to, Section 409A of the Code, or to avoid the incurrence of taxes, interest and penalties under Section 409A of the Code, and/or (ii) maintain, to the maximum extent practicable, the original intent and economic benefit to the Participant of the applicable provision without materially increasing the cost to the Company or contravening the provisions of Section 409A of the Code. This Section 9(c) does not create an obligation on the part of the Company to modify the Plan or this Agreement and does not guarantee that the RSUs will not be subject to interest and penalties under Section 409A.

(d) General Assets. All amounts credited in respect of the RSUs to the book-entry account under this Agreement shall continue for all purposes to be part of the general assets of the Company. The Participant’s interest in such account shall make the Participant only a general, unsecured creditor of the Company.

(e) Notices. Any notices provided for in this Agreement or the Plan shall be in writing and shall be deemed sufficiently given if either hand delivered or if sent by fax, pdf/email or overnight courier, or by postage paid first class mail. Notices sent by mail shall be deemed received three business days after mailing but in no event later than the date of actual receipt. Notices shall be directed, if to the Participant, at the Participant’s address indicated by the Company’s records, or if to the Company, to the attention of the General Counsel at the Company’s principal executive office.

(f) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, and each other provision of this Agreement shall be severable and enforceable to the extent permitted by law.

(g) No Rights to Employment or Service. Nothing contained in this Agreement shall be construed as giving the Participant any right to be retained, in any position, as an employee, consultant or director of the Company or its Affiliates or shall interfere with or restrict in any way the rights of the Company or its Affiliates, which are hereby expressly reserved, to remove, terminate or discharge the Participant at any time for any reason whatsoever.

(h) Fractional Shares. In lieu of issuing a fraction of a share of Class A Common Stock resulting from adjustment of the Shares or the RSUs pursuant to Section 12 of the Plan or otherwise, the Company shall be entitled to pay to the Participant an amount in cash equal to the Fair Market Value of such fractional share.

(i) Beneficiary. The Participant may file with the Committee a written designation of a beneficiary on such form as may be prescribed by the Committee and may, from time to time, amend or revoke such designation.

(j) Successors. The terms of this Agreement shall be binding upon and inure to the benefit of the Company and its successors and assigns, and of the Participant and the beneficiaries, executors, administrators, heirs and successors of the Participant.

(k) Entire Agreement. This Agreement and the Plan contain the entire agreement and understanding of the parties hereto with respect to the subject matter contained herein and supersede all prior communications, representations and negotiations in respect thereto, except as set forth in Section 8 hereof. No change, modification or waiver of any provision of this Agreement shall be valid unless the same be in writing and signed by the parties hereto, except for any changes permitted without consent under Section 12 or 14 of the Plan.

(l) Governing Law and Venue. This Agreement shall be construed and interpreted in accordance with the laws of the State of Delaware, without regard to principles of conflicts of laws thereof, or principles of conflicts of laws of any other jurisdiction which could cause the application of the laws of any jurisdiction other than the State of Delaware.

(i) Dispute Resolution; Consent to Jurisdiction. All disputes between or among any Persons arising out of or in any way connected with the Plan, this Agreement, the Shares or the RSUs shall be solely and finally settled by the Committee, acting in good faith, the determination of which shall be final. Any matters not covered by the preceding sentence shall be solely and finally settled in accordance with the Plan, and the Participant and the Company consent to the personal jurisdiction of the United States Federal and state courts sitting in Wilmington, Delaware as the exclusive jurisdiction with respect to matters arising out of or related to the enforcement of the Committee's determinations and resolution of matters, if any, related to the Plan or this Agreement not required to be resolved by the Committee. Each such Person hereby irrevocably consents to the service of process of any of the aforementioned courts in any such suit, action or proceeding by the mailing of copies thereof by registered or certified mail, postage prepaid, to the last known address of such Person, such service to become effective ten (10) days after such mailing.

(ii) Waiver of Jury Trial. Each party hereto hereby waives, to the fullest extent permitted by applicable law, any right it may have to a trial by jury in any legal proceeding directly or indirectly arising out of or relating to this Agreement or the transactions contemplated (whether based on contract, tort or any other theory). Each party hereto (A) certifies that no representative, agent or attorney of any other party has represented, expressly or otherwise, that such other party would not, in the event of litigation, seek to enforce the foregoing waiver and (B) acknowledges that it and the other parties hereto have been induced to enter into this Agreement by, among other things, the mutual waivers and certifications in this section.

(m) Headings; Gender. The headings of the Sections hereof are provided for convenience only and are not to serve as a basis for interpretation or construction, and shall not constitute a part, of this Agreement. Masculine pronouns and other words of masculine gender shall refer to both men and women as appropriate.

(n) Counterparts. This Agreement may be executed in one or more counterparts (including via facsimile and electronic image scan (pdf)), each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties.

(o) Electronic Signature and Delivery. This Agreement may be accepted by return signature or by electronic confirmation. By accepting this Agreement, the Participant consents to the electronic delivery of prospectuses, annual reports and other information required to be delivered by U.S. Securities and Exchange Commission rules (which consent may be revoked in writing by the Participant at any time upon three business days' notice to the Company, in which case subsequent prospectuses, annual reports and other information will be delivered in hard copy to the Participant).

(p) Electronic Participation in Plan. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

**[Remainder of page intentionally left blank]**

IN WITNESS WHEREOF, this Agreement has been executed by the Company and the Participant as of the day first written above.

**VIRTU FINANCIAL, INC.**

By: /s/ Douglas A. Cifu

Name: Douglas A. Cifu

Title: Chief Executive Officer

Signature: /s/ Joseph A. Molluso

Joseph A. Molluso (Jan 24, 2018)

Email: REDACTED

Joseph Molluso

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**VIRTU FINANCIAL, INC.**  
**2015 MANAGEMENT INCENTIVE PLAN**  
**EMPLOYEE**  
**RESTRICTED STOCK UNIT AND COMMON STOCK AWARD AGREEMENT**

THIS RESTRICTED STOCK UNIT AND COMMON STOCK AWARD AGREEMENT (the "Agreement"), is entered into as of January 23, 2018 (the "Date of Grant"), by and between Virtu Financial, Inc., a Delaware corporation (the "Company"), and Douglas Cifu (the "Participant").

WHEREAS, the Company has adopted the Virtu Financial, Inc. 2015 Amended and Restated Management Incentive Plan (the "Plan"), pursuant to which shares of Class A Common Stock and Restricted Stock Units ("RSUs") may be granted; and

WHEREAS, the Compensation Committee of the Board of Directors of the Company has determined that it is in the best interests of the Company and its stockholders to grant the shares of Class A Common Stock in recognition of Participant's service to the Company and its Affiliates from January 1, 2017 through December 31, 2017, and RSUs provided for herein to the Participant subject to the terms set forth herein.

NOW, THEREFORE, for and in consideration of the premises and the covenants of the parties contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereto, for themselves, their successors and assigns, hereby agree as follows:

**1. Grant of Common Stock and Restricted Stock Units.**

(a) Grant. The Company hereby grants to the Participant a total number of shares of Class A Common Stock equal to approximately \$ 600,000.00 divided by the Issue Price (the "Shares"), and a total number of RSUs equal to approximately \$ 900,000.00 divided by the Issue Price, in each case on the terms and conditions set forth in this Agreement and as otherwise provided in the Plan. The RSUs shall be credited to a separate book-entry account maintained for the Participant on the books of the Company, which may be maintained by a third party. The "Issue Price" shall mean the volume weighted average price of shares of the Company's Class A Common Stock traded during the three days preceding the Date of Grant, as determined by the Company.

(b) Incorporation by Reference. The provisions of the Plan are incorporated herein by reference. Except as otherwise expressly set forth herein, this Agreement shall be construed in accordance with the provisions of the Plan and any interpretations, amendments, rules and regulations promulgated by the Committee from time to time pursuant to the Plan. Any capitalized terms not otherwise defined in this Agreement shall have the definitions set forth in the Plan. The Committee shall have final authority to interpret and construe the Plan and this Agreement and to make any and all determinations under them, and its decision shall be binding and conclusive upon the Participant and his legal representative in respect of any questions arising under the Plan or this Agreement. The Participant acknowledges that he has received a copy of the Plan and has had an opportunity to review the Plan and agrees to be bound by all the terms and provisions of the Plan.

**2. Vesting and Settlement.**

(a) The Shares shall be one hundred percent (100%) vested as of the Date of Grant.

(b) Except as may otherwise be provided herein, subject to the Participant's continued employment or service with the Company or an Affiliate, the RSUs shall vest in equal installments on each of the first three (3) anniversaries of the Date of Grant (each such date, a "Vesting Date"). Upon

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each Vesting Date, such portion of the RSUs that vest on such date shall no longer be subject to the transfer restrictions pursuant to Section 9(a) hereof or cancellation pursuant to Section 4 hereof. Any fractional RSUs resulting from the application of the vesting schedule shall be aggregated and the RSUs resulting from such aggregation shall vest on the final Vesting Date.

(c) Vested RSUs shall be settled within ten (10) days following the Vesting Date for such RSUs in shares of Class A Common Stock, or cash, as determined by the Committee in its sole discretion.

**3. Dividend Equivalents.** In the event of any issuance of a cash dividend on the shares of Class A Common Stock (a “Dividend”), the Participant shall be entitled to receive, with respect to each RSU granted pursuant to this Agreement and outstanding as of the record date for such Dividend, payment of an amount equal to the Dividend at the same time as the Dividend is paid to holders of shares of Class A Common Stock generally.

**4. Termination of Employment or Service.** If the Participant’s employment or service with the Company and its Affiliates terminates for any reason, all unvested RSUs shall be cancelled immediately and the Participant shall not be entitled to receive any payments with respect thereto.

**5. Rights as a Stockholder.** The Participant shall not be deemed for any purpose to be the owner of any shares of Class A Common Stock constituting the Shares or underlying the RSUs unless, until and to the extent that (i) the Company shall have issued and delivered to the Participant the shares of Class A Common Stock constituting the Shares or underlying the RSUs and (ii) the Participant’s name shall have been entered as a stockholder of record with respect to such shares of Class A Common Stock on the books of the Company. The Company shall cause the actions described in clauses (i) and (ii) of the preceding sentence to occur promptly following settlement as contemplated by this Agreement, subject to compliance with applicable laws.

**6. Compliance with Legal Requirements.**

(a) Generally. The granting of the Shares and the granting and settlement of the RSUs, and any other obligations of the Company under this Agreement, shall be subject to all applicable U.S. federal, state and local laws, rules and regulations, all applicable non-U.S. laws, rules and regulations and to such approvals by any regulatory or governmental agency as may be required. The Participant agrees to take all steps the Committee or the Company determines are reasonably necessary to comply with all applicable provisions of U.S. federal and state securities law and non-U.S. securities law in exercising his rights under this Agreement.

(b) Taxes and Withholding. The grant of the Shares and the vesting and settlement of the RSUs shall be subject to the Participant satisfying any applicable U.S. federal, state and local tax withholding obligations and non-U.S. tax withholding obligations. The Participant shall be required to pay to the Company, and the Company shall have the right and is hereby authorized to withhold any cash, shares of Class A Common Stock, other securities or other property or from any compensation or other amounts owing to the Participant, the amount (in cash, Class A Common Stock, other securities or other property) of any required withholding taxes in respect of the Shares or in respect of the RSUs, settlement of the RSUs or any payment or transfer of the RSUs, and to take any such other action as the Committee or the Company deem necessary to satisfy all obligations for the payment of such withholding taxes. In its sole discretion, the Company may permit the Participant to satisfy, in whole or in part, the tax obligations by (A) withholding shares of Class A Common Stock from the Shares having a Fair Market Value equal to such withholding liability and (B) withholding shares of Class A Common Stock that would otherwise be deliverable to the Participant upon settlement of the RSUs with a Fair Market Value equal to such withholding liability.

7. **Clawback.** Notwithstanding anything to the contrary contained herein, the Committee may cancel the Shares and RSU award if the Participant, without the consent of the Company, has engaged in or engages in activity that is in conflict with or adverse to the interest of the Company or any Affiliate while employed by or providing services to the Company or any Affiliate, including fraud or conduct contributing to any financial restatements or irregularities, or violates a non-competition, non-solicitation, non-disparagement, non-disclosure or confidentiality covenant or agreement with the Company or any Affiliate, as determined by the Committee. In such event, the Participant will forfeit any compensation, gain or other value realized thereafter on the vesting or settlement of the RSUs, the sale or other transfer of the Shares and the RSUs, or the sale of shares of Class A Common Stock acquired in respect of the RSUs, and must promptly repay such amounts to the Company. If the Participant receives any amount in excess of what the Participant should have received with respect to the Shares or under the terms of the RSUs for any reason (including without limitation by reason of a financial restatement, mistake in calculations or other administrative error), all as determined by the Committee, then the Participant shall be required to promptly repay any such excess amount to the Company. To the extent required by applicable law and/or the rules and regulations of NASDAQ or any other securities exchange or inter-dealer quotation system on which the Class A Common Stock is listed or quoted, or if so required pursuant to a written policy adopted by the Company, the Shares and the RSUs shall be subject (including on a retroactive basis) to clawback, forfeiture or similar requirements (and such requirements shall be deemed incorporated by reference into this Agreement).

**8. Contractual Obligations.**

(a) Nothing in this Agreement shall supersede, modify, replace or cancel any existing contractual obligations, including but not limited to restrictive covenants, applicable to you in any employment agreement, offer letter, prior equity award agreement or any other agreement or contract with the Company or its Affiliates.

(b) In the event that the Participant violates any of the contractual obligations referred to in this Section 8, in addition to any other remedy which may be available at law or in equity, the RSUs shall be automatically forfeited effective as of the date on which such violation first occurs. The foregoing rights and remedies are in addition to any other rights and remedies that may be available to the Company and shall not prevent (and the Participant shall not assert that they shall prevent) the Company from bringing one or more actions in any applicable jurisdiction to recover damages as a result of the Participant's breach of such restrictive covenants.

**9. Miscellaneous.**

(a) Transferability. The RSUs may not be assigned, alienated, pledged, attached, sold or otherwise transferred or encumbered (a "Transfer") by the Participant other than by will or by the laws of descent and distribution, pursuant to a qualified domestic relations order or as otherwise permitted under Section 15(b) of the Plan. Any attempted Transfer of the RSUs contrary to the provisions hereof, and the levy of any execution, attachment or similar process upon the RSUs, shall be null and void and without effect.

(b) Waiver. Any right of the Company contained in this Agreement may be waived in writing by the Committee. No waiver of any right hereunder by any party shall operate as a waiver of any other right, or as a waiver of the same right with respect to any subsequent occasion for its exercise, or as a waiver of any right to damages. No waiver by any party of any breach of this Agreement shall be held to constitute a waiver of any other breach or a waiver of the continuation of the same breach.



(c) Section 409A. The RSUs are intended to be exempt from, or compliant with, Section 409A of the Internal Revenue Code (“Code”). Notwithstanding the foregoing or any provision of the Plan or this Agreement, if any provision of the Plan or this Agreement contravenes Section 409A of the Code or could cause the Participant to incur any tax, interest or penalties under Section 409A of the Code, the Committee may, in its sole discretion and without the Participant’s consent, modify such provision to (i) comply with, or avoid being subject to, Section 409A of the Code, or to avoid the incurrence of taxes, interest and penalties under Section 409A of the Code, and/or (ii) maintain, to the maximum extent practicable, the original intent and economic benefit to the Participant of the applicable provision without materially increasing the cost to the Company or contravening the provisions of Section 409A of the Code. This Section 9(c) does not create an obligation on the part of the Company to modify the Plan or this Agreement and does not guarantee that the RSUs will not be subject to interest and penalties under Section 409A.

(d) General Assets. All amounts credited in respect of the RSUs to the book-entry account under this Agreement shall continue for all purposes to be part of the general assets of the Company. The Participant’s interest in such account shall make the Participant only a general, unsecured creditor of the Company.

(e) Notices. Any notices provided for in this Agreement or the Plan shall be in writing and shall be deemed sufficiently given if either hand delivered or if sent by fax, pdf/email or overnight courier, or by postage paid first class mail. Notices sent by mail shall be deemed received three business days after mailing but in no event later than the date of actual receipt. Notices shall be directed, if to the Participant, at the Participant’s address indicated by the Company’s records, or if to the Company, to the attention of the General Counsel at the Company’s principal executive office.

(f) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, and each other provision of this Agreement shall be severable and enforceable to the extent permitted by law.

(g) No Rights to Employment or Service. Nothing contained in this Agreement shall be construed as giving the Participant any right to be retained, in any position, as an employee, consultant or director of the Company or its Affiliates or shall interfere with or restrict in any way the rights of the Company or its Affiliates, which are hereby expressly reserved, to remove, terminate or discharge the Participant at any time for any reason whatsoever.

(h) Fractional Shares. In lieu of issuing a fraction of a share of Class A Common Stock resulting from adjustment of the Shares or the RSUs pursuant to Section 12 of the Plan or otherwise, the Company shall be entitled to pay to the Participant an amount in cash equal to the Fair Market Value of such fractional share.

(i) Beneficiary. The Participant may file with the Committee a written designation of a beneficiary on such form as may be prescribed by the Committee and may, from time to time, amend or revoke such designation.

(j) Successors. The terms of this Agreement shall be binding upon and inure to the benefit of the Company and its successors and assigns, and of the Participant and the beneficiaries, executors, administrators, heirs and successors of the Participant.

(k) Entire Agreement. This Agreement and the Plan contain the entire agreement and understanding of the parties hereto with respect to the subject matter contained herein and supersede all prior communications, representations and negotiations in respect thereto, except as set forth in Section 8 hereof. No change, modification or waiver of any provision of this Agreement shall be valid unless the same be in writing and signed by the parties hereto, except for any changes permitted without consent under Section 12 or 14 of the Plan.

(l) Governing Law and Venue. This Agreement shall be construed and interpreted in accordance with the laws of the State of Delaware, without regard to principles of conflicts of laws thereof, or principles of conflicts of laws of any other jurisdiction which could cause the application of the laws of any jurisdiction other than the State of Delaware.

(i) Dispute Resolution; Consent to Jurisdiction. All disputes between or among any Persons arising out of or in any way connected with the Plan, this Agreement, the Shares or the RSUs shall be solely and finally settled by the Committee, acting in good faith, the determination of which shall be final. Any matters not covered by the preceding sentence shall be solely and finally settled in accordance with the Plan, and the Participant and the Company consent to the personal jurisdiction of the United States Federal and state courts sitting in Wilmington, Delaware as the exclusive jurisdiction with respect to matters arising out of or related to the enforcement of the Committee's determinations and resolution of matters, if any, related to the Plan or this Agreement not required to be resolved by the Committee. Each such Person hereby irrevocably consents to the service of process of any of the aforementioned courts in any such suit, action or proceeding by the mailing of copies thereof by registered or certified mail, postage prepaid, to the last known address of such Person, such service to become effective ten (10) days after such mailing.

(ii) Waiver of Jury Trial. Each party hereto hereby waives, to the fullest extent permitted by applicable law, any right it may have to a trial by jury in any legal proceeding directly or indirectly arising out of or relating to this Agreement or the transactions contemplated (whether based on contract, tort or any other theory). Each party hereto (A) certifies that no representative, agent or attorney of any other party has represented, expressly or otherwise, that such other party would not, in the event of litigation, seek to enforce the foregoing waiver and (B) acknowledges that it and the other parties hereto have been induced to enter into this Agreement by, among other things, the mutual waivers and certifications in this section.

(m) Headings; Gender. The headings of the Sections hereof are provided for convenience only and are not to serve as a basis for interpretation or construction, and shall not constitute a part, of this Agreement. Masculine pronouns and other words of masculine gender shall refer to both men and women as appropriate.

(n) Counterparts. This Agreement may be executed in one or more counterparts (including via facsimile and electronic image scan (pdf)), each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties.

(o) Electronic Signature and Delivery. This Agreement may be accepted by return signature or by electronic confirmation. By accepting this Agreement, the Participant consents to the electronic delivery of prospectuses, annual reports and other information required to be delivered by U.S. Securities and Exchange Commission rules (which consent may be revoked in writing by the Participant at any time upon three business days' notice to the Company, in which case subsequent prospectuses, annual reports and other information will be delivered in hard copy to the Participant).

(p) Electronic Participation in Plan. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

**[Remainder of page intentionally left blank]**

IN WITNESS WHEREOF, this Agreement has been executed by the Company and the Participant as of the day first written above.

VIRTU FINANCIAL, INC.

By: /s/ Robert Greifeld  
Robert Greifeld

/s/ Douglas A. Cifu  
Douglas A. Cifu

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## Subsidiaries of Virtu Financial, Inc.

The following are subsidiaries of Virtu Financial, Inc. as of December 31, 2017 and the jurisdictions in which they are organized. The names of particular subsidiaries have been omitted because, considered in the aggregate as a single subsidiary, they would not constitute, as of December 31, 2017, a "significant subsidiary" as that term is defined in Rule 1-02(w) of regulation S-X under the Securities Exchange Act of 1934.

Name	Jurisdiction of Organization
Virtu Financial LLC	Delaware
VFH Parent LLC	Delaware
Virtu Financial Operating LLC	Delaware
Virtu Financial Global Markets LLC	Delaware
Virtu Financial BD LLC	Delaware
Virtu Intermediate Holdings LLC	Delaware
Virtu Intermediate Holdings II LLC	Delaware
Virtu Financial Capital Markets LLC	New York
Virtu Financial Europe Limited	Dublin
Virtu Financial Ireland Limited	Dublin
Virtu Financial Ireland Holdings Limited	Dublin
Virtu Financial Global Services Singapore Pte Ltd.	Singapore
Virtu Financial Singapore Pte Ltd.	Singapore
Virtu Financial Asia Pty Limited	Sydney
Virtu KCG Holdings LLC	Delaware
Virtu Knight Capital Group LLC	Delaware
Virtu Strategic Holdings LLC	Delaware
Virtu Americas LLC	Delaware
KCG Europe Limited	England and Wales
Virtu GETCO, LLC	Illinois
Global Colocation Services LLC	Delaware
Virtu GETCO Holding Company LLC	Delaware
KCG Asia Pacific Pte. Ltd.	Singapore

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in Registration Statement Nos. 333-203478 and 333-219110 on Form S-8 and Registration Statement No. 333-213157 on Form S-3 of our report dated March 13, 2018, relating to the consolidated financial statements of Virtu Financial Inc. and Subsidiaries (the "Company"), appearing in this Annual Report on Form 10-K of Virtu Financial Inc., for the year ended December 31, 2017.

/s/ DELOITTE & TOUCHE LLP

New York, NY  
March 13, 2018

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CEO CERTIFICATION  
PURSUANT TO SECTION 302 OF THE  
SARBANES — OXLEY ACT OF 2002

I, Douglas A. Cifu, certify that:

1. I have reviewed this annual report on Form 10-K for the period ending December 31, 2017 of Virtu Financial, Inc. (the “registrant”) as filed with the Securities and Exchange Commission on the date hereof;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: March 13, 2018

By: /s/ Douglas A. Cifu  
Douglas A. Cifu  
Chief Executive Officer

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CFO CERTIFICATION  
PURSUANT TO SECTION 302 OF THE  
SARBANES — OXLEY ACT OF 2002

I, Joseph Molluso, certify that:

1. I have reviewed this annual report on Form 10-K for the period ending December 31, 2017 of Virtu Financial, Inc. (the “registrant”) as filed with the Securities and Exchange Commission on the date hereof;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: March 13, 2018

By: /s/ Joseph Molluso  
Joseph Molluso  
Chief Financial Officer

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CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Virtu Financial, Inc. (the "Company") on Form 10-K for the period ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Douglas A. Cifu, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, in my capacity as an officer of the Company that, to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Douglas A. Cifu  
Douglas A. Cifu  
Chief Executive Officer

Date: March 13, 2018

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CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Virtu Financial, Inc. (the "Company") on Form 10-K for the period ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joseph Molluso, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, in my capacity as an officer of the Company that, to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Joseph Molluso  
Joseph Molluso  
Chief Financial Officer

Date: March 13, 2018

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