



 Interactive Brokers

2016 Annual Report



Interactive Brokers continues to grow at a record pace.

	2012	2016
Equity capital	\$4.8 Billion	\$5.8 Billion
Accounts	210,000 In over 170 countries	385,000 In over 200 countries
Daily average revenue trades	413,000	660,000
Client equity	\$33 Billion	\$85 Billion



We offer state-of-the-art technology and access to international markets at industry-low prices.

Interactive Brokers' low commissions and financing costs, plus high execution quality, help our customers minimize their costs and maximize their returns.

	U.S. Margin Rates Comparison ¹				Commission Rates Comparison ¹		
	\$25K	\$300K	\$1.5M	\$3.5M	Equity Trades	Option Trades	Futures Trades
Interactive Brokers²	2.07%	1.74%	1.44%	1.19%	\$2.26	\$0.00 base \$0.70 per contract	\$1.74
E-Trade	8.75%	7.25%	5.75%	5.75%	\$6.95	\$6.95 base + \$0.75 per contract	exchange & regulatory fees plus \$2.99
Fidelity	7.825%	6.575%	4.00%	4.00%	\$4.95	\$4.95 base + \$0.65 per contract	N/A
Scottrade	7.75%	6.50%	5.50%	5.50%	\$7.00	\$7.00 base + \$0.70 per contract	N/A
Schwab	8.00%	6.75%	6.25%	6.00%	\$4.95	\$4.95 base + \$0.65 per contract	N/A
TD Ameritrade	8.75%	7.25%	6.50%	6.50%	\$6.95	\$6.95 base + \$0.75 per contract	exchange & regulatory fees plus \$2.25
Vanguard	7.25%	6.00%	5.25%	5.25%	\$7-\$20 depends on the number of trades	\$7.00 base + \$1.00 per contract	N/A

Interactive Brokers has lower commission rates for larger volumes and comparable rates worldwide. Lower investment costs will increase your overall return on investment, but lower costs do not guarantee that your investment will be profitable.

	Execution Price Improvement Comparison*		
	U.S. Stocks (per 100 shares)	U.S. Options (per contract)	European Stocks (per 100 shares)
Interactive Brokers	\$0.38	\$0.84	€0.08
Industry	\$0.32	\$0.60	- €0.84
IB Advantage	\$0.06	\$0.24	€0.93

In 2016, Barron's named Interactive Brokers the low-cost broker for the 15th consecutive year.³

* Based on independent measurements, the Transaction Auditing Group, Inc., (TAG), a third-party provider of transaction analysis, has determined that Interactive Brokers' US stock and options price executions were significantly better than the industry's during the second half of 2016.

1. Rates were obtained on March 2, 2017 from each firm's website, and are subject to change without notice. The IB equity and futures commission rates shown are the average of the client commissions for trades executed in January 2017 and are subject to minimums and maximums as shown on the IB website. Some of the firms listed may have additional fees and some firms may reduce or waive commissions or fees, depending on account activity or total account value. Services vary by firm.
2. IB calculates the interest charged on margin loans using the applicable rates for each interest rate tier listed on its website. For additional information, see ibkr.com/interest. Under some commission plans, overnight carrying fees may apply. Options and futures are risky and are not suitable for all investors. Please review "Characteristics and Risks of Standardized Options" and the CFTC Futures Trading Risk Disclosure at ibkr.com/disclosures before trading these products.
3. Low Cost Rated by Barron's 15 Years Straight - Low cost broker 2002 through 2016 according to Barron's online broker reviews. Barron's is a registered trademark of Dow Jones & Co. Inc. For additional information, see ibkr.com/info

Access the World

One Account, One Screen

State-of-the-art technology gives our customers access to a wide array of products in both domestic and international markets.

Enter low-cost orders 24 hours a day on over 100 market centers in 24 countries and 22 currencies.



Try our platform
commitment free
Go To ibkr.com/freedemo



PortfolioAnalyst

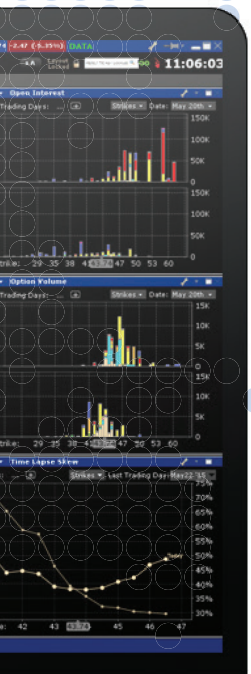
Our easy-to-use online performance analysis and reporting tool for your accounts both at and outside of IB.

Access all your accounts in one place

- See all your accounts – investments, checking, savings, annuity, incentive plan and credit card accounts - held at IB or at other financial institutions.
- Analyze your current and prior balances, percentage returns, and changes in value.
- Review asset classes, positions and trades either by financial account or across all your accounts.

Analyze your portfolio performance quickly and efficiently

- Use charts to illustrate portfolio return contribution by asset class, and heat maps for sector as well as individual stock performance.
- Select from a variety of global benchmarks, or customize your own benchmark, and track your performance across time periods.
- Determine how your asset allocation and investments affect your performance.
- Create custom reports.



Solutions for Financial Advisors

Financial advisors are increasingly opting for independence. Greenwich Advisor Compliance Services can help.



GREENWICH COMPLIANCE

Greenwich Compliance is a new resource for experienced investors and traders who are looking to take the next step and start their own investment advisor firms.

With extensive regulatory and industry experience, Greenwich Compliance professionals can help advisors with their registration and compliance needs. They will take an active role, at a reasonable cost, in helping firms navigate the registration process. For advisors using the IB trading platform, Greenwich Compliance will provide answers to day-to-day compliance questions, without cost.



Greenwich Compliance also offers:

- **RIA Compliance Center:** Investment advisors are subject to a variety of compliance obligations. We built the Compliance Center to make it as seamless as possible for our advisors to meet their obligations.
- **IB Investors' Marketplace:** Advisors on our platform can advertise their services to all IB clients in IB's Investors' Marketplace. Advisors can attract capital to manage and IB clients can find advisors to manage all or part of their investments.
- **Customer Relationship Management:** Advisors can keep track of their leads and clients in our free Customer Relationship Management tool, which is fully integrated into our Account Management system.



Unique tools and technology designed to make financial advisors and broker-dealers on our platform more efficient.





We offer turnkey solutions for trading, clearing, reporting and billing.

- Sophisticated client order management.
- Compliance support.
- White label.
- Advanced real-time client risk management.
- Performance analysis.
- Access to global markets.
- Transparent, low commissions.
- Low financing rates.
- Best executions.

We provide the tools and technology that institutions and sophisticated investors need to minimize their costs and maximize their returns¹.



Superior trading and risk management technology



Low cost



Best execution



Global market access

1. Lower investment costs will increase your overall return on investment, but do not guarantee that your investment will be profitable.

Award Winning Technology From a Recognized Industry Leader

Our multiple trading platforms, advanced trading tools, algos and sophisticated order types continue to earn awards, year after year.

BARRON'S



Interactive Brokers earned an overall rating of 4.5 in 2016¹.

FUND TECHNOLOGY

**Fund Technology
and WSL Awards**

Winner

2017 Winner

"Best Broker-Dealer Futures".

2017 Winner

"Best Broker-Dealer Options".

HFMWEEK

**US Hedge Fund
Services Awards 2016**

Winner

2016 Winner

"Best Prime Broker - Start-ups".

CTAINTELLIGENCE

**US Services
Awards 2017**

Winner

2017 Winner

"Best FCM - Technology".

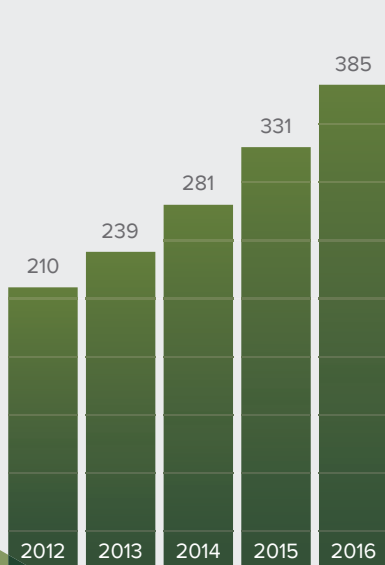
Member NYSE, FINRA, SIPC. Supporting documentation for any claims and statistical information will be provided upon request.

¹ Barron's is a registered trademark of Dow Jones & Company, Inc. For more information, see ibkr.com/awards

Industry-Leading Growth

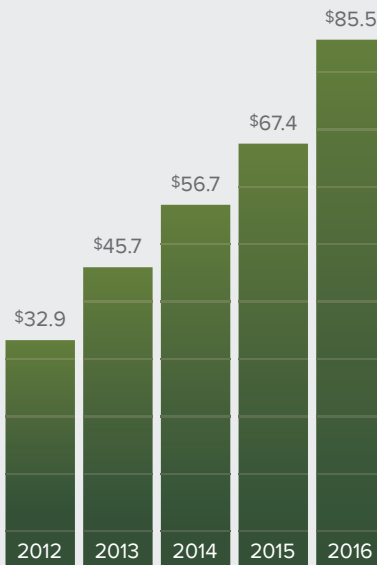
Client Accounts
(thousands)

16% Growth*



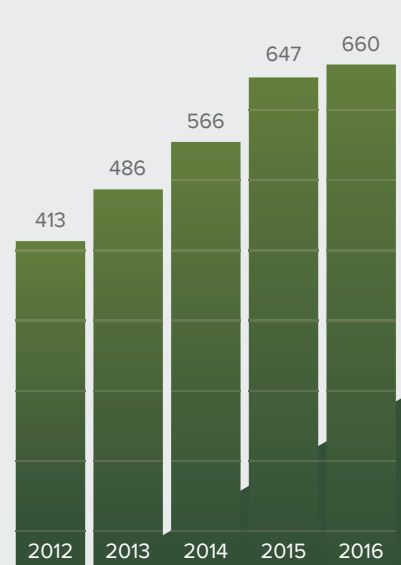
Client Equity
(billions)

27% Growth*



Total Client DARTs
(thousands)

12% Growth*

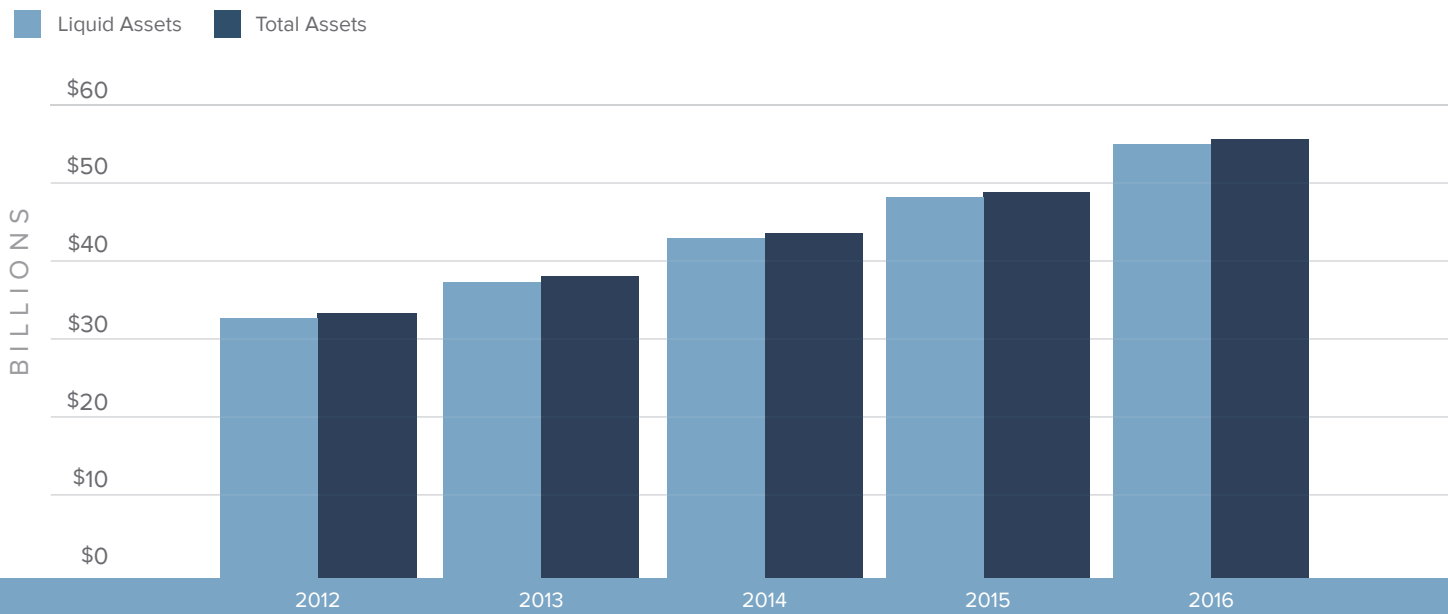


* Four-year compound annual growth rate

Financial Strength

Liquid Balance Sheet

99% of our balance sheet comprised of liquid assets



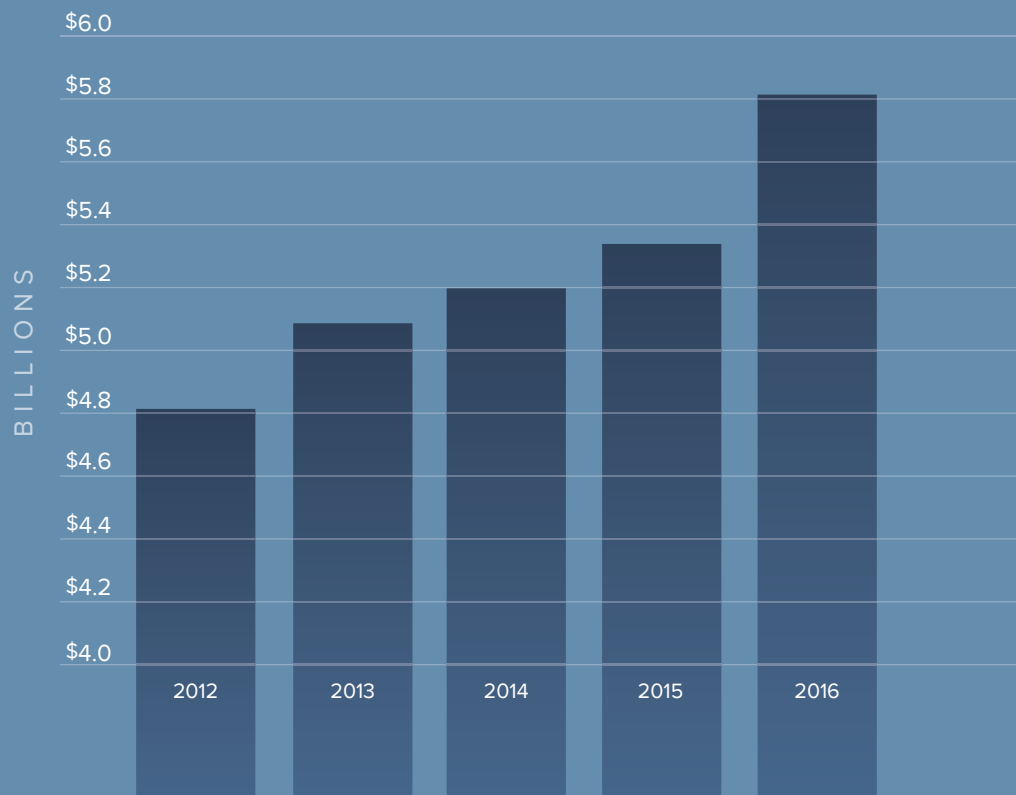
Low Financial Leverage

\$5.8B of equity.

Over \$4B of capital in excess of regulatory requirements.

No long-term debt.

Equity





Dear Fellow Shareholders:

In 2016 our relentless advance to attract more individual investors, hedge funds, financial advisors and introducing brokers to our platform continued unabated – in fact, at a slightly higher rate of growth than the year before. The total number of accounts managed on our platform increased by 16%. The total amount of assets under management was up by 27%.

What does 2017 look like?

With the increasing momentum we are experiencing, there is every reason to believe that our growth rate in 2017 can exceed last year's. Nevertheless, our business is subject to an all important factor, and that is our client's sense of well-being. Regardless of where our clients reside in the various geographic areas we serve, their confidence in both the local, regional or global political and economic landscape drives their level of economic activity.

Up until this year, these political and economic trends, whether constructive or retardant to investment activity, were, at least, fairly predictable. For example, over the last decade, many of the former Communist countries, by varying means, have been moving towards free markets with their citizens enjoying greater economic freedom in their lives. This trend translated into considerable increases in investing activity in these countries. Meanwhile, Westerners, in recent years, have demonstrated lower levels of confidence in their governments and their economies with the attendant suppression of investment activity relative to potential.

This lack of confidence has been justified as EU and US bureaucrats tied their countries' economies in knots with millions of pages of regulations, driving towards a Western version of a centrally governed economy, while the East was loosening the ropes.

The sweeping Republican victory in the US and Brexit will bring a sudden jolt to these trends. New leadership will try to bring quickening economic activity by simplifying and reducing taxes, removing stifling regulations and reawakening the entrepreneurial spirit – provided that society is not overwhelmed by a widening political divide. This uncertainty will prevail until President Trump and the world figure each other out and come to an understanding of what to expect from one another.

While people may say things they do not really believe to sound enlightened or sophisticated, they will not buy stocks unless they truly expect a favorable economic environment. Based on market prices at the end of February, we must conclude that the majority of investors expect that one way or another, the Republican agenda will be implemented. The historically nearly all-time low volatility priced into the options markets provides further proof that this expectation is widespread and stable.

We have no reason to disagree with this forecast.

With a positive view to the future, we have enhanced our software development and customer service capabilities, embarking on new projects, and strengthening our presence and workforce around the world.

Put together, we look forward to this coming year with enthusiasm and solid plans, confident that 2017 will be the best year ever for our brokerage business.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas Peterffy". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Thomas Peterffy
Chairman, Chief Executive Officer

Interactive Brokers Group, Inc.

2016 Financial Information
Form 10-K

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the year ended December 31, 2016

Commission File Number: 001-33440

INTERACTIVE BROKERS GROUP, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

30-0390693
(I.R.S. Employer
Identification No.)

One Pickwick Plaza
Greenwich, Connecticut 06830
(Address of principal executive office)

(203) 618-5800
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of the each exchange on which registered
Common Stock, par value \$.01 per share	The NASDAQ Stock Market LLC (NASDAQ Global Select Market)

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the securities act. Yes No

Indicate by check mark whether the registrant is not required to file reports pursuant to Section 13 or 15(d) of the 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 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 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 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 whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

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 the voting and non-voting common equity stock held by non-affiliates of the registrant was approximately \$2,292,096,015 computed by reference to the \$35.40 closing sale price of the common stock on the NASDAQ Global Select Market, on June 30, 2016, the last business day of the registrant's most recently completed second fiscal quarter.

As of February 24, 2017, there were 67,984,973 shares of the issuer's Class A common stock, par value \$0.01 per share, outstanding and 100 shares of the issuer's Class B common stock, par value \$0.01 per share, outstanding.

Documents Incorporated by Reference: Portions of Registrant's definitive proxy statement for its 2017 annual meeting of shareholders are incorporated by reference in Part III of this Form 10-K.

ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2016

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

We have included or incorporated by reference in this Annual Report on Form 10-K, and from time to time our management may make statements that may constitute “forward-looking statements” within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are not historical facts, but instead represent only our beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside our control. These statements include statements other than historical information or statements of current condition and may relate to our future plans and objectives and results, among other things, and may also include our belief regarding the effect of various legal proceedings, as set forth under “Legal Proceedings” in Part I, Item 3 of this Annual Report on Form 10-K, as well as statements about the objectives and effectiveness of our liquidity policies, statements about trends in or growth opportunities for our businesses, in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part II, Item 7 of this Annual Report on Form 10-K. By identifying these statements for you in this manner, we are alerting you to the possibility that our actual results may differ, possibly materially, from the anticipated results indicated in these forward-looking statements. Important factors that could cause actual results to differ from those in the forward-looking statements include, among others, those discussed below and under “Risk Factors” in Part I, Item 1A of this Annual Report on Form 10-K and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part II, Item 7 of this Annual Report on Form 10-K.

Factors that could cause actual results to differ materially from any future results, expressed or implied, in these forward-looking statements include, but are not limited to, the following:

- general economic conditions in the markets where we operate;
- increased industry competition and downward pressures on bid/offer spreads and electronic brokerage commissions;
- risks inherent to the electronic market making and brokerage businesses;
- implied versus actual price volatility levels of the products in which we make markets;
- the general level of interest rates;
- failure to protect or enforce our intellectual property rights in our proprietary technology;
- our ability to keep up with rapid technological change;
- system failures and disruptions;
- non-performance of third-party vendors;
- conflicts of interest and other risks due to our ownership and holding company structure;
- the loss of key executives and failure to recruit and retain qualified personnel;
- the risks associated with the expansion of our business;
- our possible inability to integrate any businesses we acquire;
- compliance with laws and regulations, including those relating to the securities industry; and
- other factors discussed under “Risk Factors” in Part I, Item 1A of this Annual Report on Form 10-K or elsewhere in this Annual Report on Form 10-K.

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 Annual Report on Form 10-K.

PART I

ITEM 1. BUSINESS

Overview

Interactive Brokers Group, Inc. (“IBG, Inc.” or the “Company”) is an automated global electronic broker and market maker. We custody and service accounts for hedge and mutual funds, registered investment advisors, proprietary trading groups, introducing brokers and individual investors. We specialize in routing orders while striving to achieve best executions and processing trades in securities, futures, foreign exchange instruments, bonds and mutual funds on more than 120 electronic exchanges and market centers around the world. In the United States (“U.S.”), we conduct our business primarily from our headquarters in Greenwich, Connecticut and from Chicago, Illinois. Abroad, we conduct our business through offices located in Canada, England, Switzerland, Liechtenstein, India, China (Hong Kong and Shanghai), Japan and Australia. As of December 31, 2016 we had 1,204 employees worldwide.

IBG, Inc. is a holding company and our primary assets are our ownership of approximately 16.6% of the membership interests of IBG LLC (the “Group”), the current holding company for our businesses. We are the sole managing member of IBG LLC. On May 3, 2007, IBG, Inc. priced its initial public offering (the “IPO”) of shares of common stock. In connection with the IPO, IBG, Inc. purchased 10.0% of the membership interests in IBG LLC and began to consolidate IBG LLC’s financial results into its financial statements.

When we use the terms “we,” “us,” and “our,” we mean IBG LLC and its subsidiaries for periods prior to the IPO, and IBG, Inc. and its subsidiaries (including IBG LLC) for periods from and after the IPO. Unless otherwise indicated, the term “common stock” refers to the Class A common stock of IBG, Inc.

We are a successor to the market making business founded by our Chairman and Chief Executive Officer, Mr. Thomas Peterffy, on the floor of the American Stock Exchange in 1977. Since our inception, we have focused on developing proprietary software to automate broker-dealer functions. During that time, we have been a pioneer in developing and applying technology as a financial intermediary to increase liquidity and transparency in the capital markets in which we operate. The proliferation of electronic exchanges in the last 26 years has provided us with the opportunity to integrate our software with an increasing number of exchanges and market centers into one automatically functioning, computerized platform that requires minimal human intervention. Over three decades of developing our automated trading platforms and our automation of many middle and back office functions have allowed us to become one of the lowest cost providers of broker-dealer services and significantly increase the volume of trades we handle.

Our activities are divided into two principal business segments: (1) electronic brokerage and (2) market making:

- As a direct market access broker, we serve the customers of both traditional brokers and prime brokers. We provide our customers with an advanced order management, trade execution and portfolio management platform at a very low cost. Our customers can simultaneously access many financial markets worldwide and trade across multiple asset classes (stocks, options, futures, foreign exchange (“forex”), bonds and mutual funds) denominated in 23 different currencies, on one screen, from a single account based in any major currency. Our large financial advisor and broker-dealer customers may “white brand” our trading interface (i.e., make our trading interface available to their customers without referencing our name), or they can select from among our modular functionalities, such as order routing, trade reporting or clearing on specific products or exchanges where they may not have up-to-date technology to offer their customers a comprehensive, global range of services and products. The emerging

complexity of multiple market centers provided us with the opportunity of building and continuously adapting our order routing software to secure excellent execution prices for our customers.

- As a market maker, we provide continuous bid and offer quotations on over one million securities and futures products listed on electronic exchanges around the world. Our quotes are driven by proprietary mathematical models that assimilate market data and reevaluate our outstanding quotes many times per second. Unlike firms that trade over-the-counter (“OTC”) derivative products, our business creates liquidity and transparency on electronic exchanges. In the past several years our market making business has suffered from competitive pressures and, along with the rapid increase in our electronic brokerage business, its significance continues to diminish.

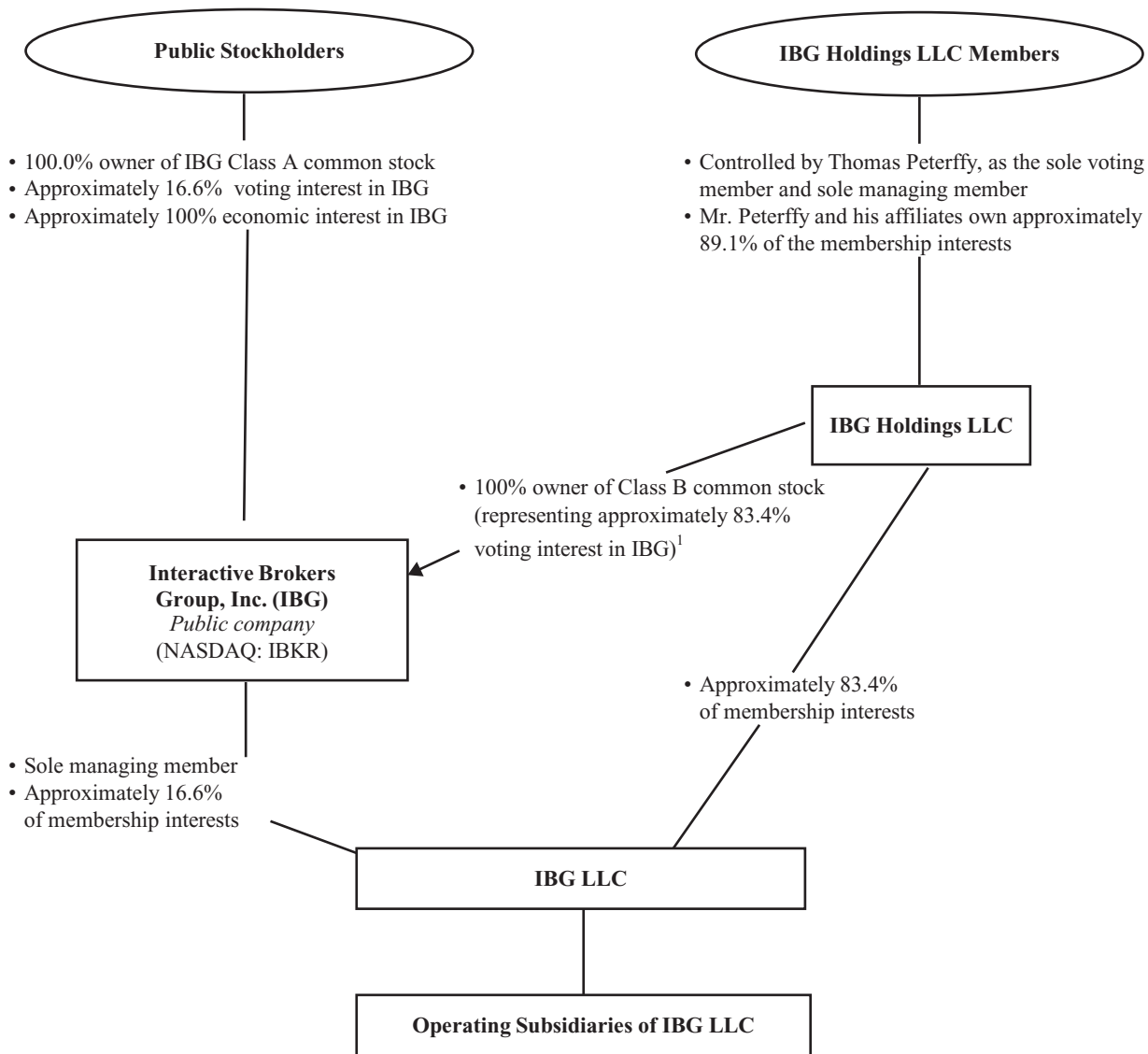
Our electronic brokerage and market making businesses are complementary. Both benefit from our combined scale and volume, as well as from our proprietary technology. Our brokerage customers benefit from the technology and market structure expertise developed in our market making business. The expense of developing and maintaining our unique technology, clearing, settlement, banking and regulatory structure required by any specific exchange or market center is shared by both of our businesses. These economies, in turn, enable us to provide lower transaction costs to our customers than our competitors. In addition, we believe we gain a competitive advantage by applying the software features we have developed for a specific product or market to newly-introduced products and markets over others who may have less automated facilities in one or both of our businesses or who operate only in a subset of the exchanges and market centers on which we operate. Our trading system contains unique architectural aspects that, together with our massive trading volume in markets worldwide, may impose a significant barrier to entry for firms wishing to compete in our specific businesses and permit us to compete favorably against our competitors. In addition, many of our regulatory and compliance functions have been built into our integrated market making, order routing and custodial systems.

Our internet address is www.interactivebrokers.com and the investor relations section of our web site is located at www.interactivebrokers.com/ir. We make available free of charge, on or through the investor relations section of our web site, this Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, related Interactive Data exhibits, 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, as well as proxy statements, registration statements, prospectus supplements, and Section 16 filings for our directors and officers, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the U.S. Securities and Exchange Commission (“SEC”). Also posted on our web site are our Bylaws, our Amended and Restated Certificate of Incorporation, charters for the Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee of our board of directors, our Accounting Matters Complaint Policy, our Whistle Blower Hotline, our Corporate Governance Guidelines and our Code of Business Conduct and Ethics governing our directors, officers and employees. Within the time periods required by SEC and the NASDAQ Stock Market (“NASDAQ”), we will post on our web site any amendment to the Code of Business Conduct and Ethics and any waiver applicable to any executive officer, director or senior financial officer. In addition, our web site includes information concerning purchases and sales of our equity securities by our executive officers and directors, as well as disclosure relating to certain non-GAAP financial measures (as defined in Regulation G) promulgated under the Securities Act of 1933, as amended (the “Securities Act”) and the Securities Exchange Act of 1934, as amended (the “Exchange Act”) that we may make public orally, telephonically, by webcast, by broadcast or by similar means from time to time.

Our Investor Relations Department can be contacted at Interactive Brokers Group, Inc., Eight Greenwich Office Park, Greenwich, Connecticut 06831, Attn: Investor Relations, telephone: 203-618-4070, e-mail: investor-relations@interactivebrokers.com.

Our Organizational Structure and Overview of Recapitalization Transactions

The graphic below illustrates our current ownership structure and reflects current ownership percentages. The graphic below does not display the subsidiaries of IBG LLC.



(1) In connection with redemption transactions in 2016, as of December 31, 2016, IBG Holdings LLC held for sale for the benefit of certain of its members 1,050,000 shares of IBG Class A common stock, representing an additional 0.26% of the voting interests in IBG. See “Use of Proceeds from Member Redemption” in Part II Item 5 of this Annual Report on Form 10-K.

Prior to the IPO, we had historically conducted our business through a limited liability company structure. Our primary assets are our ownership of approximately 16.6% of the membership interests of IBG LLC, the current holding company for our businesses, and our controlling interest and related contractual rights as the sole managing member of IBG LLC. The remaining approximately 83.4% of IBG LLC membership interests are held by IBG Holdings LLC (“Holdings”), a holding company that is owned by our founder, Chairman and Chief Executive Officer, Mr. Thomas Peterffy and his affiliates,

management and other employees of IBG LLC, and certain other members. The IBG LLC membership interests held by Holdings will be subject to purchase by us over time in connection with offerings by us of shares of our common stock. The below table shows the amount of IBG LLC membership interests held by IBG, Inc. and Holdings as of December 31, 2016.

	<u>IBG, Inc.</u>	<u>Holdings</u>	<u>Total</u>
Ownership %	16.6%	83.4%	100.0%
Membership interests	67,989,967	341,444,304	409,434,271

Purchases of IBG LLC membership interests, held by Holdings, by the Company are governed by the exchange agreement among us, IBG LLC, Holdings and the historical members of IBG LLC, (the “Exchange Agreement”), a copy of which was filed as an exhibit to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2009 and filed with the SEC on November 9, 2009. The Exchange Agreement, as amended June 6, 2012, provides that the Company may facilitate the redemption by Holdings of interests held by its members through the issuance of shares of common stock through a public offering in exchange for the interests in IBG LLC being redeemed by Holdings. The June 6, 2012 amendment (the “Amendment”), which was filed as an exhibit to our Form 8-K filed with the SEC on June 6, 2012, eliminated from the Exchange Agreement an alternative funding method, which provided that upon approval by the board of directors and by agreement of the Company, IBG LLC and Holdings, redemptions could be made in cash.

At the time of the Company’s IPO in 2007, three hundred sixty (360) million shares of authorized common stock were reserved for future sales and redemptions. From 2008 through 2010, Holdings redeemed 5,013,259 IBG LLC shares for a total of \$114 million, which redemptions were funded using cash on hand at IBG LLC. Upon cash redemption these IBG LLC shares were retired.

In June 2011, with the consent of Holdings and the Company (on its own behalf and acting as the sole managing member of IBG LLC), IBG LLC agreed to redeem certain membership interests from Holdings through the sale of common stock and to distribute the proceeds of such sale to the beneficial owners of such membership interests. On August 4, 2011, the Company filed a “shelf” Registration Statement on Form S-3 (File Number 333-176053) with the SEC for the issuance of additional shares in connection with Holdings requesting redemption of a portion of its member interests in IBG LLC. Under this shelf registration statement, in 2011, the Company issued 1,983,624 shares of common stock (with a fair value of \$29 million) to Holdings in exchange for an equivalent number of shares of member interests in IBG LLC.

On November 12, 2013, the Company filed a “shelf” Registration Statement on Form S-3 (File Number 333-192275) with the SEC for the issuance of additional shares in connection with Holdings requesting redemption of a portion of its member interests in IBG LLC. Under this shelf registration statement, from 2013 through 2016, the Company issued 10,659,871 shares of common stock (with a fair value of \$333 million) to Holdings in exchange for an equivalent number of shares of member interests in IBG LLC.

Segment Operating Results

		Year Ended December 31,		
		2016	2015	2014
		(in millions)		
Electronic Brokerage	Net revenues	\$1,239	\$1,097	\$ 952
	Non-interest expenses(1)	483	561	363
	Income before income taxes	<u>\$ 756</u>	<u>\$ 536</u>	<u>\$ 589</u>
	Pre-tax profit margin	61%	49%	62%
Market Making	Net revenues	\$ 190	\$ 298	\$ 284
	Non-interest expenses	146	168	170
	Income before income taxes	<u>\$ 44</u>	<u>\$ 130</u>	<u>\$ 114</u>
	Pre-tax profit margin	23%	44%	40%
Corporate(2)	Net revenues	\$ (33)	\$ (206)	\$ (193)
	Non-interest expenses	6	2	4
	Loss before income taxes	<u>\$ (39)</u>	<u>\$ (208)</u>	<u>\$ (197)</u>
	Pre-tax profit margin			
Total	Net revenues	\$1,396	\$1,189	\$1,043
	Non-interest expenses	635	731	537
	Income before income taxes	<u>\$ 761</u>	<u>\$ 458</u>	<u>\$ 506</u>
	Pre-tax profit margin	55%	39%	49%

(1) Electronic brokerage non-interest expenses includes an unusual loss of \$137 million in 2015. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part II Item 7 of this Annual Report on Form 10-K.

(2) The corporate segment includes corporate related activities, inter-segment eliminations and net gains and losses on positions held as part of our overall currency diversification strategy.

Financial information concerning our business segments for each of 2016, 2015, and 2014 is set forth in “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Electronic Brokerage,” and the consolidated financial statements and the notes thereto, which are in Part II, Items 7 and 8 of this Annual Report on Form 10-K.

Electronic Brokerage—Interactive Brokers

Electronic brokerage represented 87% of net revenues and 94% of income before income taxes from electronic brokerage and market making combined during 2016. We conduct our electronic brokerage business through our Interactive Brokers (“IB”) subsidiaries. As an electronic broker, we execute, clear and settle trades globally for both institutional and individual customers. Capitalizing on our proprietary technology originally developed for our market making business, IB’s systems provide our customers with the capability to monitor multiple markets around the world simultaneously and to execute trades electronically in these markets at a low cost in multiple products and currencies from a single trading account.

Since launching this business in 1993, we have grown to approximately 385 thousand institutional and individual brokerage customers. We provide our customers with what we believe to be one of the most effective and efficient electronic brokerage platforms in the industry. The following are key highlights of our electronic brokerage business:

- *Low Costs*—We provide our customers with among the industry’s lowest overall transaction costs in two ways. First, we offer among the lowest execution, commission and financing costs in the industry. Second, our customers benefit from our advanced routing of orders designed to achieve the best available trade price. In order to illustrate this advantage, we publish monthly brokerage metrics including our customers’ average net trade cost for Reg.-NMS stocks. In 2016, customers’ total all-in cost of executing and clearing U.S. Reg.-NMS stocks through IB, including brokerage commissions, regulatory and exchange fees and market impact, was 0.5 basis points of trade money, as measured against a daily volume-weighted average price (“VWAP”) benchmark.
- *Automated Risk Controls*—Throughout the trading day, we calculate margin requirements for each of our customers on a real-time basis across all product classes (stocks, options, futures, bonds, forex, and mutual funds) and across all currencies. Our customers are alerted to approaching margin violations and if a customer’s equity falls below what is required to support that customer’s margin, we attempt to automatically liquidate positions on a real-time basis to bring the customer’s account into margin compliance. This is done to protect IB, as well as the customer, from excessive losses.
- *IB Universal AccountSM*—From a single point of entry in one IB Universal AccountSM our customers are able to transact in 23 currencies, across multiple classes of tradable, primarily exchange-listed products, including stocks, options, futures, bonds, forex and mutual funds traded on more than 120 exchanges and market centers in 24 countries around the world seamlessly.
- *IB SmartRoutingSM*—Our customers benefit from our advanced order routing technology. IB SmartRoutingSM retains control of the customer’s order, continuously searches for the best available price and, unlike most other routers, dynamically routes and re-routes all or parts of a customer’s order to achieve optimal execution and among the lowest execution and commission costs in the industry. To highlight the quality of our price executions, we publish on our website independent measurements performed by a third party provider of transaction analysis to illustrate IB’s net price improvement versus the industry. We also offer Transaction Cost Analysis reporting to allow customers to track execution performance by criteria including trade date, trade price, underlying security and exchange.
- *Flexible and Customizable System*—Our platform is designed to provide an efficient customer experience, beginning with a highly automated account opening process and ending with a fast trade execution, with real-time position monitoring. Our sophisticated interface provides interactive real-time views of account balances, positions, profits or losses, buying power and “what-if” scenarios to enable our customers to more easily make informed investment decisions and trade efficiently. Our system is configured to remember the user’s preferences and is specifically designed for multi-screen systems. When away from their main workstations, customers are able to access their accounts through our IB WebTraderSM or MobileTraderSM interfaces.
- *Interactive AnalyticsSM and IB Option AnalyticsSM*—We offer our customers state-of-the-art tools, which include a customizable trading platform, advanced analytic tools and over 60 sophisticated order types and algorithms. We also provide a real-time option analytics window which displays values that reflect the rate of change of an option’s price with respect to a unit change in each of a number of risk dimensions.

- *Probability Lab*[®] (*Patent Pending*)—The Probability Lab provides customers with an intuitive, visual method to analyze market participants’ future stock price forecasts based on current option prices. This tool compares a customer’s stock price forecast versus that of the market, and scans the entire option universe for the highest Sharpe ratio multi-leg option strategies that take advantage of the customer’s forecast.
- *IB Risk Navigator*SM—We offer free to all customers our real-time market risk management platform that unifies exposure across multiple asset classes around the globe. The system is capable of identifying overexposure to risk by starting at the portfolio level and drilling down into successively greater detail within multiple report views. Report data is updated every ten seconds or upon changes to portfolio composition. Predefined reports allow the summarization of a portfolio from different risk perspectives, and allow views of Exposure, Value at Risk (“VaR”), Delta, Gamma, Vega and Theta, profit and loss and position quantity measures for the different portfolio views. The system also offers the customer the ability to modify positions through “what-if” scenarios that show hypothetical changes to the risk summary.
- *White Branding*—Our large financial advisor and broker-dealer customers may “white brand” our trading interface, account management and reports with their firm’s identity. Broker-dealer customers can also select from among our modular functionalities, such as order routing, trade reporting or clearing, on specific products or exchanges where they may not have up-to-date technology, in order to offer to their customers a complete global range of services and products.
- *Securities Financing Services*—We offer a suite of automated Stock Borrow and Lending tools, including our depth of availability, transparent rates, global reach and dedicated service representatives. Our Stock Yield Enhancement Program allows our customers to lend their fully-paid stock shares to us in exchange for cash collateral. In turn, we lend these stocks in exchange for collateral and earn stock lending fees. We pay our customers a rebate on the cash collateral generally equal to 50% of the income we earn from lending the shares. This allows customers holding fully-paid long stock positions to enhance their returns.
- *Investors’ Marketplace*—The Investors’ Marketplace is an expansion of our Money Manager Marketplace and our Hedge Fund Capital Introduction program. This program is the first electronic meeting place that brings together individual investors, financial advisors, money managers, fund managers, research analysts, technology providers, business developers and administrators, allowing them to interact to form connections and conduct business.
- *Trade Desk*—We offer broker-assisted trading through our block trade desk, which is ideal when customers are away from their computer, or if they just want another set of eyes watching their orders and updating them on market changes.
- *Model Portfolios*—Model Portfolios offer advisors an efficient and time-saving approach to investing customer assets. They allow advisors to create groupings of financial instruments based on specific investment themes, and then invest customer funds into these models.
- *Portfolio Builder*—Portfolio Builder allows our customers to set up an investment strategy based on research and rankings from top buy-side providers and fundamental data; use filters to define the universe of equities that will comprise their strategy and back-test their strategy using up to three years of historical performance; work in hypothetical mode to adjust the strategy until the historical performance meets their standards; and with the click of a button let the system create the orders to invest in a strategy and track its performance in their portfolio.

- *Greenwich Compliance*—Greenwich Advisor Compliance Services offers direct expert registration and start-up compliance services, as well as answers to basic day-to-day compliance questions for experienced investors and traders looking to start their own investment advisor firms. Greenwich Compliance professionals have regulatory and industry experience, and can help investment advisors trading on the IB platform meet their registration and compliance needs.
- *Covestor*—Covestor recruits registered financial advisors, vets them, analyzes their investment track records, and groups them by their risk profile. Retail investors who are interested in having their individual accounts robo-traded are grouped by their risk / return preferences, and members of matching groups are electronically introduced to each other. Retail investors can assign their accounts to be traded by one or more advisors. Covestor also offers to IB customers Smart Beta Portfolios which combine the benefits of actively managed fund stock selection techniques with passive ETF low cost automation to provide broad market exposure and potentially higher returns.

We are able to provide our customers with high-speed trade execution at low commission rates, in large part because of our proprietary technology. As a result of our advanced electronic brokerage platform, we attract sophisticated and active investors. No single customer represented more than 1% of our commissions and execution fees in 2016.

Market Making—Timber Hill

Market making represented 13% of net revenues and 6% of income before income taxes from electronic brokerage and market making combined during 2016. We conduct our market making business primarily through our Timber Hill (“TH”) subsidiaries. As a market maker on many of the world’s leading electronic exchanges, we provide liquidity by offering competitively tight bid/offer spreads over a broad base of over one million tradable, exchange-listed products, including equity derivative products, equity index derivative products, equity securities and futures. As principal, we commit our own capital and derive revenues or incur losses from the difference between the price paid when securities are bought and the price received when those securities are sold. Historically, our profits have been principally a function of transaction volume and price volatility of electronic exchange-traded products rather than the direction of price movements. Other factors, including the ratio of actual to implied volatility and shifts in foreign currency exchange rates, can also have a meaningful impact on our results, as described further in “Business Environment” in Part II, Item 7 of this Annual Report on Form 10-K.

Our strategy is to calculate quotes at which supply and demand for a particular security are likely to be in balance a few seconds ahead of the market and execute small trades at tiny but favorable differentials. Because we provide continuous bid and offer quotations and we are continuously both buying and selling quoted securities, we may have either a long or a short position in a particular product at a given point in time. As a matter of practice, we will generally not take portfolio positions in either the broad market or the financial instruments of specific issuers in anticipation that prices will either rise or fall. Our entire portfolio is evaluated many times per second and continuously rebalanced throughout the trading day, thus minimizing the risk of our portfolio at all times. This real-time rebalancing of our portfolio, together with our real-time proprietary risk management system, enables us to curtail risk and to be profitable in both up-market and down-market scenarios. Our quotes are based on our proprietary model rather than customer order flow, and we believe that this approach provides us with a competitive advantage.

We are a market leader in exchange-traded equity options and equity-index options and futures. Together with our electronic brokerage customers, in 2016 we accounted for approximately 7.9% of exchange-listed equity options traded worldwide according to data received from exchanges worldwide. Our ability to make markets in such a large number of exchanges and market centers simultaneously around the world is one of our core strengths and has contributed to the large volumes in our market making business. We engage in market making operations in North America, Europe and in the Asia/Pacific regions as described below.

North American Market Making Activities. Our U.S. market making activities are conducted through Timber Hill LLC (“TH LLC”), a SEC-registered securities broker-dealer that conducts market making in equity derivative products, equity index derivative products and equity securities. Since its inception in 1982, TH LLC has grown to become one of the largest listed options market makers in the U.S. As of December 31, 2016, TH LLC held specialist, primary market maker or lead market maker designations in options on approximately 940 underlying securities listed in the U.S. TH LLC is a member of the BOX Options Exchange LLC, BATS BZX Exchange, Inc., Chicago Board Options Exchange, Inc., Chicago Mercantile Exchange, Chicago Board of Trade, New York Mercantile Exchange, COMEX, International Securities Exchange, NYSE AMEX Options Exchange, NYSE Arca Options Exchange, NYSE MKT LLC, OneChicago LLC, The NASDAQ Stock Market LLC, NASDAQ BX, Inc. and NASDAQ PHLX LLC. TH LLC also conducts market making activities in Mexico at Bolsa Mexicana de Valores (BMV) and MexDer, a derivatives subsidiary of BMV. We conduct market making activities in Canada through our Canadian subsidiary, Timber Hill Canada Company (“THC”) at the Toronto Stock Exchange and Canadian Derivatives Exchange Bourse de Montreal Inc. In addition, we participate in stock trading at various notable Electronic Communications Networks (“ECNs”) in both the U.S. and Canada.

European, Asian and Australian Market Making Activities. Our European, Asian, and Australian market making subsidiaries, the largest of which is Timber Hill Europe AG (“THE”), conduct operations in 19 countries, comprising the major securities markets in these regions.

We began our market making operations in Europe in 1990. In Germany and Switzerland, we have been among the largest equity options market makers in terms of volume on Eurex, one of the world’s largest futures and options exchanges, which is wholly owned by Deutsche Börse AG. We have also been active in trading German stocks and warrants as a member of XETRA, the German electronic stock trading system, and the Frankfurt and Stuttgart stock exchanges; and in Switzerland as a member of the SIX Swiss Exchange. Our other European operations are conducted on the London Stock Exchange; the Wiener Börse AG; the Euronext exchanges in Amsterdam, Paris, Brussels and London; NASDAQ OMX Nordic exchanges in Sweden, Finland and Denmark; the MEFF and Bolsa de Valores Madrid in Spain; the IDEM and Borsa Italiana S.p.A. in Milan.

Since 1995, we have conducted market making operations in Hong Kong. Our Hong Kong subsidiary, Interactive Brokers Hong Kong Limited (formerly Timber Hill Securities Hong Kong Ltd), is a member of the cash and derivatives markets of the Hong Kong Exchanges. Since 1997, we have conducted operations in Australia. Our Australian subsidiary, Timber Hill Australia Pty Ltd (“THA”), is a member of the Australian Securities Exchange, and routes orders for its trading on ASX 24 through its affiliate, Interactive Brokers LLC (“IB LLC”). We commenced trading in Japan in 2002, Singapore in 2004 and Taiwan in 2007. In 2008, we began our market making operation and, subsequently, brokerage activities in India through our subsidiary, Interactive Brokers (India) Private Limited (“IBI”), which is a member of the National Stock Exchange of India Ltd. and the Bombay Stock Exchange.

Most of the above trading activities take place on exchanges and all securities and commodities that we trade are cleared by exchange owned or authorized clearing houses. High frequency traders (“HFTs”) and others who compete with us but do not regularly provide liquidity have put our market making operations under pressure and, along with the rapid increase in our electronic brokerage business, the relative significance of market making to our business has diminished.

Technology

Our proprietary technology is the key to our success. We built our business on the belief that a fully computerized market making system that could integrate pricing and risk exposure information quickly and continuously would enable us to make markets profitably in many different financial instruments simultaneously. We believe that integrating our system with electronic exchanges and market centers results in transparency, liquidity and efficiencies of scale. Together with the IB SmartRoutingSM system and our low commissions, these features reduce overall transaction costs to our customers and, in turn, increases our transaction volume and profits. Over the past 39 years, we have developed an integrated trading system and communications network and have positioned our company as an efficient conduit for the global flow of risk capital across asset and product classes on electronic exchanges around the world, permitting us to have one of the lowest cost structures in the industry. We believe that developing, maintaining and continuing to enhance our proprietary technology provides us and our customers with the competitive advantage of being able to adapt quickly to the changing environment of our industry and to take advantage of opportunities presented by new exchanges, products or regulatory changes before our competitors.

The quotes that we provide as market makers are driven by proprietary mathematical models that assimilate market data and re-evaluate our outstanding quotes many times per second. Because our technology infrastructure enables us to process large volumes of pricing and risk exposure information rapidly, we are able to make markets profitably in securities with relatively low spreads between bid and offer prices. As market makers, we must ensure that our interfaces connect effectively and efficiently with each exchange and market center where we make markets and that they are in complete conformity with all the applicable rules of each local venue. Utilizing up-to-date computer and telecommunications systems, we transmit continually updated pricing information directly to exchange computer devices and receive trade and quote information for immediate processing by our systems. As a result, we are able to maintain more effective control over our exposure to price and volatility movements on a real-time basis than many of our competitors. This control is important, not only because our system must process, clear and settle a few hundred thousand market maker trades per day with a minimal number of errors, but also because the system monitors and manages the risk on the entire portfolio, which generally consists of more than five million open contracts distributed among many hundreds of thousands of different products. Using our system, which we believe affords an optimal interplay of decentralized trading activity and centralized risk management, we quote markets in over one million securities and futures products traded around the world.

In our electronic brokerage business, our proprietary technology infrastructure enables us to provide our customers with the ability to execute trades at among the lowest commission costs in the industry. Additionally, our customers benefit from real-time systems optimization for our market making business. Customer trades are both automatically captured and reported in real time in our system. Our customers trade on more than 120 exchanges and market centers in 24 countries around the world. All of these exchanges are partially or fully electronic, meaning that a customer can buy or sell a product traded on that exchange via an electronic link from his or her computer terminal through our system to the exchange. We offer our products and services through a global communications network that is designed to provide secure, reliable and timely access to the most current market information. We provide our customers with a variety of means to connect to our brokerage systems, including dedicated point-to-point data lines, virtual private networks and the Internet.

Specifically, our customers receive worldwide electronic access connectivity through our Trader Workstation (our real-time Java-based trading platform), our proprietary Application Programming Interface (“API”), and/or industry standard Financial Information Exchange (“FIX”) connectivity. Customers who want a professional quality trading application with a sophisticated user interface utilize our Trader Workstation, which can be accessed through a desktop or variety of mobile devices. Customers interested in developing program trading applications in MS-Excel, Java, Visual Basic or C++ utilize our API. Large institutions with FIX infrastructure prefer to use our FIX solution for seamless integration of their existing order gathering and reporting applications.

While many brokerages, including some online brokerages, rely on manual procedures to execute many day-to-day functions, IB employs proprietary technology to automate, or otherwise facilitate, many of the following functions:

- account opening process;
- order routing and best execution;
- seamless trading across all types of securities and currencies around the world from one account;
- order types and analytical tools offered to customers;
- delivery of customer information, such as confirmations, customizable real-time account statements and audit trails;
- customer service; and
- risk management through automated real-time credit management of all new orders and margin monitoring.

Research and Development

One of our core strengths is our expertise in the rapid development and deployment of automated technology for the financial markets. Our core software technology is developed internally, and we do not generally rely on outside vendors for software development or maintenance. To achieve optimal performance from our systems, we are continuously rewriting and upgrading our software. Use of the best available technology not only improves our performance but also helps us attract and retain talented developers. Our software development costs are low because the employees who oversee the development of the software are the same employees who design the application, evaluate its performance, and participate along with our quality assurance professionals in our robust quality assurance testing procedures. The involvement of our developers in each of these processes enables us to add features and further refine our software rapidly.

Our internally-developed, fully integrated trading and risk management systems are unique and transact across all product classes on more than 120 electronic exchanges and market centers and in 23 currencies around the world. These systems have the flexibility to assimilate new exchanges and new product classes without compromising transaction speed or fault tolerance. Fault tolerance, or the ability to maintain system performance despite exchange malfunctions or hardware failures, is crucial to successful market making and ensuring best executions for brokerage customers. Our systems are designed to detect exchange malfunctions and quickly take corrective actions by re-routing pending orders.

Our company is technology-focused, and our management team is hands-on and technology-savvy. Most members of the management team write detailed program specifications for new applications. The development queue is prioritized and highly disciplined. Progress on programming initiatives is generally tracked on a bi-weekly basis by a steering committee consisting of senior executives. This enables us to prioritize key initiatives and achieve rapid results. All new business starts as a software

development project. We generally do not engage in any business that we cannot automate and incorporate into our platform prior to entering into the business.

The rapid software development and deployment cycle is achieved by our ability to leverage a highly integrated, object oriented development environment. The software code is modular, with each object providing a specific function and being reusable in multiple applications. New software releases are tracked and tested with proprietary automated testing tools. We are not hindered by disparate and often limiting legacy systems assembled through acquisitions. Virtually all of our software has been developed and maintained with a unified purpose.

For over 39 years, we have built and continuously refined our automated and integrated, real-time systems for world-wide trading, risk management, clearing and cash management, among others. 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. As a result, our trading systems are able to assimilate market data, recalculate and distribute streaming quotes for tradable products in all product classes many times per second.

Risk Management Activities

The core of our risk management philosophy is the utilization of our fully integrated computer systems to perform critical, risk-management activities on a real-time basis. In our market making business, our real-time integrated risk management system seeks to ensure that our overall positions are continuously hedged at all times, curtailing risk. In our electronic brokerage business, integrated risk management seeks to ensure that each customer's positions are continuously credit checked and brought into compliance if equity falls short of margin requirements, curtailing bad debt losses.

We actively manage our global currency exposure on a continuous basis by maintaining our equity in a basket of currencies we call the GLOBAL. We define the GLOBAL as consisting of fractions of a U.S. dollar, Euro, Japanese yen, British pound, Hong Kong dollar, Canadian dollar, Indian rupee, Swiss franc, Chinese renminbi, Australian dollar, Mexican peso, Swedish krona, Singapore dollar, Norwegian krone, and Danish krone. We currently transact business and are required to manage balances in each of these 15 currencies. The currencies comprising the GLOBAL and their relative proportions can change over time. For example, as a result of periodic assessments, we amended the composition of the GLOBAL in mid-2016 by adding the Chinese renminbi (specifically, the offshore currency known by the symbol (CNH)), and removing the South Korean won and Brazilian real. These changes went into effect at the close of business on June 30, 2016. Additional information regarding our currency diversification strategy is set forth in "Quantitative and Qualitative Disclosures about Market Risk" in Part II, Item 7A of this Annual Report on Form 10-K.

Electronic Brokerage

We calculate margin requirements for each of our customers on a real-time basis across all product classes (stocks, options, futures, forex, bonds and mutual funds) and across all currencies. Recognizing that our customers are experienced investors, we expect our customers to manage their positions proactively and we provide tools to facilitate our customers' position management. However, if a customer's equity falls below what is required to support that customer's margin, we will automatically liquidate positions on a real-time basis to bring the customer's account into margin compliance. We do this to protect us, as well as the customer, from excessive losses. These systems further contribute to our low-cost structure. The entire credit management process is completely automated.

As a safeguard, all liquidations are displayed on custom built liquidation monitoring screens that are part of the toolset our technical staff uses to monitor performance of our systems at all times the markets around the world are open. In the event our systems absorb erroneous market data from exchanges, which prompts liquidations, risk specialists on our technical staff have the capability to halt liquidations that meet specific criteria. The liquidation halt function is highly restricted.

Our customer interface includes color coding on the account screen and pop-up warning messages to notify customers that they are approaching their margin limits. This feature allows customers to take action, such as entering margin reducing trades, to avoid having us liquidate their positions. These tools and real-time margining allow our customers to understand their trading risk at any moment of the day and help us maintain low commissions.

Market Making

We employ certain hedging and risk management techniques to protect us from a severe market dislocation. Our risk management policies are developed and implemented by our Chairman and our steering committee, which is comprised of senior executives of our various companies. Our strategy is to calculate quotes a few seconds ahead of the market and execute small trades at a tiny but favorable differential as a result. This strategy is made possible by our proprietary pricing model, which evaluates and monitors the risks inherent in our portfolio, assimilates market data and reevaluates the outstanding quotes in our portfolio many times per second. Our model automatically rebalances our positions throughout each trading day to manage risk exposures both on our options and futures positions and the underlying securities, and it will price the increased risk that a position would add to the overall portfolio into the bid and offer prices we post. Under risk management policies implemented and monitored primarily through our computer systems, reports to management, including risk profiles, profit and loss analysis and trading performance, are prepared on a real-time basis as well as daily and periodical bases. Although our market making is completely automated, the trading process and our risk are monitored by a team of individuals who, in real-time, observe various risk parameters of our consolidated positions. Our assets and liabilities are marked-to-market daily for financial reporting purposes and re-valued continuously throughout the trading day for risk management and asset/liability management purposes.

We trade primarily the options on stocks (and individual stocks) whose underlying equity market capitalization is greater than \$500 million. Throughout the trading day we produce online, real-time profit and loss, risk evaluation, activity and other management reports. Our systems compile a daily balance sheet and income statements for our accounting department to review and to reconcile to our trading system results and data from external sources.

The adaptability of our portfolio risk management system and our trading methods allow us to trade a large number of financial instruments across many markets using the same risk management system and similar trading methods.

Operational Controls

We have automated the full cycle of controls surrounding the market making and brokerage businesses. Key automated controls include the following:

- Our technical operations section continuously monitors our network and the proper functioning of each of our nodes (exchanges, internet service providers (“ISPs”), leased customer lines and our own data centers) around the world.

- Our real-time credit manager software provides pre and post-execution controls by:
 - testing every customer order to ensure that the customer's account holds enough equity to support the execution of the order, rejecting the order if equity is insufficient or directing the order to an execution destination without delay if equity is sufficient; and
 - continuously updating a customer account's equity and margin requirements and, if the account's equity falls below its minimum margin requirements, automatically issuing liquidating orders in a smart sequence designed to minimize the impact on account equity.
- Our market making system continuously evaluates over one million securities and futures products in which we provide bid and offer quotes and changes our bids and offers in such a way as to maintain an overall hedge and a low-risk profile. The speed of communicating with exchanges and market centers is maximized through continuous software and network engineering innovation, thereby allowing us to achieve real-time controls over market exposure.
- Our clearing system captures trades in real-time and performs automated reconciliation of trades and positions, corporate action processing, customer account transfer, options exercise, securities lending and inventory management, allowing us to effectively manage operational risk.
- Our accounting system operates with automated data feeds from clearing and banking systems, allowing us to produce financial statements for all parts of our business every day by mid-day on the day following trade date.
- Software developed to interface with the accounting and market making systems performs daily profit and loss reconciliations, which provide tight financial controls over market making functions.

Transaction Processing

Our transaction processing is automated over the full life cycle of a trade. Our market making software generates and disseminates to exchanges and market centers continuous bid and offer quotes on over one million tradable, exchange-listed products. Our fully automated smart router system searches for the best possible combination of prices available at the time a customer order is placed and immediately seeks to execute that order electronically or send it where the order has the highest possibility of execution at the best price.

At the moment a trade is executed, our systems capture and deliver this information back to the source, either the market making system or via the brokerage system to the customer, in most cases within a fraction of a second. Simultaneously, the trade record is written into our clearing system, where it flows through a chain of control accounts that allow us to reconcile trades, positions and money until the final settlement occurs. Our integrated software tracks other important activities, such as dividends, corporate actions, options exercises, securities lending, margining, risk management and funds receipt and disbursement.

IB SmartRoutingSM

IB SmartRoutingSM searches for the best destination price in view of the displayed prices, sizes and accumulated statistical information about the behavior of market centers at the time an order is placed, and IB SmartRoutingSM immediately seeks to execute that order electronically. Unlike other smart routers, IB SmartRoutingSM never relinquishes control of the order, and constantly searches for the best price. It continuously evaluates fast-changing market conditions and dynamically re-routes all or parts of the order seeking to achieve optimal execution. IB SmartRoutingSM represents each leg of a spread order independently and enters each leg at the best possible venue. IB SmartRouting AutorecoverySM re-routes a customer's U.S. options order in the case of an exchange malfunction, and we undertake

the risk of double executions. In addition, IB SmartRoutingSM checks each new order to see if it could be executed against any of its pending orders. As the system gains more users, this feature becomes more important for customers in a world of multiple exchanges, market centers and penny priced orders because it increases the possibility of best executions for our customers ahead of customers of other brokers. As a result of this feature, our customers have a greater chance of executing limit orders and can do so sooner than those who use other routers.

Clearing and Margining

Our activities in the U.S. are entirely self-cleared. We are a full clearing member of OCC (the Options Clearing Corporation), the Chicago Mercantile Exchange Clearing House (“CMECH”), The Depository Trust & Clearing Corporation and ICE Clear U.S.

Due to our large positions in broad based index products, we benefit from the cross-margin system maintained by OCC and CMECH. For example, if we hold a position in an OCC cleared product and have an offsetting position in a CMECH cleared product, the cross-margin computation takes both positions into account, thereby reducing the overall margin requirement. The reduced margin benefit proves especially useful during times of market stress, such as on days with large price movements when intra-day margin calls may be reduced or eliminated by the cross-margin calculation.

In addition, we are fully or partially self-cleared in Canada, Great Britain, Switzerland, France, Germany, Belgium, Austria, the Netherlands, Norway, Sweden, Denmark, Finland, India, Hong Kong, and Australia.

Customers

We established our electronic brokerage subsidiary, IB LLC, in 1993 to enhance the use of our global network of trading interfaces, exchange and clearinghouse memberships, and regulatory registrations assembled over the prior 16 years to serve our market making business. We realized that electronic access to market centers worldwide through our network could easily be utilized by the very same floor traders and trading desk professionals who, in the coming years, would be displaced by the conversion of exchanges from open outcry to electronic systems.

We currently service approximately 385 thousand cleared customer accounts. Our customers reside in over 190 countries around the world.

Our target customer is one that requires the latest in trading technology, worldwide access and expects low overall transaction costs. Our customers are mainly comprised of “self-service” individuals, former floor traders, trading desk professionals, electronic retail brokers, financial advisors who are comfortable with technology, banks that require global access, and hedge funds.

Our customers fall into three groups based on services provided: cleared customers, trade execution customers and wholesale customers. By offering portfolio margining and other institutional services, we have been able to persuade many of our trade execution hedge fund customers to utilize our cleared business solution, which benefits the hedge funds in terms of cost savings. Many prime brokers once offered increased leverage over Regulation T credit limitations and NYSE margin requirements through offshore entities and joint back office arrangements. Through portfolio margining, we are able to offer similar leverage with lower margin requirements that reflect the reduced risk of a hedged portfolio.

- **Cleared Customers:** We provide trade execution and clearing services to our cleared customers who are generally attracted to our low commissions, low financing rates, high interest paid and best price execution. From small market making groups and individual market makers, our cleared customer base has expanded over the years to include institutional and individual traders and investors, financial advisors and introducing brokers.

- **Trade Execution Customers:** We offer trade execution for customers who choose to clear with another prime broker or a custodian bank; these customers are able to take advantage of our low commissions for trade execution as well as our best price execution.
- **Wholesale Customers:** Our wholesale customers, which include banks and retail electronic brokers, are generally self-clearing. These customers count on us for our superior options and option/stock combination trade routing and execution and our ability to assist them in satisfying their regulatory requirements to provide best execution to their customers.

Our non-cleared customers include online brokers and increasing numbers of the customer trading units of U.S., Canadian and European commercial banks. These customers are attracted by our IB SmartRoutingSM technology as well as our direct access to stock, options, futures, forex and bond markets worldwide.

Our customers receive worldwide electronic access connectivity in one of three ways: the Trader Workstation via desktop or mobile device, our proprietary API, and/or industry standard FIX connectivity.

Employees and Culture

We take pride in our technology-focused company culture and embrace it as one of our fundamental strengths. We remain committed to improving our technology and we try to minimize corporate hierarchy to facilitate efficient communication among employees. We have assembled what we believe is a highly talented group of employees. As we grow, we expect to continue to provide significant rewards for our employees who provide substantial value to us and the world's financial markets.

As of December 31, 2016, we had 1,204 employees, of which 1,193 own shares of the Company either vested, unvested or both, all of whom were employed on a full-time basis. None of our employees are covered by collective bargaining agreements. We believe that our relations with our employees are good.

Competition

Electronic Brokerage

The market for electronic brokerage services is rapidly evolving and highly competitive. We believe that we fit neither within the definition of a traditional broker nor that of a traditional prime broker. Our primary competitors include offerings targeted to professional traders by large retail online brokers (such as TD Ameritrade's thinkorswim, E*TRADE's Pro business, and The Charles Schwab Corporation's StreetSmart Edge and optionsXpress businesses) and the prime brokerage and electronic brokerage arms of major commercial and investment banks and brokers (such as Goldman Sachs Electronic Trading (GSET), Morgan Stanley Electronic Trading (MSET), and JP Morgan Securities). We also encounter competition to a lesser extent from full commission brokerage firms, including Bank of America Merrill Lynch and Morgan Stanley Smith Barney, as well as other financial institutions, most of which provide online brokerage services. The electronic brokerage businesses of many of our competitors are relatively insignificant in the totality of their firms' business and many impose significant account equity minimums, which we do not. We provide access to a global range of products from a single IB Universal AccountSM and professional level executions and pricing, which positions us in competition with niche direct-access providers and prime brokers. In addition to offering low commissions and financing rates, we provide sophisticated order types and analytical tools that give a competitive edge to our customers.

Market Making

Historically, competition has come from registered market making firms which range from sole proprietors with very limited resources to large integrated broker-dealers. Today, our major competitors continue to be large broker-dealers, such as Goldman Sachs, Morgan Stanley, Citigroup, Barclays, and niche players such as Citadel, Susquehanna, Wolverine Trading, Group One Trading, IMC, and Optiver. Some of our competitors in market making are larger than we are and have captive order flow or purchase order flow.

The competitive environment for market makers has evolved considerably in the past several years, most notably with the rise in HFTs, which transact significant trading volume on electronic exchanges by using complex algorithms and high speed execution software that analyzes market conditions. HFTs that are not registered market makers operate with fewer regulatory restrictions and are able to move more quickly and trade more cheaply. This issue is currently an area of focus amongst regulators who are examining the practices of HFTs and their impact on market structure.

To compete successfully, we believe that we must have more sophisticated, versatile and robust software than our competitors. This is our primary focus, as contrasted with many of our competitors. With respect to these competitors, we maintain the advantage of having had much longer experience with the development and usage of proprietary electronic brokerage and market making systems. Market conditions that are difficult for other market participants often present us with the opportunities inherent in diminished competition. Our advantage is our expertise and decades of single-minded focus on developing our technology. This enables us to have a unique platform specializing strictly in electronic brokerage and market making.

Regulation

Our securities and derivatives businesses are extensively regulated by U.S. federal and state regulators, foreign regulatory agencies, numerous exchanges and self-regulatory organizations of which our subsidiaries are members. In the current era of heightened regulation of financial institutions, we expect to incur increasing compliance costs, along with the industry as a whole. Our approach has been to build many of our regulatory and compliance functions into our integrated market making, order routing and custodial systems.

Overview

As registered U.S. broker-dealers, IB LLC and TH LLC are subject to the rules and regulations of the Exchange Act, and as members of various exchanges, we are also subject to such exchanges' rules and requirements. Additionally, IB LLC and TH LLC are subject to the Commodity Exchange Act and rules promulgated by the Commodity Futures Trading Commission ("CFTC") and the various commodity exchanges of which they are members. We are also subject to the requirements of various self-regulatory organizations such as the Financial Industry Regulatory Authority ("FINRA") and the National Futures Association ("NFA"). Our foreign affiliates are similarly regulated under the laws and institutional framework of the countries in which they operate.

U.S. broker-dealers and futures commission merchants are subject to laws, rules and regulations that cover all aspects of the securities and derivatives business, including:

- sales methods;
- trade practices;
- use and safekeeping of customers' funds and securities;
- capital structure;

- risk management;
- record-keeping;
- financing of customers' purchases; and
- conduct of directors, officers and employees.

In addition, the businesses that we may conduct are limited by our agreements with and our oversight by regulators. Participation in new business lines, including trading of new products or participation on new exchanges or in new countries often requires governmental and/or exchange approvals, which may take significant time and resources. As a result, we may be prevented from entering new businesses that may be profitable in a timely manner, or at all.

As certain of our subsidiaries are members of FINRA, we are subject to certain regulations regarding changes in control of our ownership. FINRA Rule 1017 generally provides that FINRA approval must be obtained in connection with any transaction resulting in a change in control of a member firm. The FINRA defines control as ownership of 25% or more of the firm's equity by a single entity or person and would include a change in control of a parent company. As a result of these regulations, our future efforts to sell shares or raise additional capital may be delayed or prohibited by FINRA.

Net Capital Rule

The SEC, FINRA, CFTC and various other regulatory agencies within the U.S. have stringent rules and regulations with respect to the maintenance of specific levels of net capital by regulated entities. Generally, a broker-dealer's capital is net worth plus qualified subordinated debt less deductions for certain types of assets. The Net Capital Rule requires that at least a minimum part of a broker-dealer's assets be maintained in a relatively liquid form.

If these net capital rules are changed or expanded, or if there is an unusually large charge against our net capital, our operations that require the intensive use of capital would be limited. A large operating loss or charge against our net capital could adversely affect our ability to expand or even maintain these current levels of business, which could have a material adverse effect on our business and financial condition.

The U.S. regulators impose rules that require notification when net capital falls below certain predefined 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 net 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, the Net Capital Rule and certain FINRA rules impose requirements that may have the effect of prohibiting a broker-dealer from distributing or withdrawing capital and requiring prior notice to U.S. regulators and approval from FINRA for certain capital withdrawals.

As of December 31, 2016, aggregate excess regulatory capital for all of the operating companies was \$4.2 billion.

IB LLC and TH LLC are subject to the Uniform Net Capital Rule (Rule 15c3-1) under the Exchange Act and to the CFTC's minimum financial requirements (Regulation 1.17) under the Commodities Exchange Act; and THE is subject to the Swiss Financial Market Supervisory Authority eligible equity requirement. Additionally, Interactive Brokers Hong Kong Limited ("IBHK") is subject to the Hong Kong Securities and Futures Commission financial resource requirement; THA and Interactive Brokers Australia Pty Limited ("IBA") are subject to the Australian Securities Exchange liquid capital requirement; Timber Hill (Lichtenstein) AG is subject to the Financial Market Authority Liechtenstein eligible capital requirements; THC and Interactive Brokers Canada Inc. ("IBC") are subject to the

Investment Industry Regulatory Organization of Canada risk adjusted capital requirement; Interactive Brokers (U.K.) Limited (“IBUK”) is subject to the U.K. Financial Conduct Authority financial resources requirement; IBI is subject to the National Stock Exchange of India net capital requirements; and Interactive Brokers Securities Japan, Inc. (“IBSJ”) is subject to the Japanese Financial Supervisory Agency capital requirements.

The following table summarizes capital, capital requirements and excess regulatory capital:

	<u>Net Capital/ Eligible Equity</u>	<u>Requirement</u>	<u>Excess</u>
		(in millions)	
IB LLC	\$3,254	\$294	\$2,960
TH LLC	306	1	305
THE	577	174	403
Other regulated Operating Companies	659	96	563
	<u>\$4,796</u>	<u>\$565</u>	<u>\$4,231</u>

As of December 31, 2016, all of the operating companies were in compliance with their respective regulatory capital requirements. For additional information regarding our net capital requirements see Note 15 to the consolidated financial statements in Part II, Item 8 of this Annual Report on Form 10-K.

Protection of Customer Assets

To conduct customer activities, IB LLC is obligated under rules mandated by its primary regulators, the SEC and the CFTC, to segregate cash or qualified securities belonging to customers. In accordance with the Securities Exchange Act of 1934, IB LLC is required to maintain separate bank accounts for the exclusive benefit of customers. In accordance with the Commodity Exchange Act, IB LLC is required to segregate all monies, securities and property received from commodities customers in specially designated accounts. IBC, IBUK, IBHK, IBSJ, IBI and IBA are subject to similar requirements within their respective jurisdictions.

To further enhance the protection of our customers’ assets, in 2011, IB LLC sought and received approval from FINRA to perform the customer reserve computation on a daily basis, instead of once per week. IB LLC has been performing daily computations since December 2011, along with daily adjustments of the money set aside in safekeeping for our customers.

Supervision and Compliance

Our Compliance Department supports and seeks to ensure proper operations of our market making and electronic brokerage businesses. The philosophy of the Compliance Department, and our company as a whole, is to build automated systems to try to eliminate manual steps in the compliance process and then to augment these systems with experienced staff members who apply their judgment where needed. We have built automated systems to handle wide-ranging compliance issues such as trade and audit trail reporting, financial operations reporting, enforcement of short sale rules, enforcement of margin rules and pattern day trading restrictions, review of employee correspondence, archival of required records, execution quality and order routing reports, approval and documentation of new customer accounts, and anti-money laundering and anti-fraud surveillance. In light of our automated operations and our automated compliance systems, we have a smaller and more efficient Compliance Department than many traditional securities firms. Nonetheless, we have increased the staffing in our Compliance Department over the past several years to meet the increased regulatory burdens faced by all industry participants.

Our electronic brokerage and market making companies have Chief Compliance Officers who report to the Company's CEO, General Counsel and its Audit and Compliance Committee. These Chief Compliance Officers, plus certain other senior staff members, are FINRA and NFA registered principals with supervisory responsibility over the various aspects of our businesses. Similar roles are undertaken by staff in certain non-U.S. locations as well. Staff members in the Compliance Department and in other departments of the firm are also registered with FINRA, NFA or other regulatory organizations.

Patriot Act and Increased Anti-Money Laundering ("AML") and "Know Your Customer" Obligations

Registered broker-dealers traditionally have been subject to a variety of rules that require that they "know their customers" and monitor their customers' transactions for potential suspicious activities. With the passage of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (the "Patriot Act"), broker-dealers are subject to even more stringent requirements. Likewise, the SEC, CFTC, foreign regulators, and the various exchanges and self-regulatory organizations, of which IB companies are members, have passed numerous AML and customer due diligence rules. Significant criminal and civil penalties can be imposed for violations of the Patriot Act, and significant fines and regulatory penalties for violations of other governmental and self-regulatory organization AML rules.

As required by the Patriot Act and other rules, we have established comprehensive anti-money laundering and customer identification procedures, designated AML compliance officers, trained our employees and conducted independent audits of our programs. Our anti-money laundering screening is conducted using a mix of automated and manual reviews and has been structured to comply with regulations in various jurisdictions. We collect required information through our new account opening process and screen accounts against databases for the purposes of identity verification and for review of negative information and appearance on government lists, including the Office of Foreign Assets and Control, Specially Designated Nationals and Blocked Persons lists. Additionally, we have developed methods for risk control and continue to add upon specialized processes, queries and automated reports designed to identify money laundering, fraud and other suspicious activities.

Dodd-Frank Reform Act

The Dodd-Frank Wall Street Reform and Consumer Protection Act imposes strict reporting and disclosure requirements on the financial services industry. We have enhanced the evidence of our supervisory review of controls over financial reporting and Management continues to monitor accounting and regulatory rulemaking developments for their potential effect on our financial statements and internal controls over financial reporting.

Business Continuity Planning

Federal regulators and industry self-regulatory organizations have passed a series of rules in the past several years requiring regulated firms to maintain business continuity plans that describe what actions firms would take in the event of a disaster (such as a fire, natural disaster or terrorist incident) that might significantly disrupt operations. We have developed business continuity plans that describe steps that we and our employees would take in the event of various scenarios. We have built a backup site for certain key operations at our Chicago facilities that would be utilized in the event of a significant outage at our Greenwich headquarters. In addition, we have strengthened the infrastructure at our Greenwich headquarters and have built redundancy of systems so that certain operations can be handled from multiple offices. We continually evaluate opportunities to further our business continuity planning efforts.

Foreign Regulation

Our international subsidiaries are subject to extensive regulation in the various jurisdictions where they have operations. The most significant of our international subsidiaries are: IBC and THC, registered to do business in Canada as an investment dealer and securities dealer, respectively; IBUK, registered to do business in the U.K. as a broker; THE, registered to do business in Switzerland as a securities dealer; IBI, registered to do business in India as a stock broker; IBHK, registered to do business in Hong Kong as a securities dealer; THA, registered to do business in Australia as a securities dealer and futures broker; IBA, registered to do business in Australia as a securities dealer and futures broker; and IBSJ, registered in Japan as a financial instruments firm with the Kanto Regional Finance Bureau and the Financial Supervisory Agency.

In Canada, both THC and IBC are subject to the Investment Industry Regulatory Organization of Canada (“IIROC”) risk adjusted capital requirement. In the United Kingdom, IBUK is subject to the U.K Financial Conduct Authority financial resources requirement. In Switzerland, THE is subject to the Swiss Financial Market Supervisory Authority eligible equity requirement. In India, IBI is subject to the National Stock Exchange and Bombay Stock Exchange capital requirements. In Hong Kong, the Securities and Futures Commission (“SFC”) regulates our subsidiary, IBHK, as a securities dealer. The compliance requirements of the SFC include, among other things, net capital requirements and stockholders’ equity requirements. The SFC regulates the activities of the officers, directors, employees and other persons affiliated with IBHK and requires the registration of such persons. In Australia, both THA and IBA are subject to the Australian Securities Exchange liquid capital requirement. In Japan, IBSJ is subject to the Financial Supervisory Agency, the Osaka Securities Exchange and the Tokyo Stock Exchange capital requirements.

Executive Officers and Directors of Interactive Brokers Group, Inc.

The following table sets forth the names, ages and positions of our current directors and executive officers:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Thomas Peterffy	72	Chairman of the Board of Directors and Chief Executive Officer
Earl H. Nemser	70	Vice Chairman and Director
Milan Galik	50	President and Director
Paul J. Brody	56	Chief Financial Officer, Treasurer, Secretary and Director
Thomas A. Frank	61	Executive Vice President and Chief Information Officer
Lawrence E. Harris	60	Director
Hans R. Stoll	77	Director—Retired 12/31/2016
Wayne Wagner	78	Director
Richard Gates	45	Director
Gary Katz	56	Director—Effective 1/4/2017

Thomas Peterffy—Mr. Peterffy has been at the forefront of applying computer technology to automate trading and brokerage functions since he emigrated from Hungary to the United States in 1965. In 1977, after purchasing a seat on the American Stock Exchange and trading as an individual market maker in equity options, Mr. Peterffy was among the first to apply a computerized mathematical model to continuously value equity option prices. By 1986, Mr. Peterffy developed and employed a fully integrated, automated market making system for stocks, options and futures. As this pioneering system extended around the globe, online brokerage functions were added and, in 1993, Interactive Brokers was formed.

Earl H. Nemser—Mr. Nemser has been our Vice Chairman since November 2006. Mr. Nemser has been the Vice Chairman of the Company since 1988 and also serves as a director and/or officer for various subsidiaries of IBG LLC. Mr. Nemser has served as Special Counsel to the law firm Dechert LLP since January 2005. Prior to such time Mr. Nemser served as Partner at the law firms of Swidler Berlin Shereff Friedman, LLP from 1995 to December 2004 and Cadwalader, Wickersham & Taft LLP prior to 1995. Mr. Nemser received a Bachelor of Arts degree in economics from New York University in 1967 and a Juris Doctor, magna cum laude, from Boston University School of Law in 1970.

Milan Galik—Mr. Galik joined us in 1990 as a software developer and has served as President of the Company and IBG LLC since October 2014. Mr. Galik served as Senior Vice President, Software Development of IBG LLC from October 2003 to October 2014. In addition, Mr. Galik has served as Vice President of Timber Hill LLC since April 1998 and serves as a member of the board of directors of the Boston Options Exchange. Mr. Galik received a Master of Science degree in electrical engineering from the Technical University of Budapest in 1990.

Paul J. Brody—Mr. Brody has been our Chief Financial Officer, Treasurer and Secretary since November 2006. Mr. Brody joined the Company in 1987 and has served as Chief Financial Officer of IBG LLC since December 2003. Mr. Brody serves as a director and/or officer for various subsidiaries of IBG LLC. From 2005 to 2012, Mr. Brody served as a director, and for a portion of the time as member Vice Chairman, of The Options Clearing Corporation, of which Timber Hill LLC and Interactive Brokers LLC are members. He also served as a director of Quadriserv Inc., an electronic securities lending platform provider, from 2009 to 2015. Mr. Brody received a Bachelor of Arts degree in economics from Cornell University in 1982.

Thomas A. Frank—Dr. Frank joined us in 1985 and has served since July 1999 as Executive Vice President and Chief Information Officer of Interactive Brokers LLC. In addition, Dr. Frank has served as Vice President of Timber Hill LLC since December 1990. Mr. Frank has served as a director of The Options Clearing Corporation, since 2015. Dr. Frank received a Ph.D. in physics from the Massachusetts Institute of Technology in 1985.

Lawrence E. Harris—Dr. Harris has been a director since July 2007. He is a professor of Finance and Business Economics at the University of Southern California, where he holds the Fred V. Keenan Chair in Finance at the Marshall School of Business. Dr. Harris also serves as trustee of the Clipper Fund, director of the Selected Funds, and as the research coordinator of the Institute for Quantitative Research in Finance. Dr. Harris formerly served as Chief Economist of the U.S. Securities and Exchange Commission. Dr. Harris earned his Ph.D. in Economics from the University of Chicago, and is a CFA charterholder. He is an expert in the economics of securities market microstructure and the uses of transactions data in financial research. He has written extensively about trading rules, transaction costs, index markets, and market regulation. Dr. Harris is also the author of the widely respected textbook *Trading and Exchanges: Market Microstructure for Practitioners*.

Hans R. Stoll—Dr. Stoll is The Anne Marie and Thomas B. Walker, Jr., Professor of Finance, Emeritus at the Owen Graduate School of Management, Vanderbilt University and founder of the Financial Markets Research Center. Dr. Stoll has published several books and more than 60 articles on numerous securities and finance related subjects. He is known for developing the put call parity relation and for his work in market microstructure. Dr. Stoll was on the faculty of the Wharton School from 1966 to 1980, at which time he joined the faculty at Vanderbilt. Dr. Stoll served as a member of the board of directors of The Options Clearing Corporation from 2005 to 2008 and he has been president of the American Finance Association. Dr. Stoll received his A.B. degree from Swarthmore College in 1961 and his M.B.A. and Ph.D. degrees from the Graduate School of Business of the University of Chicago in 1963 and 1966, respectively.

Wayne Wagner—Mr. Wagner has been a director since April 2014. He is a consultant on issues related to investment management and securities trading. He co-founded Plexus Group, now part of ITG, Inc., in 1986. Plexus provided trading evaluation and advisory services to money managers, brokerage firms and pension plan sponsors. He was also a founding partner of Wilshire Associates and served as the Chief Investment Officer of Wilshire Asset Management. He participated in the design of the operating, balancing and evaluation algorithms for the world's first operational index fund at Wells Fargo Bank. He is recognized as instrumental in pioneering processes to reduce the costs of trading. Mr. Wagner has authored several books on the topic of trading and investment management.

Richard Gates—Mr. Gates co-founded TFS Capital in 1997. TFS is an independent advisory firm that has been dedicated to the construction of quantitative models that are designed to identify market inefficiencies. As a portfolio manager at this firm, he oversees several hedge funds and mutual funds that take both long and short positions in equities and futures. At TFS, his focus is on trade execution, factor research and business development. Mr. Gates graduated from the University of Virginia in 1994 with a bachelor's degree in Chemical Engineering.

Gary Katz—Mr. Katz has been a director since January 2017. He was the President and Chief Executive Officer of the International Securities Exchange (“ISE”) and a co-founder of ISE. Mr. Katz was one of the principal developers of the unique options market structure—an auction market on an electronic platform—used by all three options exchanges; ISE, ISE Gemini and ISE Mercury and was named as inventor or co-inventor on six patents that the ISE received or applied for relating to its proprietary trading system and technology. He served on the Executive Board of Eurex and on the Board of Directors of The Options Clearing Corporation and chaired the Board's newly formed technology committee. Mr. Katz also served on the Board of Directors of Direct Edge. Mr. Katz graduated from New York University with a master's degree in Statistics with Distinction and a bachelor's degree from Queens College.

ITEM 1A. RISK FACTORS

We face a variety of risks that are substantial and inherent in our businesses, including market, liquidity, credit, operational, legal and regulatory. In addition to the risks identified elsewhere in this Annual Report on Form 10-K, the following risk factors apply to our business results of operations and financial condition:

Risks Related to Our Company Structure

Control by Mr. Thomas Peterffy of a majority of the combined voting power of our common stock may give rise to conflicts of interests and could discourage a change of control that other stockholders may favor, which could negatively affect our stock price, and adversely affect stockholders in other ways.

Mr. Thomas Peterffy, our founder, Chairman and Chief Executive Officer, and his affiliates beneficially own approximately 89.1% of the economic interests and all of the voting interests in Holdings, which owns all of our Class B common stock, representing approximately 83.4% of the combined voting power of all classes of our voting stock. As a result, Mr. Thomas Peterffy has the ability to elect all of the members of our board of directors and thereby to control our management and affairs, including determinations with respect to acquisitions, dispositions, material expansions or contractions of our business, entry into new lines of business, borrowings, issuances of common stock or other securities, and the declaration and payment of dividends on our common stock. In addition, Mr. Thomas Peterffy is able to determine the outcome of all matters requiring stockholder approval and will be able to cause or prevent a change of control of our company or a change in the composition of our board of directors and could preclude any unsolicited acquisition of our company. The concentration of ownership could discourage potential takeover attempts that other stockholders may favor and could

deprive stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company and this may adversely affect the market price of our common stock.

Moreover, because of Mr. Thomas Peterffy's substantial ownership, we are eligible to be and are, treated as a "controlled company" for purposes of the NASDAQ Marketplace Rules. As a result, we are not required by NASDAQ to have a majority of independent directors or to maintain Compensation and Nominating and Corporate Governance Committees composed entirely of independent directors to continue to list the shares of our common stock on The NASDAQ Global Select Market ("NASDAQ GS"). Our Compensation Committee is comprised of Messrs. Thomas Peterffy (Chairman of the Compensation Committee) and Earl H. Nemser (our Vice Chairman). Mr. Thomas Peterffy's membership on the Compensation Committee may give rise to conflicts of interests in that Mr. Thomas Peterffy is able to influence all matters relating to executive compensation, including his own compensation.

We are dependent on IBG LLC to distribute cash to us in amounts sufficient to pay our tax liabilities and other expenses.

We are a holding company and our primary assets are our approximately 16.6% equity interest in IBG LLC and our controlling interest and related rights as the sole managing member of IBG LLC and, as such, we operate and control all of the business and affairs of IBG LLC and are able to consolidate IBG LLC's financial results into our financial statements. We have no independent means of generating revenues. IBG LLC is treated as a partnership for U.S. federal income tax purposes and, as such, is not subject to U.S. federal income tax. Instead, its taxable income is allocated on a pro rata basis to Holdings and us. Accordingly, we incur income taxes on our proportionate share of the net taxable income of IBG LLC, and also incur expenses related to our operations. We intend to cause IBG LLC to distribute cash to its members in amounts at least equal to that necessary to cover their tax liabilities, if any, with respect to the earnings of IBG LLC. To the extent we need funds to pay such taxes, or for any other purpose, and IBG LLC is unable to provide such funds, it could have a material adverse effect on our business, financial condition and results of operations.

We are required to pay Holdings for the benefit relating to additional tax depreciation or amortization deductions we claim as a result of the tax basis step-up our subsidiaries received in connection with our IPO and certain subsequent redemptions of Holdings membership interests.

In connection with our IPO, we purchased interests in IBG LLC from Holdings for cash. In connection with redemptions of Holdings membership interests, we acquired additional interests in IBG LLC by issuing shares of Class A common stock in exchange for an equivalent number of shares of member interests in IBG LLC (the "Redemptions"). In addition, IBG LLC membership interests held by Holdings may be sold in the future to us and financed by our issuances of shares of our common stock. The initial purchase and the Redemptions did, and the subsequent purchases may, result in increases in the tax basis of the tangible and intangible assets of IBG LLC and its subsidiaries that otherwise would not have been available. Such increase will be approximately equal to the amount by which our stock price at the time of the purchase exceeds the income tax basis of the assets of IBG LLC underlying the IBG LLC interests acquired by us. These increases in tax basis will result in increased deductions in computing our taxable income and resulting tax savings for us generally over the 15 year period which commenced with the initial purchase. We have agreed to pay 85% of these tax savings, if any, to Holdings as they are realized as additional consideration for the IBG LLC interests that we acquire.

As a result of the IPO and the Redemptions by Holdings, the increase in the tax basis attributable to our interest in IBG LLC is \$1.2 billion. The tax savings that we would actually realize as a result of this increase in tax basis likely would be significantly less than this amount multiplied by our effective tax rate due to a number of factors, including the allocation of a portion of the increase in tax basis to foreign or non-depreciable fixed assets, the impact of the increase in the tax basis on our ability to use

foreign tax credits and the rules relating to the amortization of intangible assets, for example. Based on facts and assumptions as of December 31, 2016, including that subsequent purchases of IBG LLC interests will occur in fully taxable transactions, the potential tax basis increase resulting from the historical and future purchases of the IBG LLC interests held by Holdings could be as much as \$8.3 billion. The tax receivable agreement requires 85% of such tax savings, if any, to be paid to Holdings, with the balance to be retained by us. The actual increase in tax basis depends, among other factors, upon the price of shares of our common stock at the time of the purchase and the extent to which such purchases are taxable and, as a result, could differ materially from this amount. Our ability to achieve benefits from any such increase, and the amount of the payments to be made under the tax receivable agreement, depends upon a number of factors, as discussed above, including the timing and amount of our future income.

The tax basis of \$8.3 billion assumes that (a) all remaining IBG LLC membership interests held by Holdings are purchased by us and (b) such purchases in the future are made at prices that reflect the closing share price as of December 31, 2016. In order to have an \$8.3 billion tax basis, the offering price per share of Class A common stock in such future public offering will need to exceed the then current cost basis per share of Class A common stock by approximately \$23.73.

If either immediately before or immediately after any purchase or the related issuance of our stock, the Holdings members own or are deemed to own, in the aggregate, more than 20% of our outstanding common stock, then all or part of any increase in the tax basis of goodwill may not be amortizable and, thus, our ability to realize the annual tax savings that otherwise would have resulted if such tax basis were amortizable may be significantly reduced. Although the Holdings members are prohibited under the Exchange Agreement from purchasing shares of Class A common stock, grants of our common stock to employees and directors who are also members or related to members of Holdings and the application of certain tax attribution rules, such as among family members and partners in a partnership, could result in Holdings members being deemed for tax purposes to own shares of Class A common stock.

If the Internal Revenue Services (“IRS”) successfully challenges the tax basis increase, under certain circumstances, we could be required to make payments to Holdings under the tax receivable agreement in excess of our cash tax savings.

Future sales of our common stock in the public market could lower our stock price, and any additional capital raised by us through the sale of equity or convertible securities may dilute your ownership in us.

The members of Holdings have the right to cause the redemption of their Holdings membership interests over time in connection with offerings of shares of our common stock. We intend to sell additional shares of common stock in public offerings in the future, which may include offerings of our common stock to finance future purchases of IBG LLC membership interests which, in turn, will finance corresponding redemptions of Holdings membership interests. These offerings and related transactions are anticipated to occur at least annually into the future. The size and occurrence of these offerings may be affected by market conditions. We may also issue additional shares of common stock or convertible debt securities to finance future acquisitions or business combinations. We currently have approximately 68 million outstanding shares of common stock. Assuming no anti-dilution adjustments based on combinations or divisions of our common stock, the offerings referred to above could result in the issuance by us of up to an additional approximately 341 million shares of common stock. It is possible, however, that such shares could be issued in one or a few large transactions.

We cannot predict the size of future issuances of our common stock or the effect, if any, that future issuances and sales of shares of our common stock may have on the market price of our common stock. Sales of substantial amounts of our common stock (including shares issued in connection with an acquisition), or the perception that such sales could occur, may cause the market price of our common stock to decline.

Certain provisions in our amended and restated certificate of incorporation may prevent efforts by our stockholders to change our direction or management.

Provisions contained in our amended and restated certificate of incorporation could make it more difficult for a third party to acquire us, even if doing so might be beneficial to our stockholders. For example, our amended and restated certificate of incorporation authorizes our board of directors to determine the rights, preferences, privileges and restrictions of unissued series of preferred stock, without any vote or action by our stockholders. We could issue a series of preferred stock that could impede the completion of a merger, tender offer or other takeover attempt. These provisions may discourage potential acquisition proposals and may delay, deter or prevent a change of control of us, including through transactions, and, in particular, unsolicited transactions, that some or all of our stockholders might consider to be desirable. As a result, efforts by our stockholders to change our direction or management may be unsuccessful.

Risks Related to Our Business

Our business may be harmed by global events beyond our control, including overall slowdowns in securities trading.

Like other brokerage and financial services firms, our business and profitability are directly affected by elements that are beyond our control, such as economic and political conditions, broad trends in business and finance, changes in volume of securities and futures transactions, changes in the markets in which such transactions occur and changes in how such transactions are processed. A weakness in equity markets, such as a slowdown causing reduction in trading volume in U.S. or foreign securities and derivatives, has historically resulted in reduced transaction revenues and would have a material adverse effect on our business, financial condition and results of operations.

Because our revenues and profitability depend on trading volume, they are prone to significant fluctuations and are difficult to predict.

Our revenues are dependent on the level of trading activity on securities and derivatives exchanges in the U.S. and abroad. In the past, our revenues and operating results have varied significantly from period to period primarily due to the willingness of competitors to trade more aggressively by decreasing their bid/offer spreads and thereby assuming more risk in order to acquire market share, to movements and trends in the underlying markets, and to fluctuations in trading 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.

Our reliance on our computer software could cause us great financial harm in the event of any disruption or corruption of our computer software. We may experience technology failures while developing our software.

We rely on our computer software to receive and properly process internal and external data. 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 cause us great financial harm. To maintain our competitive advantage, our software is under continuous development. As we identify and enhance our software, there is risk that software failures may occur and result in service interruptions and have other unintended consequences.

Our business could be harmed by a systemic market event.

Some market participants could be overleveraged. In case of sudden, large price movements, such market participants may not be able to meet their obligations to brokers who, in turn, may not be able to meet their obligations to their counterparties. As a result, the financial system or a portion thereof could collapse, and the impact of such an event could be catastrophic to our business.

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

A substantial portion of our revenues and operating profits is derived from our trading as principal in our role as a market maker and specialist. We may incur trading losses relating to these activities since each primarily involves the purchase or sale of securities for our own account. In any period, we may incur trading losses in a significant number of securities for a variety of reasons including:

- price changes in securities;
- lack of liquidity in securities in which we have positions; and
- the required performance of our market making and specialist obligations.

These risks may limit or restrict our ability to either resell securities we purchased or to repurchase securities we sold. In addition, we may experience difficulty borrowing securities to make delivery to purchasers to whom we sold short, or lenders from whom we have borrowed. From time to time, we have large position concentrations in securities of a single issuer or issuers engaged in a specific industry or traded in a particular market. Such a concentration could result in higher trading losses than would occur if our positions and activities were less concentrated.

In our role as a market maker, we attempt to derive a profit from the difference between the prices at which we buy and sell, or sell and buy, securities. However, competitive forces often require us to match the quotes other market makers display and to hold varying amounts of securities in inventory. By having to maintain inventory positions, we are subjected to a high degree of risk. We cannot assure you that we will be able to manage such risk successfully or that we will not experience significant losses from such activities, which could have a material adverse effect on our business, financial condition and results of operations.

Reduced spreads in securities pricing, levels of trading activity and trading through market makers and/or specialists could harm our business.

Computer-generated buy/sell programs and other technological advances and regulatory changes in the marketplace may continue to tighten spreads on securities transactions. Tighter spreads and increased competition could make the execution of trades and market making activities less profitable. In addition, alternative trading systems such as ECNs are an alternative for individual and institutional investors, as well as broker-dealers, to avoid directing their trades through market makers, and could result in reduced revenues derived from our market making business.

We may incur losses in our market making activities in the event of failures of our proprietary pricing model.

The success of our market making business is substantially dependent on the accuracy of our proprietary pricing mathematical model, which continuously evaluates and monitors the risks inherent in our portfolio, assimilates market data and reevaluates our outstanding quotes many times per second. Our model is designed to automatically rebalance our positions throughout the trading day to manage risk exposures on our positions in options, futures and the underlying securities. In the event of a flaw in our pricing model and/or a failure in the related software, our pricing model may lead to unexpected and/or unprofitable trades, which may result in material trading losses.

The valuation of the financial instruments we hold 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 price 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. As a result, there may be large and occasionally anomalous swings in the value of our positions daily and, accordingly, in our earnings in any period. This is especially true on the last business day of each calendar quarter.

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

As market makers, we provide liquidity by buying from sellers and selling to buyers. Quite often, we trade with others who have different information than we do, and as a result, we may accumulate unfavorable positions preceding large price movements in companies. Should the frequency or magnitude of these events increase, our losses will likely increase correspondingly.

Rules governing specialists and designated market makers may require us to make unprofitable trades or prevent us from making profitable trades.

Specialists and designated market makers are granted certain rights and have certain obligations to “make a market” in a particular security. They agree to specific obligations to maintain a fair and orderly market. In acting as a specialist or designated market maker, we are subjected to a high degree of risk by having to support an orderly market. In this role, we may at times be required to make trades that adversely affect our profitability. In addition, we may at times be unable to trade for our own account in circumstances in which it may be to our advantage to trade, and we may be obligated to act as a principal when buyers or sellers outnumber each other. In those instances, we may take a position counter to the market, buying or selling securities to support an orderly market. Additionally, the rules of the markets which govern our activities as a specialist or designated market maker are subject to change. If these rules are made more stringent, our trading revenues and profits as specialist or designated market maker could be adversely affected.

We are subject to potential losses as a result of our clearing and execution activities.

As a clearing member firm providing financing services to certain of our brokerage customers, we are ultimately responsible for their financial performance in connection with various stock, options and futures transactions. Our clearing operations require a commitment of our capital and, despite safeguards implemented by our software, involve risks of losses due to the potential failure of our customers to perform their obligations under these transactions. If our customers default on their obligations, we remain financially liable for such obligations, and although these obligations are collateralized, we are subject to market risk in the liquidation of customer collateral to satisfy those obligations. There can be no assurance that our risk management procedures will be adequate. Any liability arising from clearing operations could have a material adverse effect on our business, financial condition and results of operations.

As a clearing member firm of securities and commodities clearing houses in the U.S. and abroad, we are also exposed to clearing member credit risk. Securities and commodities clearing houses require member firms to deposit cash and/or government securities to a clearing fund. If a clearing member defaults in its obligations to the clearing house in an amount larger than its own margin and clearing fund deposits, the shortfall is absorbed pro rata from the deposits of the other clearing members. Many clearing houses of which we are members also have the authority to assess their members for additional

funds if the clearing fund is depleted. A large clearing member default could result in a substantial cost to us if we are required to pay such assessments.

We may not pay dividends on our common stock at any time in the foreseeable future.

As a holding company for our interest in IBG LLC, we will be dependent upon the ability of IBG LLC to generate earnings and cash flows and distribute them to us so that we may pay any dividends to our stockholders. To the extent (if any) that we have excess cash, any decision to declare and pay dividends in the future will be made at the discretion of our board of directors and will depend on, among other things, our results of operations, financial conditions, cash requirement, contractual restrictions and other factors that our board of directors may deem relevant. In December 2010 and December 2012, special cash dividends were paid to holders of our common stock. Since the second quarter of 2011, we have declared and paid a quarterly cash dividend of \$0.10 per share. Although not required, we currently intend to pay quarterly dividends of \$0.10 per share to our common stockholders for the foreseeable future.

Regulatory and legal uncertainties could harm our business.

The securities and derivatives businesses are heavily regulated. Firms in financial service industries have been subject to an increasingly regulated environment over recent years, and penalties and fines sought by regulatory authorities have increased accordingly. This 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. Our broker-dealer subsidiaries are subject to regulations in the U.S. and abroad covering all aspects of their business. Regulatory bodies include, in the U.S., the SEC, FINRA, the Board of Governors of the Federal Reserve System, the Chicago Board Options Exchange, the Chicago Mercantile Exchange, the CFTC, and the NFA; in Canada, the Investment Industry Regulatory Organization of Canada and various Canadian securities commissions; in the United Kingdom, the Financial Conduct Authority; in Switzerland, the Swiss Financial Market Supervisory Authority; in India, the Securities and Exchange Board of India; in Hong Kong, the Securities and Futures Commission; in Australia, the Australian Securities and Investment Commission; and in Japan, the Financial Supervisory Agency and the Japan Securities Dealers Association. Our mode of operation and profitability may be directly affected by additional legislation changes in rules promulgated by various domestic and foreign government agencies and self-regulatory organizations that oversee our businesses, and changes in the interpretation or enforcement of existing laws and rules, including the potential imposition of transaction taxes. Noncompliance with applicable laws or regulations could result in sanctions being levied against us, including fines and censures, suspension or expulsion from a certain jurisdiction or market or the revocation or limitation of licenses. Noncompliance with applicable laws or regulations could adversely affect our reputation, prospects, revenues and earnings. In addition, changes in current laws or regulations or in governmental policies could adversely affect our business, financial condition and results of operations.

Domestic and foreign stock exchanges, other self-regulatory organizations and state and foreign securities commissions can censure, fine, issue cease-and-desist orders, suspend or expel a broker-dealer or any of its officers or employees. Our ability to comply with all applicable laws and rules is largely dependent on our internal system 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 and results of operations. To continue to operate and to expand our services internationally, we may 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.

Our future efforts to sell shares or raise additional capital may be delayed or prohibited by regulations.

As certain of our subsidiaries are members of FINRA, we are subject to certain regulations regarding changes in control of our ownership. FINRA Rule 1017 generally provides that FINRA approval must be obtained in connection with any transaction resulting in a change in control of a member firm. FINRA defines control as ownership of 25% or more of the firm's equity by a single entity or person and would include a change in control of a parent company. IBUK, THC, IBC, and IBHK are subject to similar change in control regulations promulgated by the FCA in the United Kingdom, the IIROC in Canada and the SFC in Hong Kong, respectively. As a result of these regulations, our future efforts to sell shares or raise additional capital may be delayed or prohibited. We may be subject to similar restrictions in other jurisdictions in which we operate.

We depend on our proprietary technology, and our future results may be impacted if we cannot maintain technological superiority in our industry.

Our success in the past has largely been attributable to our sophisticated proprietary technology that has taken many years to develop. We have benefited from the fact that the type of proprietary technology equivalent to that which we employ has not been widely available to our competitors. If our technology becomes more widely available to our current or future competitors for any reason, our operating results may be adversely affected. 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. The markets in which we compete are characterized by rapidly changing technology, evolving industry standards and changing trading systems, practices and techniques. Although we have been at the forefront of many of these developments in the past, we may not be able to keep up with these rapid changes in the future, develop new technology, realize a return on amounts invested in developing new technologies or remain competitive in the future.

The loss of our key employees would materially adversely affect our business.

Our key executives have substantial experience and have made significant contributions to our business, and our continued success is dependent upon the retention of our key management executives, as well as the services provided by our staff of trading system, technology and programming specialists and a number of other key managerial, marketing, planning, financial, technical and operations personnel. The loss of such key personnel could have a material adverse effect on our business. Growth in our business is dependent, to a large degree, on our ability to retain and attract such employees.

We are exposed to risks associated with our international operations.

During 2016, approximately 25% of our net revenues were generated by our operating companies outside the U.S. We are exposed to risks and uncertainties inherent in doing business in international markets, particularly in the heavily regulated brokerage 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; and difficulties in staffing, including reliance on newly hired local experts, and managing foreign operations. These risks could cause a material adverse effect on our business, financial condition and results of operations.

We do not have fully redundant systems. System failures could harm our business.

If our systems fail to perform, we could experience unanticipated disruptions in operations, slower response times or decreased customer service and customer satisfaction. Our ability to facilitate transactions successfully and provide high quality customer service also depends on the efficient and uninterrupted operation of our computer and communications hardware and software systems. Our service has experienced periodic system interruptions, which we believe will continue to occur from time to time. Our systems and operations also are vulnerable to damage or interruption from human error, natural disasters, power loss, telecommunication failures, break-ins, sabotage, computer viruses, intentional acts of vandalism and similar events. While we currently maintain redundant servers to provide limited service during system disruptions, we do not have fully redundant systems, and our formal disaster recovery plan does not include restoration of all services. For example, we have backup facilities at our disaster recovery site that enable us, in the case of complete failure of our main North America data center, to recover and complete all pending transactions, provide customers with access to their accounts to deposit or withdraw money, transfer positions to other brokers and manage their risk by continuing trading through the use of marketable orders. These backup services are currently limited to U.S. markets. We do not currently have separate backup facilities dedicated to our non-U.S. operations. It is our intention to provide for and progressively deploy backup facilities for our global facilities over time. In addition, we do not carry business interruption insurance to compensate for losses that could occur to the extent not required. Any system failure that causes an interruption in our service or decreases the responsiveness of our service could impair our reputation, damage our brand name and materially adversely affect our business, financial condition and results of operations.

Failure of third-party systems on which we rely could adversely affect our business.

We rely on certain third-party computer systems or third-party service providers, including clearing systems, exchange systems, Internet service, communications facilities and other facilities. Any interruption in these third-party services, or deterioration in their performance, could be disruptive to our business. If our arrangement with any third party is terminated, we may not be able to find an alternative source of systems support on a timely basis or on commercially reasonable terms. This could have a material adverse effect on our business, financial condition and results of operations.

We face competition in our market making activities.

In our market making activities, we compete with other firms based on our ability to provide liquidity at competitive prices and to attract order flow. These firms include registered market makers as well as HFTs that act as market makers. Both types of competitors range from sole proprietors with very limited resources to a few highly sophisticated groups which have substantially greater financial and other resources, including research and development personnel, 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 and to compete for market share generally. HFTs that are not registered market makers have certain advantages over registered market making firms that may allow them to bypass regulatory restrictions and trade more quickly and cheaply than registered market makers at some exchanges. We may not be able to compete effectively against HFTs or market makers with greater financial resources, and our failure to do so could materially and adversely affect our business, financial condition and results of operations. As in the past, we may in the future face enhanced competition, resulting in narrowing bid/offer spreads in the marketplace that may adversely impact our financial performance. This is especially likely if HFTs continue to receive advantages in capturing order flow or if others can acquire systems that enable them to predict markets or process trades more efficiently than we can.

Our direct market access clearing and non-clearing brokerage operations face intense competition.

With respect to our direct market access brokerage business, the market for electronic and interactive bidding, offering and trading services in connection with equities, options and futures is relatively new, rapidly evolving and intensely competitive. We expect competition to continue and intensify in the future. Our current and potential future competition principally comes from five categories of competitors:

- prime brokers who, in an effort to satisfy the demands of their customers for hands-on electronic trading facilities, universal access to markets, smart routing, better trading tools, lower commissions and financing rates, have embarked upon building such facilities and product enhancements;
- direct market access and online options and futures firms;
- direct market access and online equity brokers;
- software development firms and vendors who create global trading networks and analytical tools and make them available to brokers; and
- traditional brokers.

In addition, we compete with financial institutions, mutual fund sponsors and other organizations, many of which provide online, direct market access or other investing services. A number of brokers provide our technology and execution services to their customers, and these brokers will become our competitors if they develop their own technology. Some of our competitors in this area have greater name recognition, longer operating histories and significantly greater financial, technical, marketing and other resources than we have and offer a wider range of services and financial products than we do. Some of our competitors may also have an ability to charge lower commissions. We cannot assure you that we will be able to compete effectively or efficiently with current or future competitors. These increasing levels of competition in the online trading industry could significantly harm this aspect of our business.

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

We are exposed to substantial risks of liability under federal and state securities laws, other federal and state laws and court decisions, as well as rules and regulations promulgated by the SEC, the CFTC, the Federal Reserve, state securities regulators, self-regulatory organizations and foreign regulatory agencies. We are also subject to the risk of litigation and claims that may be without merit. We could incur significant legal expenses in defending ourselves against and resolving lawsuits or claims. An adverse resolution of any 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 an adverse effect on our business, financial condition and results of operations. See Part I, Item 3, “Legal Proceedings and Regulatory Matters.”

Any future acquisitions may result in significant transaction expenses, integration and consolidation risks and risks associated with entering new markets, and we may be unable to profitably operate our consolidated company.

Although our growth strategy has not focused historically on acquisitions, we may in the future engage in evaluations of potential acquisitions and new businesses. We may not have the financial resources necessary to consummate any acquisitions in the future or the ability to obtain the necessary funds on satisfactory terms. Any future acquisitions may result in significant transaction expenses and risks associated with entering new markets in addition to integration and consolidation risks. Because acquisitions historically have not been a core part of our growth strategy, we have no material

experience in successfully utilizing acquisitions. We may not have sufficient management, financial and other resources to integrate any such future acquisitions or to successfully operate new businesses and we may be unable to profitably operate our expanded company.

Internet-related issues may reduce or slow the growth in the use of our services in the future.

Critical issues concerning the commercial use of the Internet, such as ease of access, security, privacy, reliability, cost, and quality of service, remain unresolved and may adversely impact the growth of Internet use. If Internet usage continues to increase rapidly, the Internet infrastructure may not be able to support the demands placed on it by this growth, and its performance and reliability may decline. Although our larger institutional customers use leased data lines to communicate with us, our ability to increase the speed with which we provide services to consumers and to increase the scope and quality of such services is limited by and dependent upon the speed and reliability of our customers' access to the Internet, which is beyond our control. If periods of decreased performance, outages or delays on the Internet occur frequently or other critical issues concerning the Internet are not resolved, overall Internet usage or usage of our web based products could increase more slowly or decline, which could have a material adverse effect on our business, financial condition and results of operations.

Our computer infrastructure may be vulnerable to security breaches. Any such problems could jeopardize confidential information transmitted over the Internet, cause interruptions in our operations or cause us to have liability to third persons.

Our computer infrastructure is potentially vulnerable to physical or electronic computer break-ins, viruses and similar disruptive problems and security breaches. Any such problems or security breaches could cause us to have liability to one or more third parties, including our customers, and disrupt our operations. A party able to circumvent our security measures could misappropriate proprietary information or customer information, jeopardize the confidential nature of information transmitted over the Internet or cause interruptions in our operations. Concerns over the security of Internet transactions and the privacy of users could also inhibit the growth of the Internet or the electronic brokerage industry in general, particularly as a means of conducting commercial transactions. To the extent that our activities involve the storage and transmission of proprietary information such as personal financial information, security breaches could expose us to a risk of financial loss, litigation and other liabilities. Our estimated annual losses from reimbursements to customers whose accounts have been negatively affected by unauthorized access have historically been less than \$500,000 annually and effectively zero since the widespread introduction of our Secure Transaction Program, but instances of unauthorized access of customer accounts have been increasing recently on an industry-wide basis. Our current insurance program may protect us against some, but not all, of such losses. Any of these events, particularly if they (individually or in the aggregate) result in a loss of confidence in our company or electronic brokerage firms in general, could have a material adverse effect on our business, financial condition and results of operations.

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 primarily on trade secret, contract, copyright, patent and trademark laws to protect our proprietary technology. It is possible that third parties may copy or otherwise obtain and use our proprietary technology without authorization or otherwise infringe on our rights. We may also face claims of infringement that could interfere with our ability to use technology that is material to our business operations.

In the future, we may have to 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, any of which could negatively affect our business.

Our future success will depend on our response to the demand for new services, products and technologies.

The demand for market making services, particularly services that rely on electronic communications gateways, is characterized by:

- rapid technological change;
- changing customer demands;
- the need to enhance existing services and products or introduce new services and products; and
- evolving industry standards.

New services, products and technologies may render our existing services, products and technologies less competitive. Our future success will depend, in part, on our ability to respond to the demand for new services, products and technologies on a timely and cost-effective basis and to adapt to technological advancements and changing standards to address the increasingly sophisticated requirements and varied needs of our customers and prospective customers. We cannot assure you that we will be successful in developing, introducing or marketing new services, products and technologies. In addition, we may experience difficulties that could delay or prevent the successful development, introduction or marketing of these services and products, and our new service and product enhancements may not achieve market acceptance. Any failure on our part to anticipate or respond adequately to technological advancements, customer requirements or changing industry standards, or any significant delays in the development, introduction or availability of new services, products or enhancements could have a material adverse effect on our business, financial condition and results of operations.

Market making in forex-based products entails significant risk, and unforeseen events in such business could have an adverse effect on our business, financial condition and results of operations.

Our activities in market making for forex-based products include the trading of cash in foreign currencies with banks and exchange-listed futures, options on futures, options on cash deposits and currency-based ETFs. All of the risks that pertain to our market making activities in equity-based products also apply to our forex-based market making. In addition, we have comparatively less experience in the forex markets and various unexpected events can occur that may result in great financial loss.

We are subject to counterparty risk whereby defaults by parties with whom we do business can have an adverse effect on our business, financial condition and results of operations.

In our electronic brokerage business, our customer margin credit exposure is to a great extent mitigated by our policy of automatically evaluating each account throughout the trading day and closing out positions automatically for accounts that are found to be under-margined. While this methodology is effective in most situations, it may not be effective in situations in which no liquid market exists for the relevant securities or commodities or in which, for any reason, automatic liquidation for certain accounts has been disabled. If no liquid market exists or automatic liquidation has been disabled, we are subject to risks inherent in extending credit, especially during periods of rapidly declining markets. Any loss or expense incurred due to defaults by our customers in failing to repay margin loans or to maintain adequate collateral for these loans would cause harm to our business, financial condition and results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our headquarters are located in Greenwich, Connecticut. We also lease facilities in 19 other locations throughout parts of the world where we conduct our operations as set forth below. Unless otherwise indicated, all properties are used by both our market making and electronic brokerage segments. We believe our present facilities, together with our current options to extend lease terms, are adequate for our current needs.

The following table sets forth certain information with respect to our leased facilities:

<u>Location</u>	<u>Space (sq. feet)</u>	<u>Expiration</u>	<u>Principal Usage</u>
Greenwich, CT	81,266	2019	Headquarters and data center
Greenwich, CT	42,196	2019	Office space
Jersey City, NJ	5,869	2017	Office space
San Francisco, CA	833	2019	Office space
Chicago, IL	48,275	2026	Office space
Chicago, IL	13,217	2017	Data center
Washington, D.C.	8,884	2024	Office space
West Palm Beach, FL	8,509	2027	Office space
Boston, MA	2,348	2021	Office space
Montreal, Canada	4,566	2019	Office space
Vancouver, Canada	2,737	2021	Office space
London, United Kingdom	12,969	2023	Office space
Zug, Switzerland	19,246	2017	Office space
Zug, Switzerland	4,435	2021	Data center
Vaduz, Liechtenstein	2,370	2017	Office space
Sydney, Australia	3,358	2023	Office space
Hong Kong	8,872	2018	Office space
Hong Kong	6,739	2019	Office space
Budapest, Hungary	6,002	2018	Office space
St. Petersburg, Russia	2,742	2017	Office space
Tallinn, Estonia	6,600	2021	Office space
Mumbai, India	12,061	2020	Office space
Tokyo, Japan	2,161	2018	Office space
Shanghai, China	3,635	2018	Office space

ITEM 3. LEGAL PROCEEDINGS AND REGULATORY MATTERS

The securities and commodities industry is highly regulated and many aspects of our business involve substantial risk of liability. In recent years, there has been an increasing incidence of litigation involving the brokerage industry, including class action suits that generally seek substantial damages, including in some cases punitive damages. Compliance and trading problems that are reported to federal, state and provincial regulators, exchanges or other self-regulatory organizations by dissatisfied customers are investigated by such regulatory bodies, and, if pursued by such regulatory body or such customers, may rise to the level of arbitration or disciplinary action. We are also subject to periodic regulatory audits and inspections.

Like other brokerage firms, we have been named as a defendant in lawsuits and from time to time we have been threatened with, or named as a defendant in, arbitrations and administrative proceedings. The following contains information regarding potentially material pending litigation and pending regulatory inquiries. We may in the future become involved in additional litigation or regulatory proceedings in the ordinary course of our business, including litigation or regulatory proceedings that could be material to our business.

Trading Technologies Matter

On February 3, 2010, Trading Technologies International, Inc. (“Trading Technologies”) filed a complaint in the U.S. District Court for the Northern District of Illinois, Eastern Division, against IBG, Inc., IBG LLC, Holdings, and IB LLC. Thereafter, Trading Technologies dismissed IBG, Inc. and Holdings from the case, leaving only IBG LLC and IB LLC as defendants (“Defendants”). The operative complaint, as amended, alleges that the Defendants have infringed and continue to infringe twelve U.S. patents held by Trading Technologies. Trading Technologies is seeking, among other things, unspecified damages and injunctive relief (“the Litigation”).

The Defendants filed an answer to Trading Technologies’ amended complaint, as well as related counterclaims. The defendants deny Trading Technologies’ claims, assert that the asserted patents are not infringed and are invalid, and assert several other defenses as well.

Trading Technologies also filed patent infringement lawsuits against approximately a dozen other companies in the same court, many of which are still pending. The Litigation was consolidated with the other lawsuits filed by Trading Technologies.

The United States Patent and Trademark Office (“USPTO”) issued decisions instituting Covered Business Method Review (“CBM Review”) on all of the asserted patents and has made a finding that it is more likely than not that the patents are invalid. The District Court granted the Defendants’ motion to stay the Litigation pending the CBM Reviews. On February 17, 2017, the USPTO issued two decisions finding that the claims of one patent are patentable and the claims of another patent are not patentable. On February 28, 2017, the USPTO issued a decision finding that most of the claims of another patent are not patentable and finding three claims of the same patent to be patentable. The Defendants plan to appeal to the extent any claims were held to be patentable.

It is difficult to predict the outcome of the matter, however, the Company believes it has meritorious defenses to the allegations made in the complaint and intends to defend itself vigorously against them. However, litigation is inherently uncertain and there can be no guarantee that the Company will prevail or that the Litigation can be settled on favorable terms.

Class Action Matter

On December 18, 2015, a former individual customer filed a purported class action complaint against IB LLC, IBG, Inc., and Thomas Frank, PhD, the Company’s Executive Vice President and Chief Information Officer, in the U.S. District Court for the District of Connecticut. The complaint alleges that the former customer and members of the purported class of IB LLC’s customers were harmed by alleged “flaws” in the computerized system used by the Company to close out (i.e., liquidate) positions in customer brokerage accounts that have margin deficiencies. The complaint seeks, among other things, undefined compensatory damages and declaratory and injunctive relief.

On February 19, 2016, the Company filed a motion to dismiss the class action complaint. On September 28, 2016, the Court issued an order granting the Company’s motion to dismiss and dismissing the complaint in its entirety, and without providing plaintiff leave to amend. On October 5, 2016, the Court entered judgment in the Company’s favor. On October 12, 2016, plaintiff filed motions for leave to file an amended complaint and to vacate or amend judgment, which the Company

opposed. The Court has not yet ruled on these motions. We believe that the proposed amended complaint, like the original complaint, lacks merit. Further, even if the complaint ultimately were to survive a motion to dismiss, we do not believe that a purported class action is appropriate given the great differences in portfolios, markets and many other circumstances surrounding the liquidation of any particular customer's margin-deficient account. IB LLC and the related defendants intend to continue to defend themselves vigorously against the case and, consistent with past practice in connection with this type of unwarranted action, any potential claims for counsel fees and expenses incurred in defending the case shall be fully pursued against the plaintiff.

Pending Regulatory Inquiries

Our businesses are heavily regulated by state, federal and foreign regulatory agencies as well as numerous exchanges and self-regulatory organizations. Most of our companies are regulated under state securities laws, U.S. and foreign securities, commodities and financial services laws and under the rules of more than 25 exchanges and self-regulatory organizations. In the current era of dramatically heightened regulatory scrutiny of financial institutions, we have incurred sharply increased compliance costs, along with the industry as a whole. Increased regulation also creates increased barriers to entry, however, we have built human and automated infrastructure to handle increased regulatory scrutiny, which provides us with an advantage over potential newcomers to the business.

We receive hundreds of regulatory inquiries each year in addition to being subject to frequent regulatory examinations. The great majority of these inquiries do not lead to fines or any further action against us. Most often, regulators do not inform us as to when and if an inquiry has been concluded. We are currently the subject of regulatory inquiries regarding topics such as order audit trail reporting, trade reporting, short sales, margin lending, anti-money laundering, technology development practices, business continuity planning and other topics of recent regulatory interest. We are unaware of any specific regulatory matter that, itself, or together with similar regulatory matters, would have a material impact on our business, financial condition and results of operations. Nonetheless, in the current climate, we expect to pay significant regulatory fines on various topics on an ongoing basis, as other regulated financial services businesses do. The amount of any fines, and when and if they will be incurred, is impossible to predict given the nature of the regulatory process.

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

Common Stock Information

The following table shows the high and low sale prices for the periods indicated for our common stock, as reported by NASDAQ:

	Sales Price	
	High	Low
(in dollars)		
2015		
First Quarter	\$34.56	\$25.56
Second Quarter	\$42.46	\$32.22
Third Quarter	\$45.95	\$35.60
Fourth Quarter	\$44.85	\$36.71
2016		
First Quarter	\$43.14	\$29.50
Second Quarter	\$41.40	\$33.75
Third Quarter	\$37.39	\$33.66
Fourth Quarter	\$39.68	\$31.97

The closing price of our common stock on February 22, 2017, as reported by NASDAQ, was \$38.13 per share.

Holders

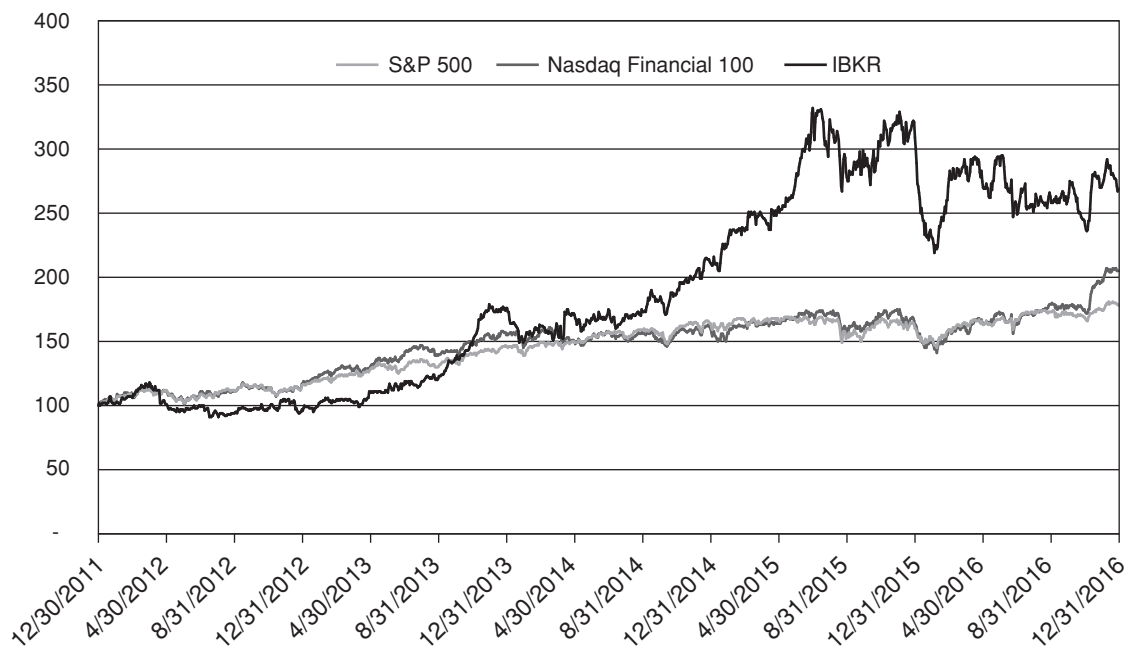
On February 21, 2017, there were five holders of record, which does not reflect those shares held beneficially or those shares held in "street" name. Accordingly, the number of beneficial owners of our common stock exceeds this number.

Dividends and Other Restrictions

During the second quarter of 2011, we declared and paid a cash dividend of \$0.10 per share and have continued this quarterly dividend policy through the current fiscal year end and into the first quarter of 2017. We currently intend to pay quarterly dividends of \$0.10 per share to our common stockholders for the foreseeable future.

Stockholder Return Performance Graph

The following graph compares cumulative total stockholder return on our common stock, the S&P 500 Index and the NASDAQ Financial-100 Index from December 30, 2011 to December 31, 2016. The comparison assumes \$100 was invested on December 31, 2011 in our common stock and each of the foregoing indices and assumes reinvestment of dividends before consideration of income taxes.



- (1) The NASDAQ Financial-100 Index includes 100 of the largest domestic and international financial securities listed on The NASDAQ Stock Market based on market capitalization. They include companies classified according to the Industry Classification Benchmark as Financials, which are included within the NASDAQ Bank, NASDAQ Insurance, and NASDAQ Other Finance Indexes.
- (2) The S&P 500 Index includes 500 large cap common stocks actively traded in the U.S. The stocks included in the S&P 500 are those of large publicly held companies that trade on either of the two largest American stock markets, the New York Stock Exchange and NASDAQ.

The stock performance depicted in the graph above is not to be relied upon as indicative of future performance. The stock performance graph shall not be deemed to be incorporated by reference into any of our filings under the Securities Act or the Exchange Act, except to the extent that we specifically incorporate the same by reference, nor shall it be deemed to be “soliciting material” or to be “filed” with the SEC or subject to Regulations 14A or 14C or to the liabilities of Section 18 of the Exchange Act.

Use of Proceeds from Member Redemption

Purchases of IBG LLC membership interests, held by Holdings, by the Company are governed by the Exchange Agreement, a copy of which was filed as an exhibit to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2009 and filed with the SEC on November 9, 2009. The Exchange Agreement, as amended June 6, 2012 and July 23, 2015, provides that the Company may facilitate the redemption by Holdings of interests held by its members through the issuance of shares of common stock through a public offering in exchange for the interests in IBG LLC being redeemed by Holdings. On an annual basis, each holder of a membership interest may request that Holdings redeem the

liquefiable portion of that holder's interest. We expect Holdings to use the net proceeds it receives from such sales to redeem an identical number of Holdings membership interests from the requesting holders.

At the time of the Company's IPO in 2007, three hundred sixty (360) million shares of authorized common stock were reserved for future sales and redemptions. From 2008 through 2015, Holdings redeemed 16,060,554 IBG LLC shares with an approximate total value of \$420 million, which redemptions were funded using cash on hand at IBG LLC and through issuances of common stock.

With the consent of Holdings and the Company (on its own behalf and acting as the sole managing member of IBG LLC), IBG LLC agreed in July 2016 to redeem certain membership interests from Holdings through the sale of common stock and the distribution of the proceeds of such sale to the beneficial owners of such membership interests.

On July 28, 2016, the Company issued 1,596,200 shares of Class A common stock (with a fair value of \$56 million) to Holdings, for sale for the benefit of, certain of its members in exchange for membership interests in IBG LLC equal in number to such number of shares of common stock issued by the Company. The acquired shares are to be sold for the benefit of certain of the members of Holdings who elected to redeem a portion of their Holdings membership interests in open market transactions pursuant to one or more Rule 10b5-1 trading plans (collectively, the "Plans"). A portion of the acquired shares was sold during 2016 pursuant to the Plans. The remaining shares are held for sale under certain conditions, pursuant to the Plans, in open market transactions. All sales made pursuant to the Plans are disclosed publicly in accordance with applicable securities laws, rules and regulations through appropriate filings with the SEC, as applicable.

Certain officers and directors are among the members of Holdings who have elected to redeem a portion of their Holdings membership interests and therefore have an interest in the proceeds of sale of 1,050,000 shares of the Class A common stock to be sold pursuant to the Plans. In addition, certain employees of the Company and its subsidiaries also elected the redemption of a portion of their membership interests in Holdings and therefore have an interest in the balance of the shares to be sold under the Plans and/or distributed by Holdings. Neither Mr. Thomas Peterffy nor his affiliates have elected to redeem any of their Holdings membership interests and therefore have no interest in the proceeds of sale or distribution of the shares of Class A common stock acquired by Holdings on July 28, 2016.

As a consequence of this transaction, IBG, Inc.'s interest in IBG LLC increased to approximately 16.6%, with Holdings owning the remaining 83.4%. The redemptions also resulted in an increase in the Holdings interest held by Mr. Thomas Peterffy and his affiliates from approximately 88.7% to approximately 89.1%.

On October 13, 2015, the Company filed a Post-Effective Amendment to multiple Registration Statements filed under the Securities Act of 1933, as amended (the "Securities Act") on Form S-8 that registered shares of the Company's Class A common stock, \$0.01 par value, for issuance under the Company's 2007 Stock Incentive Plan (the "Plan"): Registration No. 333-142686, filed on May 7, 2007; Registration No. 333-174913, filed on June 15, 2011; and Registration No. 333-203358, filed on April 10, 2015.

The Plan provides employees with two options to pay for their withholding tax obligations, which become due when shares vest: either (1) reimburse the Company via cash payment, or (2) elect to have the Selling Stockholder withhold a portion of the vesting shares. In the case of employees who elect to have the IBG LLC withhold shares to cover their tax obligations, those shares are transferred to IBG LLC, which in turn, sells those shares in open market transactions to recover the amount paid to the tax authorities on the employees' behalf. As of December 31, 2016 the Company has sold 709,897 shares of its Class A common stock (with a fair value of \$26 million) in open market transactions,

during 2016. The proceeds were used to reimburse the Company for withholding taxes paid by the Company on the employees' behalf.

As per General Instruction C of Form S-8, the sale of the shares described above constitutes a resale or reoffer of the Company's Class A common stock. The Post-Effective Amendment, contains a reoffer prospectus that registers 6,400,000 shares of the Company's Class A common stock which represents the Company's estimate of shares that will be withheld from employees related to the vesting of Plan shares over the next nine years based on current tax rates and historical employee elections. The Company has re-issued 920,876 shares under this reoffer prospectus supplement. The reoffer prospectus allows for future sales by IBG LLC, on a continuous or delayed basis, to the public without restriction.

Securities Authorized for Issuance under Equity Compensation Plans

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, 2016. The Company has not made grants of common stock outside of its equity compensation plans.

	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u>	<u>Weighted-average exercise price of outstanding options warrants and rights</u>	<u>Number of securities remaining available for future issuance under equity compensation plans(1)</u>
Equity compensation plans approved by security holders	N/A	N/A	7,862,022
Equity compensation plans not approved by security holders	<u>N/A</u>	<u>N/A</u>	<u>—</u>
Total	<u>—</u>	<u>—</u>	<u>7,862,022</u>

(1) Amount represents shares available for future issuance of grants under the Company's 2007 Stock Incentive Plan ("SIP"). The amount excludes shares purchased from employees to satisfy their tax withholding obligations for vested shares, which are held as treasury stock. No shares are available for future issuance of grants under the 2007 ROI Unit Stock Plan; all shares under this plan have been granted.

ITEM 6. SELECTED FINANCIAL DATA

The following tables set forth selected historical consolidated financial and other data of the Company. They are presented for the years ended, and as of, December 31, 2012, 2013, 2014, 2015, and 2016.

	Year Ended December 31,				
	2016	2015	2014	2013	2012
(in millions, except share and per share amounts)					
Consolidated Statement of Comprehensive					
Income Data					
Revenues					
Trading gains	\$ 163	\$ 269	\$ 261	\$ 331	\$ 466
Commissions and execution fees	612	617	549	502	413
Interest income	606	492	416	304	270
Other (loss) income	94	(122)	(111)	(9)	44
Total revenues	1,475	1,256	1,115	1,128	1,193
Interest expense	79	67	72	52	62
Total net revenues	1,396	1,189	1,043	1,076	1,131
Non-interest expenses					
Execution and clearing	244	231	212	243	251
Fixed expenses	385	354	322	315	350
Customer bad debt(1)	6	146	3	67	3
Total non-interest expenses	635	731	537	625	604
Income before income taxes	761	458	506	451	527
Income tax expense	62	43	47	33	30
Net income	699	415	459	418	497
Less net income attributable to noncontrolling interests	615	366	414	381	456
Net income available for common stockholders	\$ 84	\$ 49	\$ 45	\$ 37	\$ 41
Earnings per share					
Basic	\$ 1.28	\$ 0.80	\$ 0.79	\$ 0.74	\$ 0.89
Diluted	\$ 1.25	\$ 0.78	\$ 0.77	\$ 0.73	\$ 0.89
Comprehensive income available for common stockholders					
	\$ 80	\$ 39	\$ 30	\$ 34	\$ 53
Comprehensive income attributable to noncontrolling interests					
	\$ 594	\$ 313	\$ 322	\$ 356	\$ 473
Comprehensive earnings per share					
Basic	\$ 1.21	\$ 0.64	\$ 0.52	\$ 0.69	\$ 1.13
Diluted	\$ 1.19	\$ 0.62	\$ 0.51	\$ 0.67	\$ 1.13
Weighted average common shares outstanding					
Basic	66,013,247	61,043,071	56,492,381	49,742,428	46,814,676
Diluted	67,299,413	62,509,796	57,709,668	50,924,736	47,070,522

- (1) Electronic brokerage non-interest expenses includes an unusual loss of \$137 million in 2015. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part II Item 7 of this Annual Report on Form 10-K. In October 2013, a small number of the Company’s brokerage customers had taken relatively large positions in four securities listed on the Singapore Exchange. In early October, within a very short timeframe, these securities lost over 90% of their value. The customer accounts were margined and fell into deficits totaling \$64 million prior to the time the Company took possession of their securities positions.

	December 31,				
	2016	2015	2014	2013	2012
	(in millions)				
Consolidated Statement of Financial Condition Data					
Cash, cash equivalents and short-term investments(1) . . .	\$26,053	\$23,105	\$17,059	\$15,591	\$14,526
Total assets(2)(3)	\$54,673	\$48,734	\$43,385	\$37,871	\$33,200
Total liabilities(3)	\$48,853	\$43,390	\$38,200	\$32,779	\$28,387
Stockholders' equity	\$ 974	\$ 863	\$ 766	\$ 707	\$ 598
Noncontrolling interests	\$ 4,846	\$ 4,481	\$ 4,419	\$ 4,385	\$ 4,215

- (1) Cash, cash equivalents and short-term investments represent cash and cash equivalents, cash and securities segregated under federal and other regulations, short-term investments and securities purchased under agreements to resell.
- (2) As of December 31, 2016, approximately \$54.2 billion, or 99.1%, of total assets were considered liquid and consisted primarily of cash, marketable securities and collateralized receivables.
- (3) As a result of the Company's acquisition from Holdings of IBG LLC membership interests, the Company received not only an interest in IBG LLC but also, for federal income tax purposes, a step-up to the federal income tax basis of the assets of IBG LLC underlying such additional interest. This increased tax basis is expected to result in tax benefits as a result of increased amortization deductions. The Company will retain 15% of the tax benefits actually realized. As set forth in the tax receivable agreement the Company entered into with Holdings, the Company will pay the remaining 85% of the realized tax benefits relating to any applicable tax year to Holdings. The deferred tax asset was \$273 million, \$288 million, \$279 million, \$295 million, and \$282 million and the corresponding payable to Holdings was \$285 million, \$291 million, \$277 million, \$287 million, and \$259 million as of December 31, 2016, 2015, 2014, 2013, and 2012, respectively.

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

The following discussion should be read in conjunction with the audited consolidated financial statements and the related notes in Item 8, included elsewhere in this report. In addition to historical information, the following discussion also contains forward-looking statements that include risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth under the heading "Risk Factors" in Part I, Item 1A of this Annual Report on Form 10-K.

Business Overview

We are an automated global electronic broker and market maker. We custody and service accounts for hedge and mutual funds, registered investment advisers, proprietary trading groups, introducing brokers and individual investors. We specialize in routing orders and executing and processing trades in securities, futures and foreign exchange instruments on more than 120 electronic exchanges and market centers around the world. Since our inception in 1977, we have focused on developing proprietary software to automate broker-dealer functions. The proliferation of electronic exchanges in the last 26 years has provided us with the opportunity to integrate our software with an increasing number of exchanges and market centers into one automatically functioning, computerized platform that requires minimal human intervention.

In connection with our IPO priced on May 3, 2007, IBG, Inc. purchased 10.0% of the membership interests in IBG LLC, became the sole managing member of IBG LLC and began to consolidate IBG LLC's financial results into its financial statements. Our primary assets are our ownership of approximately 16.6% of the membership interests of IBG LLC, the current holding company for our businesses, and our controlling interest and related contractual rights as the sole managing member of IBG LLC. The remaining approximately 83.4% of IBG LLC membership interests are held by Holdings, a holding company that is owned by our founder, Chairman and Chief Executive Officer, Mr. Thomas Peterffy and his affiliates, management and other employees of IBG LLC, and certain other members. The IBG LLC membership interests held by Holdings will be subject to purchase by us over time in connection with offerings by us of shares of our common stock.

Business Segments

We report our results in two operating business segments, electronic brokerage and market making. These segments are analyzed separately as these are the two principal business activities from which we derive our revenues and to which we allocate resources.

- *Electronic Brokerage.* We conduct our electronic brokerage business through certain Interactive Brokers ("IB") subsidiaries. As an electronic broker, we execute, clear and settle trades globally for both institutional and individual customers. Capitalizing on our proprietary technology originally developed for our market making business, IB's systems provide our customers with the capability to monitor multiple markets around the world simultaneously and to execute trades electronically in these markets at a low cost, in multiple products and currencies from a single trading account. We offer our customers access to all classes of tradable, primarily exchange-listed products, including stocks, bonds, options, futures, forex and mutual funds traded on more than 120 exchanges and market centers in 24 countries and in 23 currencies around the world seamlessly. The emerging complexity of multiple market centers has provided us with the opportunity of building and continuously adapting our order routing software to secure excellent execution prices.

Our customer base is diverse with respect to geography and segments. Currently, more than half of our customers reside outside the U.S. in over 190 countries. Approximately 63% of our customers' equity is in institutional accounts such as hedge funds, financial advisors, proprietary trading desks, and introducing brokers. Specialized products and services that we have developed are successfully attracting these accounts. For example, we offer prime brokerage services, including capital introduction and securities lending to hedge funds; and our model portfolio technology and automated share allocation and rebalancing tools are particularly attractive to financial advisors. We provide a host of analytical tools such as the Probability LabSM, which allows our customers to analyze option strategies under various market assumptions. IB Investors' MarketplaceSM allows wealth advisors to search for money managers and assign them to customer accounts based on their investment strategy. IB EmployeeTrackSM is widely used by compliance officers of financial institutions to streamline the process of tracking their employees' brokerage activities. IB Portfolio Builder allows our customers to set up an investment strategy based on research and rankings from top research providers and fundamental data. In addition, Greenwich Compliance offers direct expert registration and start-up compliance services, as well as answers to basic day-to-day compliance questions for experienced investors and traders looking to start their own investment advisor firms. Greenwich Compliance professionals have regulatory and industry experience, and can help investment advisors trading on the IB platform meet their registration and compliance needs.

- *Market Making.* We conduct our market making business primarily through our Timber Hill subsidiaries. As a market maker on many of the world's leading exchanges, we provide liquidity by offering competitively tight bid/offer spreads over a broad base of over one million tradable, exchange-listed products. As principal, we commit our own capital and derive revenues or incur losses from the difference between the price paid when securities are bought and the price received when those securities are sold. Because we provide continuous bid and offer quotations and we are continuously both buying and selling quoted securities, we may have either a long or a short position in a particular product at a given point in time. Our entire portfolio is evaluated many times per second and continuously rebalanced throughout the trading day, thus minimizing the risk of our portfolio at all times. This real-time rebalancing of our portfolio, together with our real-time proprietary risk management system, enables us to curtail risk and to be profitable in both up-market and down-market scenarios. In the past several years our market making business has suffered from competitive pressures and along with the rapid increase of our electronic brokerage business, its significance continues to diminish.

The operating business segments are supported by our corporate segment which provides centralized services and executes our currency diversification strategy.

Business Environment

Against a backdrop of global declines in trading volumes, we maintained our position as the largest U.S. electronic broker as measured by the number of customer revenue trades, which increased 2% from the prior year. New customer account growth remained robust as total customer accounts increased 16% to 385 thousand from 2015. Institutional customers, such as hedge funds, mutual funds, introducing brokers, proprietary trading groups and financial advisors, comprised approximately 44% of total accounts and approximately 63% of total customer equity at the end of 2016. Our customer base continues to be geographically diverse, with customers residing in over 190 countries and over 50% of new customers coming from outside the U.S. Average equity per account increased by 9%, to \$222 thousand compared to the prior year.

Electronic brokerage net interest income grew 25%, compared to 2015. Our low margin lending rates are tied to benchmark rates, such as the Federal Funds rate in the U.S. In 2016, our customers paid 0.5% to 2.2% for their U.S. dollar margin loans with us. Customer margin loans increased by 14% from 2015, due to customers' appetite for increased risk, along with expanded prime broker financing and average customer credit balances rose 16% in 2016.

Market making segment results decreased in 2016, as trading gains were dampened by lower trading volumes and decreases in volatility and in the actual-to-implied volatility ratio as compared to 2015.

The following is a summary of the key profit drivers that affect our business and how they compared to the prior year:

Global trading volumes. According to data received from exchanges worldwide, volumes in exchange-listed equity-based options decreased by approximately 12% globally and 2% in the U.S. for the year ended December 31, 2016, compared to 2015. During 2016 we accounted for approximately 7.9% (7.8% in 2015) of the exchange-listed equity-based options volume traded worldwide (including options on ETFs and stock index products), and approximately 10.9% (11.3% in 2015) of exchange-listed equity-based options volume traded in the U.S. It is important to note that this metric is not directly correlated with our profits. See tables on pages 61-63 of this Annual Report on Form 10-K for additional details regarding our trade volumes, contract and share volumes and brokerage statistics.

Volatility. Since we typically maintain an overall long volatility position, our market making profits are generally correlated with market volatility, protecting us against a severe market dislocation in either direction. Based on the Chicago Board Options Exchange Volatility Index ("VIX®"), the average volatility decreased to 15.9 in 2016, down 5% from the average of 16.7 in 2015.

The ratio of actual to implied volatility is also meaningful to our results. Because the cost of hedging our positions is based on implied volatility, while our trading profits are, in part, based on actual market volatility, a higher ratio has a generally favorable impact on our trading gains and a lower ratio generally has a negative effect. This ratio averaged approximately 83% during 2016, compared to an average of approximately 88% in 2015.

Currency fluctuations. As a global electronic broker and market maker trading on exchanges around the world in multiple currencies, we are exposed to foreign currency risk. We actively manage this exposure by keeping our net worth in proportion to a defined basket of 15 currencies we call the "GLOBAL" in order to diversify our risk and to align our hedging strategy with the currencies that we use in our business. Because we report our financial results in U.S. dollars, the change in the value of the GLOBAL versus the U.S. dollar affects our earnings. During 2016 the value of the GLOBAL, as measured in U.S. dollars, decreased 0.93% compared to its value as of December 31, 2015, which had a negative impact on our comprehensive earnings for 2016. A discussion of our approach for managing foreign currency exposure is contained in Part II, Item 7A of this Annual Report on Form 10-K entitled "Quantitative and Qualitative Disclosures about Market Risk."

Financial Overview

Diluted earnings per share were \$1.25 for the year ended December 31, 2016 ("current year"), compared to diluted earnings per share of \$0.78 for the year ended December 31, 2015 ("prior year"). The calculation of diluted earnings per share is detailed in Note 4 to the audited consolidated financial statements, in Part II, Item 8 of this Annual Report on Form 10-K.

On a comprehensive basis, which includes other comprehensive income ("OCI"), diluted earnings per share were \$1.19 for the current year, compared to diluted earnings per share of \$0.62 for the prior year.

In connection with our currency diversification strategy, we determine our net worth in GLOBALs, a basket of 15 major currencies in which we hold our equity. As a result, as of December 31, 2016, approximately 53% of our equity was denominated in currencies other than the U.S. dollar. In the current year, our currency diversification strategy decreased our comprehensive earnings by \$65 million (versus a decrease of \$269 million in the prior year), as the U.S. dollar value of the GLOBAL decreased by approximately 0.93%. The effects of our currency diversification strategy are reported as (1) a component of other income in the consolidated statement of comprehensive income and (2) OCI in the consolidated statement of financial condition and the consolidated statement of comprehensive income. The full effect of the GLOBAL is captured in comprehensive income.

As a result of a periodic assessment, and in light of the increasing importance of China to our business, we changed the composition of the GLOBAL by adding the Chinese renminbi (specifically, the offshore currency known by the symbol CNH), removing the South Korean won (KRW) and Brazilian real (BRL) components, and realigning the relative weights of the U.S. dollar (USD) and Japanese yen (JPY) components to better reflect the global diversification of our businesses. The new composition of the GLOBAL went into effect as of the close of business on June 30, 2016.

Consolidated: For the current year, our net revenues were \$1,396 million and income before income taxes was \$761 million, compared to net revenues of \$1,189 million and income before income taxes of \$458 million in the prior year. The increase in income before income taxes in the current year was mainly driven by a 24% increase in net interest income and the non-recurrence of customer debt expenses resulting from the Swiss franc event in January 2015, as further described below, partially offset by a 39% decrease in trading gains. Our pre-tax profit margin was 55%, compared to 39% for the prior year.

Electronic Brokerage: For the current year, income before income taxes in our electronic brokerage segment increased \$220 million, or 41%, compared to the prior year, mainly driven by higher net interest income and the non-recurrence of \$137 million in customer bad debt expenses in the prior year due to the Swiss franc event described below. Net revenues increased 13%, mainly from a 25% increase in net interest income, due to higher customer cash balances, the majority of which were invested in interest-bearing U.S. government securities during the current year, and from a 62% increase in other income, driven by higher net mark-to-market gains on our U.S. government securities portfolio. Pre-tax profit margin was 61% for the current year and 49% for the prior year. Customer accounts grew 16% and customer equity increased 27% from the prior year. For the current year, total Daily Average Revenue Trades (“DARTs”) for cleared and execution-only customers increased 2% to 660 thousand, compared to 647 thousand in the prior year.

Sudden Move in the Value of the Swiss Franc

On January 15, 2015, in an unprecedented action, the Swiss National Bank removed a previously instituted and repeatedly confirmed cap of the currency relative to the euro, causing a sudden move in the value of the Swiss franc. Several of our customers holding currency futures and spot positions suffered losses in excess of their deposits with us. We took immediate action to hedge our exposure to the foreign currency receivables from these customers. Since January 2015, we have incurred cumulative losses, net of hedging activity and debt collection efforts, of \$118 million. We continue to actively pursue collection of the debts. The ultimate effect of this incident on our results will depend upon the outcome of our debt collection efforts.

Market Making: For the current year, income before income taxes in our market making segment decreased \$86 million, or 66%, compared to the prior year. Trading gains decreased 39% on lower trading volumes, a divergence in price behavior among a significant number of individual stocks during the first quarter of 2016, and decreases in volatility and in the actual-to-implied volatility ratio compared to the prior year. Pre-tax profit margin was 23% for the current year and 44% for the prior year.

Market making, by its nature, does not produce predictable earnings. Our results in any given period may be materially affected by volumes in the global financial markets, the level of competition and other factors. Electronic brokerage is more predictable, but it is dependent on customer activity, growth in customer accounts and assets, interest rates and other factors. For a further discussion of the factors, that may affect our future operating results, please see the description of risk factors in Part I, Item 1A of this Annual Report on Form 10-K.

The following two tables present net revenues and income before income taxes for each of our business segments for the periods indicated.

Net revenues of each of our segments and our total net revenues are summarized below:

	Year Ended December 31,		
	2016	2015	2014
	(in millions)		
Electronic brokerage	\$1,239	\$1,097	\$ 952
Market making	190	298	284
Corporate(1)	(33)	(206)	(193)
Total	<u>\$1,396</u>	<u>\$1,189</u>	<u>\$1,043</u>

(1) The corporate segment includes corporate related activities, inter-segment eliminations, and gains and losses on positions held as part of our overall currency diversification strategy.

Income before income taxes of each of our segments and our total income before income taxes are summarized below:

	Year Ended December 31,		
	2016	2015	2014
	(in millions)		
Electronic brokerage	\$756	\$ 536	\$ 589
Market making	44	130	114
Corporate(1)	(39)	(208)	(197)
Total	<u>\$761</u>	<u>\$ 458</u>	<u>\$ 506</u>

(1) The corporate segment includes corporate related activities, inter-segment eliminations, and gains and losses on positions held as part of our overall currency diversification strategy.

Net Revenues

Trading Gains

Trading gains are generated in the normal course of our market making business. Trading revenues are, in general, proportional to the trading activity in the markets. Our revenue base is highly diversified and comprised of millions of relatively small individual trades of various financial products traded on electronic exchanges, primarily in stocks, options and futures. Trading gains accounted for approximately 12%, 23%, and 25% of our total net revenues for the years ended December 31, 2016, 2015, and 2014, respectively.

Trading gains also include revenues from net dividends. Market making activities require us to hold a substantial inventory of equity securities. We derive significant revenues in the form of dividend income from these equity securities. This dividend income is largely offset by dividend expense incurred when we make significant payments in lieu of dividends on short positions in securities in our portfolio. Dividend income and expense arise from holding market making positions over dates on which dividends are paid to shareholders of record. When a stock pays a dividend, its market price is generally adjusted downward to reflect the value paid to the shareholders of record, which will not be received by those who purchase the stock on or after the ex-dividend date. Hence, the apparent gains and losses due to these price changes must be taken together with the dividends paid and received, respectively, to accurately reflect the results of our market making operations.

As a result of the way we have integrated our market making and securities lending systems, our trading gains and our net interest income from the market making segment are interchangeable and depend on the mix of market making positions in our portfolio. When implied interest rates in the equity and equity options and futures markets exceed the actual interest rates available to us, our market making systems tend to buy stock and sell it forward, which produces higher trading gains and lower net interest income. When these rates are inverted, our market making systems tend to sell stock and buy it forward, which produces lower trading gains and higher net interest income.

Our trading gains are geographically diversified. In 2016, 2015, and 2014, we generated 66%, 59%, and 24%, respectively, of our trading gains from operations conducted internationally.

Commissions and Execution Fees

We earn commissions and execution fees from our cleared customers for whom we act as an executing and clearing broker and from our non-cleared customers for whom we act as an execution-only broker. We have a commission structure that allows customers to choose between an all-inclusive fixed, or “bundled”, rate and a tiered, or “unbundled”, rate that offers lower commissions for high volume customers. For “unbundled” commissions, we pass through regulatory and exchange fees separately from our commissions, adding transparency to our fee structure. Commissions and execution fees accounted for 44%, 52%, and 53% of our total net revenues for the years ended December 31, 2016, 2015, and 2014, respectively.

Our commissions and execution fees are geographically diversified. In 2016, 2015, and 2014 we generated 30%, 26%, and 25%, respectively, of commissions and execution fees from operations conducted internationally.

Interest Income and Interest Expense

We earn interest on customer funds segregated in safekeeping accounts; on customer borrowings on margin, secured by marketable securities these customers hold with us; from our investments in U.S. and foreign government securities; from borrowing and lending securities in the general course of our market making and brokerage activities; and on deposits with banks. Interest income accounted for 43%, 41%, and 40% of our total net revenues for the years ended December 31, 2016, 2015, and 2014, respectively. Interest income is partially offset by interest expense.

We pay interest on cash balances customers hold with us; for borrowing and lending securities in the general course of our market making and brokerage activities; and on our borrowings. Interest expense accounted for 6%, 6%, and 7% of our total net revenues for the years ended December 31, 2016, 2015, and 2014, respectively.

We have automated and integrated our securities lending system with our trading system. As a result, we have been able to tailor our securities lending activity to produce more optimal results when taken together with trading gains (see description under “Trading Gains” above).

Net interest income accounted for approximately 38%, 36%, and 33% of our total net revenues for the years ended December 31, 2016, 2015, and 2014, respectively.

Other Income

A primary component of other income is foreign currency gains and losses from our currency diversification strategy. A discussion of our approach to managing foreign currency exposure is contained in Part II, Item 7A of this Annual Report on Form 10-K entitled “Quantitative and Qualitative Disclosures about Market Risk.”

Other income also consists of mark-to-market gains and losses on our U. S. government securities portfolio; income from market data fees, payments for order flow, minimum activity fees, risk exposure fees; and gains and losses on financial instruments at fair value and other financial instruments that are not held for our market making operations. Other income (loss) accounted for approximately 7%, –10%, and –11% of our total net revenues for the years ended December 31, 2016, 2015, and 2014, respectively.

Costs and Expenses

Execution and Clearing Expenses

Execution and clearing expenses include the costs of executing and clearing our market making and electronic brokerage trades, as well as liquidity rebates received from various exchanges and market centers, regulatory fees, market data fees, and payments for order flow. Execution fees are paid primarily to electronic exchanges and market centers on which we trade. Clearing fees are paid to clearing houses and clearing agents. Market data fees are paid to third parties to receive streaming price quotes and related information. Payments for order flow are paid as part of exchange-mandated programs and to otherwise attract order volume to our system.

Employee Compensation and Benefits

Employee compensation and benefits include salaries, bonuses and other incentive compensation plans, group insurance, contributions to benefit programs and other related employee costs.

Occupancy, Depreciation and Amortization

Occupancy expenses consist primarily of rental payments on office and data center leases and related occupancy costs, such as utilities. Depreciation and amortization expenses result from the depreciation of fixed assets, such as computing and communications hardware, as well as amortization of leasehold improvements, capitalized in-house software development and acquired intangible assets.

Communications

Communications expenses consist primarily of the cost of voice and data telecommunications lines supporting our business, including connectivity to exchanges around the world.

General and Administrative and Customer Bad Debt

General and administrative expenses consist primarily of advertising, professional services expenses, such as legal and audit work, and other operating expenses. Customer bad debt expenses consist primarily of losses incurred by customers in excess of their assets with us, net of amounts recovered by us.

Income Tax Expense

We pay U.S. federal, state and local income taxes on our taxable income, which is proportional to the percentage we own of IBG LLC. Also, our subsidiaries are subject to income tax in the respective jurisdictions in which they operate.

Noncontrolling Interest

We are the sole managing member of IBG LLC and, as such, operate and control all of the business and affairs of IBG LLC and its subsidiaries and consolidate IBG LLC's financial results into our financial statements. As of December 31, 2016, we held approximately 16.6% ownership interest in IBG LLC. Holdings is owned by the original members of IBG LLC and holds approximately 83.4% ownership interest in IBG LLC. We reflect Holdings' ownership as a noncontrolling interest in our consolidated statement of financial condition, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows. Our share of IBG LLC's net income, excluding Holdings' noncontrolling interest, for the current year was approximately 16.2%, compared to approximately 15.1% for the prior year.

Certain Trends and Uncertainties

We believe that our continuing operations may be favorably or unfavorably impacted by the following trends that may affect our financial condition and results of operations:

- Over the past several years, the effects of market structure changes, competition (in particular, from high frequency traders) and market conditions have, during certain periods, exerted downward pressure on bid/offer spreads realized by market makers.
- Retail broker-dealer participation in the equity markets has fluctuated over the past few years due to investor sentiment, market conditions and a variety of other factors. Retail transaction volumes may not be sustainable and are not predictable.
- In recent years, in an effort to improve the quality of their executions as well as to increase efficiencies, market makers have increased the level of automation within their operations, which may allow them to compete more effectively with us.
- Scrutiny of equity and option market makers, hedge funds and soft dollar practices by regulatory and legislative authorities has increased. New legislation or modifications to existing regulations and rules could occur in the future.
- Additional consolidation among market centers may adversely affect the value of our smart routing software.
- A driver of our market making profits is the relationship between actual and implied volatility in the equities markets. The cost of maintaining our conservative risk profile is based on implied volatility, while our profitability, in part, is based on actual volatility. Hence, our profitability is increased when actual volatility runs above implied volatility and it is decreased when actual volatility falls below implied volatility. Implied volatility tends to lag actual volatility.

See "Risk Factors" in Part I, Item 1A of this Annual Report on Form 10-K for a discussion of other risks that may affect our financial condition and results of operations.

Results of Operations

The tables in the period comparisons below provide summaries of our consolidated results of operations. The period-to-period comparisons below of financial results are not necessarily indicative of future results.

	Year Ended December 31,		
	2016	2015	2014
	(in millions, except share and per share amounts)		
Revenues			
Trading gains	\$ 163	\$ 269	\$ 261
Commissions and execution fees	612	617	549
Interest income	606	492	416
Other income (loss)	94	(122)	(111)
Total revenues	<u>1,475</u>	<u>1,256</u>	<u>1,115</u>
Interest expense	79	67	72
Total net revenues	<u>1,396</u>	<u>1,189</u>	<u>1,043</u>
Non-interest expenses			
Execution and clearing	244	231	212
Employee compensation and benefits	242	227	205
Occupancy, depreciation and amortization	51	44	39
Communications	30	25	24
General and administrative	62	58	54
Customer bad debt	6	146	3
Total non-interest expenses	<u>635</u>	<u>731</u>	<u>537</u>
Income before income taxes	761	458	506
Income tax expense	62	43	47
Net income	699	415	459
Less net income attributable to noncontrolling interests	615	366	414
Net income available for common stockholders	<u>\$ 84</u>	<u>\$ 49</u>	<u>\$ 45</u>
Earnings per share			
Basic	<u>\$ 1.28</u>	<u>\$ 0.80</u>	<u>\$ 0.79</u>
Diluted	<u>\$ 1.25</u>	<u>\$ 0.78</u>	<u>\$ 0.77</u>
Weighted average common shares outstanding			
Basic	<u>66,013,247</u>	<u>61,043,071</u>	<u>56,492,381</u>
Diluted	<u>67,299,413</u>	<u>62,509,796</u>	<u>57,709,668</u>
Comprehensive income			
Net income available for common stockholders	<u>\$ 84</u>	<u>\$ 49</u>	<u>\$ 45</u>
Other comprehensive income			
Cumulative translation adjustment, before income taxes	(4)	(10)	(15)
Income taxes related to items of other comprehensive income	—	—	—
Other comprehensive loss, net of tax	<u>(4)</u>	<u>(10)</u>	<u>(15)</u>
Comprehensive income available for common stockholders	<u>\$ 80</u>	<u>\$ 39</u>	<u>\$ 30</u>
Comprehensive income attributable to noncontrolling interests			
Net income attributable to noncontrolling interests	\$ 615	\$ 366	\$ 414
Other comprehensive loss—cumulative translation adjustment	(21)	(53)	(92)
Comprehensive income attributable to noncontrolling interests	<u>\$ 594</u>	<u>\$ 313</u>	<u>\$ 322</u>

The following table sets forth our consolidated results of operations as a percent of our total net revenues for the indicated periods:

	Year Ended December 31,		
	2016	2015	2014
Revenues			
Trading gains	12%	23%	25%
Commissions and execution fees	44%	52%	53%
Interest income	43%	41%	40%
Other income (loss)	7%	(10)%	(11)%
Total revenues	106%	106%	107%
Interest expense	6%	6%	7%
Total net revenues	100%	100%	100%
Non-interest expenses			
Execution and clearing	17%	19%	20%
Employee compensation and benefits	17%	19%	20%
Occupancy, depreciation and amortization	4%	4%	4%
Communications	2%	2%	2%
General and administrative	4%	5%	5%
Customer bad debt	0%	12%	0%
Total non-interest expenses	45%	61%	52%
Income before income taxes	55%	39%	49%
Income tax expense	4%	4%	5%
Net Income	50%	35%	45%
Less net income attributable to noncontrolling interests	44%	31%	40%
Net income available for common stockholders	6%	4%	5%

Year Ended December 31, 2016 (“current year”) compared to the Year Ended December 31, 2015 (“prior year”)

Net Revenues

Total net revenues, for the current year, increased \$207 million, or 17%, compared to the prior year, to \$1,396 million. The increase in net revenues was primarily due to higher other income (driven by lower losses on our currency diversification strategy and net mark-to-market gains on our U.S. government securities portfolio), and net interest income; partially offset by lower trading gains and commissions and execution fees. Trading volume is an important driver of revenues and costs for both our electronic brokerage and market making segments. During the current year, our futures contract volume increased 2%, while options contract and stock share volumes each decreased 10%, compared to the prior year.

Trading Gains

Trading gains, for the current year, decreased \$106 million, or 39%, compared to the prior year, to \$163 million. As market makers, we provide liquidity by buying from sellers and selling to buyers. During the current year, our market making operations executed 64.0 million trades compared to 65.9 million trades executed in the prior year. Market making options and futures contract and stock share volumes decreased 8%, 5%, and 15%, respectively, compared to the prior year.

Trading gains were unfavorably impacted by lower trading volumes, a divergence in price behavior among a significant number of individual stocks during the first quarter of 2016, and decreases in volatility and in the actual-to-implied volatility ratio as compared to the prior year. The VIX[®], which measures perceived U.S. equity market volatility, decreased 5% to an average of 15.9 for the current year, compared to an average of 16.7 for the prior year. The ratio of actual to implied volatility decreased to an average of 83% for the current year, compared to an average of 88% for the prior year.

Included in trading gains are net dividends. Dividend income and expense arise from holding market making positions over dates on which dividends are paid to shareholders of record. When a stock pays a dividend, its market price is generally adjusted downward to reflect the value paid, which will not be received by those who purchase stock on or after the ex-dividend date. Hence, the apparent gains and losses due to these price changes, reflecting the value of dividends paid to shareholders, must be taken together with the dividends paid and received, respectively, to accurately reflect the results of our market making operations.

Commissions and Execution Fees

Commissions and execution fees, for the current year, decreased \$5 million, or 1%, compared to the prior year, to \$612 million, driven by mixed customer trading volumes and lower average commission per customer order, but moderated by continued customer account growth. Cleared customer options contract and stock share volumes decreased 7% and 10%, respectively, while futures contract volume increased 3%, compared to the prior year. Total DARTs for cleared and execution-only customers, for the current year, increased 2% to 660 thousand, compared to 647 thousand during the prior year. DARTs for cleared customers, i.e., customers for whom we execute trades, as well as, clear and carry positions, for the current year, increased 3% to 609 thousand, compared to 589 thousand for the prior year. Average commission per DART for cleared customers, for the current year, decreased by 4% to \$3.92, compared to \$4.07 for the prior year, reflecting smaller average order sizes across most product types.

Interest Income and Interest Expense

Net interest income (interest income less interest expense), for the current year, increased \$102 million, or 24%, compared to the prior year, to \$527 million. The increase in net interest income was driven by higher customer cash balances and higher net fees earned from securities lending transactions.

Net interest income on customer balances, for the current year, increased \$100 million, compared to the prior year, driven by a \$5.3 billion increase in average customer cash balances, the majority of which were invested in interest-bearing U.S. government securities, while average customer margin borrowings decreased \$1.5 billion. In addition, the average Fed Funds effective rate increased by approximately 26 basis points to 0.39% for the current year, compared to the prior year.

We earn income on securities loaned and borrowed to support customer long and short stock holdings in margin accounts. In addition, our Stock Yield Enhancement Program provides an opportunity for customers with fully-paid stock to allow us to lend it out. We pay customers a rebate on the cash collateral generally equal to 50% of the income we earn from lending the shares. We place cash collateral securing the loans in the customer's account.

In the market making segment, as a result of the way we have integrated our market making and securities lending systems, our trading income and our net interest income are interchangeable and depend on the mix of market making positions in our portfolio. When implied interest rates in the equity and equity options and futures markets exceed the actual interest rates available to us, our market making systems tend to buy stock and sell it forward, which produces higher trading gains and

lower net interest income. When these rates are inverted, our market making systems tend to sell stock and buy it forward, which produces lower trading gains and higher net interest income.

In the current year, average securities borrowed increased by 19%, to \$4.2 billion and average securities loaned decreased by 3%, to \$2.9 billion, compared to the prior year. Net interest earned from securities lending is also affected by the level of demand for securities positions in our market making business and held by our customers. During the current year, net fees earned by our electronic brokerage and market making segments from securities lending transactions increased \$6 million or 4%, compared to the prior year. The increase in net interest income from securities lending transactions was attributable to the market making segment.

The Company measures return on interest-earnings assets using net interest margin (“NIM”). NIM is computed by dividing the annualized net interest income by the average interest-earning assets for the period. Interest-earning assets consist of cash and securities segregated for regulatory purposes (including U.S. government securities and securities purchased under agreements to resell), customer margin borrowings, securities borrowed and other interest-earning assets (solely firm assets).

The following table presents net interest income information corresponding to interest-earning assets and interest-bearing liabilities for the indicated periods:

	Year Ended December 31,		
	2016	2015	2014
	(in millions)		
Average interest-earning assets			
Segregated cash and securities	\$24,134	\$18,314	\$15,371
Customer margin borrowings	16,506	17,247	15,693
Securities borrowed	4,155	3,511	3,182
Other interest-earning assets	2,495	2,004	1,473
	<u>\$47,290</u>	<u>\$41,076</u>	<u>\$35,719</u>
Average interest-bearing liabilities			
Customer credit balances	\$39,980	\$34,276	\$28,713
Securities loaned	2,897	3,000	2,927
	<u>\$42,877</u>	<u>\$37,276</u>	<u>\$31,640</u>
Net interest income			
Segregated cash and securities	\$ 149	\$ 68	\$ 39
Customer margin borrowings	217	199	169
Securities borrowed and loaned, net	156	149	132
Customer credit balances	(12)	(11)	(19)
Other net interest income	17	20	23
Net interest income	<u>\$ 527</u>	<u>\$ 425</u>	<u>\$ 344</u>
Net interest margin (“NIM”)	<u>1.11%</u>	<u>1.03%</u>	<u>0.96%</u>
Yields			
Segregated cash and securities	0.62%	0.37%	0.25%
Customer margin borrowings	1.31%	1.15%	1.08%
Customer credit balances	-0.03%	-0.03%	-0.07%

Other Income

Other income, for the current year, increased \$216 million, to \$94 million, compared to a loss of \$122 million in the prior year, mainly driven by \$166 million lower losses on our currency diversification strategy (loss of \$40 million for the current year, compared to a loss of \$206 million in the prior year), and \$26 million net mark-to-market gains on our U.S. government securities portfolio in the current year, compared to \$33 million net mark-to-market losses in the prior year, due to a decline in average medium term interests rates during the current year; partially offset by the non-recurrence of an \$18 million gain from hedging activities related to the Swiss franc event in the prior year. In general, mark-to-market gains and losses on U.S. government securities are expected to reverse when, as intended, these securities are held to maturity. A discussion of our approach to managing foreign currency exposure is contained in Part II, Item 7A of this Annual Report on Form 10-K entitled “Quantitative and Qualitative Disclosures about Market Risk.”

Non-Interest Expenses

Non-interest expenses, for the current year, decreased \$96 million, or 13%, compared to the prior year, to \$635 million, mainly due to the non-recurrence of \$137 million in customer bad debt expense due to the Swiss franc event in the prior year, as described above; partially offset by higher execution and clearing expenses and fixed expenses. As a percentage of total net revenues, non-interest expenses were 45% for the current year and 61% for the prior year.

Execution and Clearing

Execution and clearing expenses, for the current year, increased \$13 million, or 6%, compared to the prior year, to \$244 million, driven by higher trading volume in futures in the electronic brokerage segment and a reduction in liquidity rebates from exchanges operating a make-or-take pricing model, in which we are paid for adding liquidity and charged for removing liquidity, as the options trading volume shifted away from orders that added liquidity to orders that removed liquidity in the current year compared to the prior year.

Employee Compensation and Benefits

Employee compensation and benefits expenses, for the current year, increased \$15 million, or 7%, compared to the prior year, to \$242 million, mainly due to an 11% increase in the number of employees to 1,204, compared to 1,087 as of December 31, 2015. Within the operating business segments, we continued to add staff in customer service, legal and compliance, and software development to support electronic brokerage and reduce staff in market making. As we continue to grow, our focus on automation has allowed us to maintain a relatively small staff. As a percentage of total net revenues, employee compensation and benefits expenses were 17% for the current year and 19% for the prior year.

Occupancy, Depreciation and Amortization

Occupancy, depreciation and amortization expenses, for the current year, increased \$7 million, or 16%, compared to the prior year, to \$51 million, mainly due to higher office rent expenses during the current year as we continue to increase the number of employees and expand into other regions. As a percentage of total net revenues, occupancy, depreciation and amortization expenses were 4% for both the current year and the prior year.

Communications

Communications expenses, for the current year, increased \$5 million, or 20%, compared to the prior year, to \$30 million, mainly due to higher costs of data lines to exchanges during the current year. As a percentage of total net revenues, communications expenses were 2% for both the current year and the prior year.

General and Administrative

General and administrative expenses, for the current year, increased \$4 million, or 7%, compared to the prior year, to \$62 million, mainly due to higher professional services fees and expenses related to legal and regulatory matters. As a percentage of total net revenues, general and administrative expenses were 4% for the current year and 5% for the prior year.

Customer Bad Debt

Customer bad debt expense, for the current year, decreased \$140 million, or 96%, compared to the prior year, to \$6 million, primarily due to the non-recurrence of unsecured customer losses of \$137 million caused by the sudden move in the value of the Swiss franc in the prior year, as described above in the “Financial Overview” section.

Income Tax Expense

Income tax expense, for the current year, increased \$19 million, or 44%, to \$62 million, compared to the prior year, as income before taxes increased \$303 million, or 66%, during the same period.

Our operating results, for the current year, excluding the effects of our currency diversification strategy, the net mark-to-market gains and losses from our U.S. government securities portfolio and the Swiss franc related customer losses from the prior year were as follows: net revenues were \$1,410 million, unchanged from the prior year; non-interest expenses were \$635 million, up 7%; income before income taxes was \$775 million, down 5%; and pre-tax profit margin decreased to 55% for the current year, from 58% for the prior year.

Year Ended December 31, 2015 compared to the Year Ended December 31, 2014

Net Revenues

Total net revenues, in 2015, increased \$146 million, or 14%, to \$1,189 million, compared to 2014. The increase in net revenues was primarily due to higher commissions and execution fees and net interest income. Trading volume is an important driver of revenues and costs for both our electronic brokerage and market making segments. In 2015, our futures contract and stock share volumes increased 14% and 12%, respectively, while options contract volume remained unchanged, compared to 2014.

Trading Gains

Trading gains, in 2015, increased \$8 million, or 3%, to \$269 million, compared to 2014. As market makers, we provide liquidity by buying from sellers and selling to buyers. In 2015, our market making operations executed 65.9 million trades, an increase of 2% compared to the number of trades executed in 2014. Market making stock share volume increased 28%, while options and futures contract volumes decreased 3% and 4%, respectively, compared to 2014.

Trading gains were favorably impacted by higher volatility levels and periods of higher trading activity. The VIX[®], which measures perceived U.S. equity market volatility, increased 18% to an average of 16.7 in 2015, compared to an average of 14.2 in 2014. The ratio of actual to implied volatility increased to an average of 88% in 2015, compared to an average of 79% in 2014.

Included in trading gains are net dividends. Dividend income and expense arise from holding market making positions over dates on which dividends are paid to shareholders of record. When a stock pays a dividend, its market price is generally adjusted downward to reflect the value paid, which will not be received by those who purchase stock after the ex-dividend date. Hence, the apparent gains and losses due to these price changes, reflecting the value of dividends paid to shareholders, must be taken together with the dividends paid and received, respectively, to accurately reflect the results of our market making operations.

Commissions and Execution Fees

Commissions and execution fees, in 2015, increased \$68 million, or 12%, to \$617 million, compared to 2014, driven by continued customer account growth and increased customer trading activity, but moderated by lower average commission per customer order. Cleared customer options and futures contract volumes and stock share volume increased 8%, 17%, and 12%, respectively, from 2014. Total DARTs for cleared and execution-only customers, in 2015, increased 14% to 647 thousand, compared to 566 thousand in 2014. DARTs for cleared customers, i.e., customers for whom we execute trades, as well as, clear and carry positions, in 2015, increased 14% to 589 thousand, compared to 515 thousand in 2014. Average commission per DART for cleared customers, in 2015, decreased by 2% to \$4.07, compared to \$4.16 in 2014.

Interest Income and Interest Expense

Net interest income (interest income less interest expense), in 2015, increased \$81 million, or 24%, to \$425 million, compared to 2014. The increase in net interest income was driven by higher average customer margin borrowings, higher average customer cash balances which were invested in interest-bearing instruments (e.g., U.S. government securities), and higher net fees earned from securities lending transactions.

Net interest income on customer balances, in 2015, increased \$66 million, compared to 2014, driven by a \$5.0 billion increase in average customer cash balances, which were invested in interest-bearing instruments (e.g., U.S. government securities), and a \$1.6 billion increase in average customer margin borrowings. In addition, the average Fed Funds effective rate increased by approximately four basis points to 0.13% in 2015, compared to 2014.

We earn fees on securities loaned and borrowed to support customer long and short stock holdings in margin accounts. In addition, our Stock Yield Enhancement Program provides an opportunity for customers with fully-paid stock to allow us to lend it out. We pay customers a rebate on the cash collateral generally equal to 50% of the income we earn from lending the shares. We place cash collateral securing the loans in the customer's account.

In the market making segment, as a result of the way we have integrated our market making and securities lending systems, our trading income and our net interest income are interchangeable and depend on the mix of market making positions in our portfolio. When implied interest rates in the equity and equity options and futures markets exceed the actual interest rates available to us, our market making systems tend to buy stock and sell it forward, which produces higher trading gains and lower net interest income. When these rates are inverted, our market making systems tend to sell stock and buy it forward, which produces lower trading gains and higher net interest income.

In 2015, average securities borrowed increased by 10%, to \$3.5 billion and average securities loaned increased by 2%, to \$3.0 billion, compared to 2014. Net interest earned from securities lending is also affected by the level of demand for securities positions in our market making business and held by our customers. During 2015, net fees earned by our electronic brokerage and market making segments from securities lending transactions increased \$16 million, or 12%, compared to 2014. The majority of the increase in net interest income from securities lending transactions was attributable to the electronic brokerage segment.

Other Income

Other income, in 2015, decreased \$11 million, or 10%, to a loss of \$122 million, compared to 2014, mainly driven by \$21 million higher losses on our currency diversification strategy and \$36 million higher mark-to-market losses on U.S. government securities, partially offset by \$15 million higher risk exposure fee income and an \$18 million gain from our hedging activities to offset our losses related to the Swiss franc event. In general, mark-to-market gains and losses on U.S. government securities are expected to reverse when, as intended, these securities are held to maturity. A discussion of our approach to managing foreign currency exposure is contained in Part II, Item 7A of this Annual Report on Form 10-K entitled “Quantitative and Qualitative Disclosures about Market Risk.”

Non-Interest Expenses

Non-interest expenses, in 2015, increased \$194 million, or 36%, to \$731 million, compared to 2014, mainly due to higher customer bad debt expense due to the Swiss franc event, execution and clearing expenses, and employee compensation and benefits expenses. As a percentage of total net revenues, non-interest expenses were 61% in 2015 and 51% in 2014.

Execution and Clearing

Execution and clearing expenses, in 2015, increased \$19 million, or 9%, to \$231 million, compared to 2014, driven by higher trading volumes in options, futures and stocks in the electronic brokerage segment and higher trading volumes in stocks in the market making segment.

Employee Compensation and Benefits

Employee compensation and benefits expenses, in 2015, increased \$22 million, or 11%, to \$227 million, compared to 2014, mainly due to a 13% increase in the number of employees to 1,087, compared to 960 in 2014. Approximately 15% of the increase in the number of employees was due to the acquisition of Covestor, an online investment marketplace, during the second quarter of 2015. Within the operating business segments, we continued to add staff in electronic brokerage and reduce staff in market making. As we continue to grow, our focus on automation has allowed us to maintain a relatively small staff. As a percentage of total net revenues, employee compensation and benefits expenses were 19% in 2015 and 20% in 2014.

Occupancy, Depreciation and Amortization

Occupancy, depreciation and amortization expenses, in 2015, increased \$5 million, or 13%, to \$44 million, compared to 2014, mainly due to higher amortization expenses as a result of acquired intangible assets during 2015. As a percentage of total net revenues, occupancy, depreciation and amortization expenses were 4% for both 2015 and 2014.

Communications

Communications expenses, in 2015, increased \$1 million, or 4%, to \$25 million, compared to 2014. As a percentage of total net revenues, communications expenses were 2% for both 2015 and 2014.

General and Administrative

General and administrative expenses, in 2015, increased \$4 million, or 7%, to \$58 million, compared to 2014, mainly due to higher advertising expenses. As a percentage of total net revenues, general and administrative expenses were 5% for both 2015 and 2014.

Customer Bad Debt

Customer bad debt expense, in 2015, increased \$143 million, to \$146 million, compared to 2014, primarily due to unsecured customer losses of \$137 million caused by the sudden move in the value of the Swiss franc, as described above in the “Financial Overview” section, and \$7 million caused by the market volatility in August 2015.

Income Tax Expense

Income tax expense, in 2015, decreased \$4 million, or 9%, to \$43 million, compared to 2014, as income before taxes decreased \$48 million, or 9%, during the same period.

Our operating results, in 2015, excluding the effects of our currency diversification strategy, the net mark-to-market losses from our U.S. government securities portfolio and the Swiss franc related customer losses, compared to 2014 were as follows: net revenues were \$1,410 million, up 12%; non-interest expenses were \$594 million, up 11%; income before income taxes was \$816 million, up 14%; and pre-tax profit margin was 58% in 2015 and 57% in 2014.

Trading Volumes and Brokerage Statistics

The following tables present historical trading volumes and brokerage statistics for our business. However, volumes are not the only drivers in our business.

TRADE VOLUMES:

(in 000's, except %)

Period	Market	% Change	Brokerage	% Change	Brokerage	% Change	Total	% Change	Avg. Trades
	Making Trades		Cleared Trades		Non Cleared Trades		Trades		per U.S. Trading Day
2012	60,421		150,000		16,118		226,540		904
2013	65,320	8%	173,849	16%	18,489	15%	257,658	14%	1,029
2014	64,530	(1)%	206,759	19%	18,055	(2)%	289,344	12%	1,155
2015	65,937	2%	242,846	17%	18,769	4%	327,553	13%	1,305
2016	64,038	(3)%	259,932	7%	16,515	(12)%	340,485	4%	1,354

CONTRACT AND SHARE VOLUMES:

(in 000's, except %)

TOTAL

Period	Options (contracts)	% Change	Futures (contracts)	% Change	Stocks (shares)	% Change
2012	698,140		98,801		65,872,960	
2013	659,673	(6)%	121,776	23%	95,479,739	45%
2014	631,265	(4)%	123,048	1%	153,613,174	61%
2015	634,388	0%	140,668	14%	172,742,520	12%
2016	572,834	(10)%	143,287	2%	155,439,227	(10)%

Notes:

(1) Futures contract volume includes options on futures

MARKET MAKING

<u>Period</u>	<u>Options (contracts)</u>	<u>% Change</u>	<u>Futures (contracts)</u>	<u>% Change</u>	<u>Stocks (shares)</u>	<u>% Change</u>
2012	457,384		12,660		9,339,465	
2013	404,490	(12)%	18,184	44%	12,849,729	38%
2014	344,741	(15)%	15,668	(14)%	12,025,822	(6)%
2015	335,406	(3)%	14,975	(4)%	15,376,076	28%
2016	307,377	(8)%	14,205	(5)%	13,082,887	(15)%

BROKERAGE TOTAL

<u>Period</u>	<u>Options (contracts)</u>	<u>% Change</u>	<u>Futures (contracts)</u>	<u>% Change</u>	<u>Stocks (shares)</u>	<u>% Change</u>
2012	240,756		86,141		56,533,495	
2013	255,183	6%	103,592	20%	82,630,010	46%
2014	286,524	12%	107,380	4%	141,587,352	71%
2015	298,982	4%	125,693	17%	157,366,444	11%
2016	265,457	(11)%	129,082	3%	142,356,340	(10)%

BROKERAGE CLEARED

<u>Period</u>	<u>Options (contracts)</u>	<u>% Change</u>	<u>Futures (contracts)</u>	<u>% Change</u>	<u>Stocks (shares)</u>	<u>% Change</u>
2012	144,539		84,794		54,371,351	
2013	180,660	25%	101,732	20%	78,829,785	45%
2014	225,662	25%	106,074	4%	137,153,132	74%
2015	244,356	8%	124,206	17%	153,443,988	12%
2016	227,413	(7)%	128,021	3%	138,523,932	(10)%

Notes:

(1) Futures contract volume includes options on futures

BROKERAGE STATISTICS:

(in 000's, except % and where noted)

	<u>4Q2016</u>	<u>4Q2015</u>	<u>% Change</u>
Year over Year			
Total Accounts	385	331	16%
Customer Equity (in billions)*	\$ 85.5	\$ 67.4	27%
Cleared DARTs	591	582	2%
Total Customer DARTs	640	641	(0)%
Cleared Customers (in \$'s, except DART per account)			
Commission per DART	\$ 4.01	\$ 3.81	5%
DART per Avg. Account (Annualized)	394	447	(12)%
Net Revenue per Avg. Account (Annualized)	\$3,205	\$3,239	(1)%

* Excludes non-customers.

Business Segments

The following sections discuss the results of our operations by business segment, excluding a discussion of corporate segment income and expense. In the following tables, revenues and expenses directly associated with each business segment are included in determining income before income taxes. Due to the integrated nature of the business segments, estimates and judgments have been made in allocating certain revenue and expense items. Transactions between business segments generally result from one subsidiary facilitating the business of another subsidiary through the use of its existing trading memberships and clearing arrangements. In such cases, certain revenue and expense items are eliminated to accurately reflect the external business conducted in each business segment. Rates on transactions between business segments are designed to approximate full costs. In addition to execution and clearing expenses, which are the main cost driver for both the market making and the electronic brokerage segments, each business segment's operating expenses include: (i) employee compensation and benefits expenses that are incurred directly in support of each business segment, (ii) general and administrative expenses, which include directly incurred expenses for property leases, professional fees, travel and entertainment, communications and information services, equipment, and (iii) indirect support costs (including compensation and other related operating expenses) for administrative services provided by corporate segment subsidiaries. Such administrative services include, but are not limited to, computer software development and support, accounting, tax, legal and facilities management.

Electronic Brokerage

The following table sets forth the results of our electronic brokerage operations for the indicated periods:

	<u>Year Ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(in millions)		
Revenues			
Commissions and execution fees	\$ 613	\$ 618	\$549
Interest income	537	431	352
Other income	128	79	81
Total revenues	<u>1,278</u>	<u>1,128</u>	<u>982</u>
Interest expense	39	31	30
Total net revenues	<u>1,239</u>	<u>1,097</u>	<u>952</u>
Non-interest expenses			
Execution and clearing	181	160	148
Employee compensation and benefits	113	97	80
Occupancy, depreciation and amortization	21	16	11
Communications	14	12	11
General and administrative	148	130	110
Customer bad debt	6	146	3
Total non-interest expenses	<u>483</u>	<u>561</u>	<u>363</u>
Income before income taxes	<u>\$ 756</u>	<u>\$ 536</u>	<u>\$589</u>

Year Ended December 31, 2016 (“current year”) compared to the Year Ended December 31, 2015 (“prior year”)

Electronic brokerage total net revenues, for the current year, increased \$142 million, or 13%, compared to the prior year, to \$1,239 million, primarily due to higher net interest income and other income.

Commissions and execution fees, for the current year, decreased \$5 million, or 1%, compared to the prior year, to \$613 million, driven by mixed customer trading volumes and lower average commission per customer order, but moderated by continued customer account growth. Cleared customer options contract and stock share volumes decreased 7% and 10%, respectively, while futures contract volume increased 3% compared to the prior year. Total DARTs for cleared and execution-only customers, for the current year, increased 2% to 660 thousand, compared to 647 thousand during the prior year. DARTs for cleared customers, i.e., customers for whom we execute trades, as well as, clear and carry positions, for the current year, increased 3% to 609 thousand, compared to 589 thousand for the prior year. Average commission per DART for cleared customers, for the current year, decreased 4% to \$3.92, compared to \$4.07 for the prior year, reflecting smaller average order sizes across product types.

Net interest income, for the current year, increased \$98 million, or 25% compared to the prior year, to \$498 million. The increase in net interest income was attributable to higher net customer interest of \$100 million, driven by a \$5.3 billion increase in average customer cash balances, the majority of which were invested in interest-bearing U.S. government securities, while average customer margin borrowings decreased by \$1.5 billion. In addition, the average Fed Funds effective rate increased by approximately 26 basis points to 0.39% for the current year, compared to the prior year.

Other income, for the current year, increased \$49 million, or 62%, compared to the prior year, to \$128 million, mainly driven by \$26 million net mark-to-market gains on our U.S. government securities portfolio compared to \$33 million net mark-to-market losses in the prior year, due to a decline in average medium-term interest rates, partially offset by the non-recurrence of an \$18 million gain from hedging activities related to the Swiss franc event in the prior year. In general, mark-to-market gains and losses on U.S. government securities are expected to reverse when, as intended, these securities are held to maturity.

Non-interest expenses, for the current year, decreased \$78 million, or 14%, compared to the prior year, to \$483 million, mainly due to a decrease in bad debt expense of \$140 million, or 96%, compared to the prior year, to \$6 million, on the non-recurrence of \$137 million in customer bad debt expense related to the Swiss franc event in the prior year. Within non-interest expenses, execution and clearing expenses increased \$21 million, or 13%, driven by higher trading volume in futures and a reduction in liquidity rebates from exchanges operating a make-or-take pricing model, in which we are paid for adding liquidity and charged for removing liquidity, as the options trading volume shifted away from orders that added liquidity to orders that removed liquidity in the current year compared to the prior year. A 16% increase in the number of employees providing services to the electronic brokerage segment led to increased employee compensation and benefits expenses of \$16 million, or 16%, and in general and administrative expenses of \$18 million, where the latter includes software development provided by the corporate segment on a consulting basis. In addition, general and administrative expenses for the current year include higher professional fees and expenses related to legal and regulatory matters, compared to the prior year. As a percentage of total net revenues, non-interest expenses were 39% for the current year and 51% for the prior year.

Income before income taxes, for the current year, increased \$220 million, or 41%, compared to the prior year, to \$756 million. As a percentage of total net revenues for the electronic brokerage segment, income before income taxes was 61% for the current year and 49% for the prior year.

Electronic brokerage operating results, for the current year, excluding the net mark-to-market gains and losses from our U.S. government securities portfolio and the Swiss franc related customer losses from the prior year were as follows: net revenues were \$1,213 million, up 9%; non-interest expenses were \$483 million up 14%; income before income taxes was \$730 million, up 6%; and pre-tax profit margin decreased to 60% for the current year from 62% for the prior year.

Year Ended December 31, 2015 compared to the Year Ended December 31, 2014

Electronic brokerage total net revenues, in 2015, increased \$145 million, or 15%, compared to 2014, to \$1,097 million, primarily due to higher commission and execution fees and net interest income.

Commissions and execution fees, in 2015, increased \$69 million, or 13%, compared to 2014, to \$618 million, driven by continued customer account growth and increased customer trading activity, but moderated by lower average commission per customer order. Cleared customer options and futures contract and stock share volumes increased 8%, 17%, and 12%, respectively. Total DARTs for cleared and execution-only customers, in 2015, increased 14% to 647 thousand, compared to 566 thousand during 2014. DARTs for cleared customers, i.e., customers for whom we execute trades, as well as, clear and carry positions, in 2015, increased 14% to 589 thousand, compared to 515 thousand in 2014. Average commission per DART for cleared customers, in 2015, decreased by 2% to \$4.07, compared to \$4.16 in 2014.

Net interest income, in 2015, increased \$78 million, or 24%, compared to 2014, to \$400 million. The increase in net interest income was attributable to higher net customer interest of \$66 million, driven by a \$5.0 billion increase in average customer cash balances, the majority of which were invested in interest-bearing U.S. government securities, and a \$1.6 billion increase in average customer margin borrowings, and higher net fees from securities lending transactions of \$14 million. In addition, the average Fed Funds effective rate increased by approximately four basis points to 0.13% in 2015, compared to 2014.

Other income, in 2015, decreased \$2 million, or 2%, compared to 2014, to \$79 million, mainly due to \$36 million higher mark-to-market losses on U.S. government securities, largely offset by \$15 million higher risk exposure fee income and an \$18 million gain from hedging activities related to the Swiss franc event. In general, mark-to-market gains and losses on U.S. government securities are expected to reverse when, as intended, these securities are held to maturity.

Non-interest expenses, in 2015, increased \$198 million, or 55%, compared to 2014, to \$561 million, mainly due to \$137 million bad debt expense as a result of the sudden move in the value of the Swiss franc as described above in the “Financial Overview” section, and \$7 million bad debt expense caused by the market volatility in the late-August period. Within non-interest expenses, execution and clearing expenses increased \$12 million, or 8%, due to higher trading volume across all product classes. Employee compensation and benefits expenses increased \$17 million, or 21%, due to a 13% increase in the average number of employees. General and administrative expenses increased \$20 million, or 18%, primarily due to higher administrative, consulting and advertising expenses. As a percentage of total net revenues, non-interest expenses were 51% in 2015 and 38% in 2014.

Income before income taxes, in 2015, decreased \$53 million, or 9%, compared to 2014, to \$536 million. As a percentage of total net revenues for the electronic brokerage segment, income before income taxes was 49% in 2015 and 62% in 2014.

Electronic brokerage operating results, in 2015, excluding the effects of the net mark-to-market gains and losses from our U.S. government securities portfolio and the Swiss franc related customer losses, compared to 2014 were as follows: net revenues were \$1,112 million, up 16%; non-interest expenses were \$424 million, up 17%; income before income taxes was \$688 million, up 15%; and pre-tax profit margin was 62% for both 2015 and 2014.

Market Making

The following table sets forth the results of our market making operations for the indicated periods:

	Year Ended December 31,		
	2016	2015	2014
	(in millions)		
Revenues			
Trading gains	\$163	\$269	\$261
Interest income	71	62	65
Other income	4	10	2
Total revenues	<u>238</u>	<u>341</u>	<u>328</u>
Interest expense	<u>48</u>	<u>43</u>	<u>44</u>
Total net revenues	<u>190</u>	<u>298</u>	<u>284</u>
Non-interest expenses			
Execution and clearing	63	72	64
Employee compensation and benefits	31	38	41
Occupancy, depreciation and amortization	4	4	6
Communications	10	10	9
General and administrative	<u>38</u>	<u>44</u>	<u>50</u>
Total non-interest expenses	<u>146</u>	<u>168</u>	<u>170</u>
Income before income taxes	<u>\$ 44</u>	<u>\$130</u>	<u>\$114</u>

Year Ended December 31, 2016 (“current year”) compared to the Year Ended December 31, 2015 (“prior year”)

Market making total net revenues, for the current year, decreased \$108 million, or 36%, compared to the prior year, to \$190 million, primarily due to lower trading gains, partially offset by higher net interest income.

Trading gains, for the current year, decreased \$106 million, or 39%, compared to the prior year, to \$163 million, unfavorably impacted by lower trading volumes, a divergence in price behavior among a significant number of individual stocks during the first quarter of 2016 and decreases in volatility and in the actual-to-implied volatility ratio as compared to the prior year. The VIX[®], which measures perceived U.S. equity market volatility, decreased 5% to an average of 15.9 for the current year, compared to an average of 16.7 for the prior year. The ratio of actual to implied volatility decreased to an average of 83% for the current year, compared to an average of 88% for the prior year. Options and futures contract and stock share volumes decreased 8%, 5%, and 15%, respectively, compared to the prior year.

Net interest income, for the current year, increased \$4 million, or 21%, compared to the prior year, to \$23 million. As described above, our trading gains and our net interest income are interchangeable and depend on the mix of market making positions in our portfolio and on relative interest rates in the stock and options markets. In the current year, these factors produced more net interest income than in the prior year.

Non-interest expenses, for the current year, decreased \$22 million, or 13%, compared to the prior year, to \$146 million. Within non-interest expenses, execution and clearing fees decreased \$9 million, or 13%, on lower trading volumes across product types. Employee compensation and benefits expenses decreased \$7 million, or 18%, driven by continued reductions in staff. General and administrative

expense decreased \$6 million, or 14%, due to lower consulting expenses, primarily for internal software development. As a percentage of total net revenues, non-interest expenses were 77% for the current year and 56% for the prior year.

Income before income taxes, for the current year, decreased \$86 million, or 66%, compared to the prior year, to \$44 million. As a percentage of total net revenues for the market making segment, income before income taxes was 23% for the current year and 44% for the prior year.

Year Ended December 31, 2015 compared to the Year Ended December 31, 2014

Market making total net revenues, in 2015, increased \$14 million, or 5%, compared to 2014, to \$298 million, primarily due to higher trading gains and other income as a result of higher dividend income received from other investments.

Trading gains, in 2015, increased \$8 million, or 3%, compared to 2014, to \$269 million. Trading gains were favorably impacted by higher volatility levels and periods of higher trading activity. The VIX[®], which measures perceived U.S. equity market volatility, increased 18% to an average of 16.7 in 2015, compared to an average of 14.2 in 2014. The ratio of actual to implied volatility increased to an average of 88% in 2015, compared to an average of 79% in 2014. Stock share volume increased 28%, while options and futures contract volumes decreased 3% and 4%, respectively, compared to 2014.

Net interest income, in 2015, decreased \$2 million, or 10%, compared to 2014, to \$19 million. As described above, our trading gains and our net interest income are interchangeable and depend on the mix of market making positions in our portfolio and on relative interest rates in the stock and options markets. In 2015, these factors, together with a reduction in interest earned on deposits with banks, produced less net interest income than in 2014.

Non-interest expenses, in 2015, decreased \$2 million, or 1%, compared to 2014, to \$168 million. The decrease was primarily due to a \$6 million decrease in general and administrative expenses driven by lower administrative and consulting fees, primarily for internal software development, and a \$3 million decrease in employee compensation and benefits expenses as reductions in staff in the market making segment continued; partially offset by an \$8 million increase in execution and clearing driven by higher trading volumes. As a percentage of total net revenues, non-interest expenses were 56% in 2015 and 60% in 2014.

Income before income taxes, in 2015, increased \$16 million, or 14%, compared to 2014, to \$130 million. As a percentage of total net revenues for the market making segment, income before income taxes was 44% in 2015 and 40% in 2014.

Liquidity and Capital Resources

We maintain a highly liquid balance sheet. The majority of our assets consist of investments of customer funds, collateralized receivables arising from customer-related and proprietary securities transactions, and exchange-listed marketable securities, which are marked-to-market daily.

Collateralized receivables consist primarily of customer margin loans, securities borrowed, and, to a lesser extent receivables from clearing houses for settlement of securities transactions, and securities purchased under agreements to resell. As of December 31, 2016, total assets were \$54.7 billion of which approximately \$54.2 billion, or 99.1% were considered liquid.

Daily monitoring of liquidity needs and available collateral levels is undertaken to help ensure that an appropriate liquidity cushion, in the form of unpledged collateral, is maintained at all times. Our ability to quickly reduce funding needs by balance sheet contraction without adversely affecting our core

businesses and to pledge additional collateral in support of secured borrowings is continuously evaluated to ascertain the adequacy of our capital base.

We actively manage our excess liquidity and we maintain significant borrowing facilities through the securities lending markets and with banks. As a general practice, we maintain sufficient levels of cash on hand to provide us with a buffer should we need immediately available funds for any reason.

Liability balances, as of December 31, 2016, in connection with our short term borrowings, securities loaned, and payables to customers were higher than their respective average monthly balances during the current year. Based on our current level of operations, we believe our cash flows from operations, available cash and available borrowings will be adequate to meet our future liquidity needs for more than the next twelve months.

Cash and cash equivalents held by our non-U.S. operating companies as of December 31, 2016 were \$448 million (\$382 million as of December 31, 2015). These funds are primarily intended to finance each individual operating company's local operations, and thus would not be available to fund U.S. domestic operations unless repatriated through payment of dividends to IBG LLC. In December 2015, June 2016, and December 2016 dividends of \$80 million, \$40 million, and \$22 million, respectively, were paid to IBG LLC from three of our non-U.S. subsidiaries. As of December 31, 2016, we had no intention to repatriate further amounts from non-U.S. operating companies. In the event dividends were to be paid to the Company in the future by a non-U.S. operating company, the Company would be required to accrue and pay income taxes on such dividends to the extent that U.S. income taxes had not been paid previously on the income of the paying company.

Historically, our consolidated equity has consisted primarily of accumulated retained earnings, which to date have been sufficient to fund our operations and growth. Our consolidated equity increased 9% to \$5.8 billion as of December 31, 2016 from \$5.3 billion as of December 31, 2015. This increase is attributable to total comprehensive income, partially offset by distributions and dividends paid during 2016.

Cash Flows

The following table sets forth our cash flows from operating activities, investing activities and financing activities for the periods indicated:

	Year Ended December 31,		
	2016	2015	2014
	(in millions)		
Net cash provided by operating activities	\$ 544	\$ 725	\$ 417
Net cash provided by (used in) investing activities	(6)	(35)	54
Net cash used in financing activities	(189)	(295)	(308)
Effect of exchange rate changes on cash and cash equivalents	(25)	(63)	(107)
Increase in cash and cash equivalents	<u>\$ 324</u>	<u>\$ 332</u>	<u>\$ 56</u>

Our cash flows from operating activities are largely a reflection of the size and composition of trading positions held by our market making subsidiaries, and of the changes in customer cash and margin balances in our electronic brokerage business. Our cash flows from investing activities are primarily related to other investments, capitalized internal software development, purchases and sales of memberships at exchanges where we trade, and strategic investments where such investments may enable us to offer better execution alternatives to our current and prospective customers, or create new opportunities for ourselves as market makers or where we can influence exchanges to provide

competing products at better prices using sophisticated technology. Our cash flows from financing activities are comprised of short-term borrowings and capital transactions. Short-term borrowings from banks are part of our daily cash management in support of operating activities. Capital transactions consist primarily of quarterly dividends paid to common stockholders and related distributions paid to Holdings.

Year Ended December 31, 2016: Our cash and cash equivalents increased by \$324 million to \$1.9 billion for the year ended December 31, 2016. We raised \$544 million in net cash from operating activities. We used net cash of \$195 million in our investing and financing activities, primarily for distributions to noncontrolling interests, dividends paid to our common stockholders and payments made under the Tax Receivable Agreement. Under investing activities, purchases and sales of other investments mainly consisted of transactions in marketable securities held for investment purposes and distributions received from investments.

Year Ended December 31, 2015: Our cash and cash equivalents increased by \$332 million to \$1,601 million for the year ended December 31, 2015. We raised \$725 million in net cash from operating activities. We used net cash of \$330 million in our investing and financing activities, primarily for distributions to noncontrolling interests, dividends paid to our common stockholders, and payments made to Holdings under the Tax Receivable Agreement. Under investing activities, purchases and sales of other investments mainly consisted of transactions in marketable securities held for investment purposes.

Year Ended December 31, 2014: Our cash and cash equivalents increased by \$56 million to \$1,269 million for the year ended December 31, 2014. We raised \$417 million in net cash from operating activities. We used net cash of \$254 million in our investing and financing activities, primarily for distributions to noncontrolling interests, dividends paid to our common stockholders, and payments made to Holdings under the Tax Receivable Agreement. Under investing activities, purchases and sales of other investments mainly consisted of transactions in marketable securities held for investment purposes.

Regulatory Capital Requirements

Our principal operating companies are subject to separate regulation and capital requirements in the U.S. and other jurisdictions. IB LLC and TH LLC are registered U.S. broker-dealers and their primary regulators include the SEC, the CFTC, the Chicago Board Options Exchange, the Chicago Mercantile Exchange and FINRA. IB LLC is also a registered U.S. futures commission merchant, as such it is regulated by the NFA. THE is registered to do business in Switzerland as a securities dealer and is regulated by the Swiss Financial Market Supervisory Authority. Our various other operating companies are similarly regulated. See the notes to the consolidated financial statements in Part II, Item 8 of this Annual Report on Form 10-K for further information regarding our regulated operating companies.

As of December 31, 2016, aggregate excess regulatory capital for all of the operating companies was \$4.2 billion, and all of the operating companies were in compliance with their respective regulatory capital requirements.

	<u>Net Capital/ Eligible Equity</u>	<u>Requirement</u>	<u>Excess</u>
	(in millions)		
IB LLC	\$3,254	\$294	\$2,960
TH LLC	306	1	305
THE	577	174	403
Other regulated Operating Companies	<u>659</u>	<u>96</u>	<u>563</u>
	<u>\$4,796</u>	<u>\$565</u>	<u>\$4,231</u>

Capital Expenditures

Our capital expenditures are comprised of compensation costs of our software engineering staff for development of software for internal use and expenditures for computer, networking and communications hardware. These expenditure items are reported as property, equipment, and intangible assets. Capital expenditures for property, equipment, and intangible assets were approximately \$27 million, \$30 million, and \$19 million for the three years ended December 31, 2016, 2015, and 2014, respectively. In the future, we plan meet capital expenditure needs as we continue our focus on technology infrastructure initiatives to further enhance our competitive position. We anticipate that we will fund capital expenditures with cash from operations and cash on hand. In response to changing economic conditions, we believe we have the flexibility to modify our capital expenditures by adjusting them (either upward or downward) to match our actual performance. If we pursue any strategic acquisitions, we may incur additional capital expenditures.

Contractual Obligations Summary

Our contractual obligations principally include obligations associated with our outstanding indebtedness and interest payments as of December 31, 2016.

	<u>Payments Due by Year</u>			
	<u>Total</u>	<u>2017 - 2018</u>	<u>2019 - 2020</u>	<u>Thereafter</u>
	(in millions)			
Payable to Holdings under Tax Receivable Agreement(1)	\$285	\$44	\$49	\$192
Operating leases	<u>49</u>	<u>27</u>	<u>8</u>	<u>14</u>
Total contractual cash obligations	<u>\$334</u>	<u>\$71</u>	<u>\$57</u>	<u>\$206</u>

(1) As of December 31, 2016, contractual amounts owed under the tax receivable agreement of \$285 million have been recorded in payable to affiliate in the consolidated financial statements representing management's best estimate of the amounts currently expected to be owed under the tax receivable agreement. Through December 31, 2016, approximately \$116 million of cumulative cash payments have been made.

Seasonality

Our businesses are subject to seasonal fluctuations, reflecting varying numbers of market participants at times during the year, varying numbers of trading days from quarter-to-quarter, and declines in trading

activity due to holidays. Typical seasonal trends may be superseded by market or world events, which can have a significant impact on prices and trading volume.

Inflation

Although we cannot accurately anticipate the effects of inflation on our operations, we believe that, for the three most recent years, inflation has not had a material impact on our results of operations and will not likely have a material impact in the foreseeable future.

Investments in U.S. Government Securities

We invest in U.S. government securities for the purpose of satisfying U.S. regulatory requirements. As a broker-dealer, unlike banks, we are required to mark these investments to market even though we intend to hold them to maturity. Sudden increases in interest rates will cause mark-to-market losses on these securities, which are recovered if we hold them to maturity, as currently intended. The impact of changes in interest rates is further described in ITEM 7A of this Annual Report on Form 10-K entitled “Quantitative and Qualitative Disclosures about Market Risk.”

Strategic Investments and Acquisitions

We regularly evaluate potential strategic investments and acquisitions. We hold strategic investments in electronic trading exchanges including: BOX Options Exchange, LLC; OneChicago LLC and CBOE Stock Exchange, LLC.

We intend to continue making acquisitions on an opportunistic basis, generally only when the acquisition candidate will, in our opinion, enable us to acquire either technology or customers faster than we could develop them on our own.

As of December 31, 2016, there were no definitive agreements with respect to any material acquisition.

Certain Information Concerning Off-Balance-Sheet Arrangements

We may be exposed to a risk of loss not reflected in our consolidated financial statements for futures products, which represent our obligations to settle at contracted prices, and which may require us to repurchase or sell in the market at prevailing prices. Accordingly, these transactions result in off-balance sheet risk, as our cost to liquidate such futures contracts may exceed the amounts reported in our consolidated statements of financial condition.

Critical Accounting Policies

Principles of Consolidation, including Noncontrolling Interests

The consolidated financial statements include the accounts of IBG, Inc. and its majority and wholly owned subsidiaries. As sole managing member of IBG LLC, we exert control over the Group’s operations. In accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) ASC Topic 810, “Consolidation”, we consolidate the Group’s consolidated financial statements and record as noncontrolling interest the interests in the Group that we do not own.

We are the sole managing member of IBG LLC and, as such, operate and control all of the business and affairs of IBG LLC and its subsidiaries and as such, consolidate IBG LLC's financial results into our financial statements. We hold approximately 16.6% ownership interest in IBG LLC. Holdings is owned by the original members of IBG LLC and holds approximately 83.4% ownership interest in IBG LLC. Our current share of IBG LLC's net income is approximately 16.6%.

Our policy is to consolidate all other entities in which we own more than 50% unless we do not have control. All inter-company balances and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts and disclosures in the consolidated financial statements and accompanying notes. These estimates and assumptions are based on judgment and the best available information at the time. Therefore, actual results could differ materially from those estimates. Such estimates include the allowance for doubtful accounts, valuation of certain investments, compensation accruals, current and deferred income taxes, and contingency reserves.

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, securities borrowed, receivable from customers, 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 reported at amounts that approximate 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, payables to customers, and payables to brokers, dealers and clearing organizations are carried at fair value based on published market prices and are marked to market daily, or are liabilities which are short-term in nature and are reported at amounts that approximate fair value. Our long and short positions are mainly valued at the last consolidated trade price at the close of regular trading hours, in their respective markets. Given that we manage a globally integrated market making portfolio, we have large and substantially offsetting positions in securities and commodities that trade on different exchanges that close at different times of the trading day. As a result, there may be large and anomalous swings in the value of our positions daily and, accordingly, in our earnings in any period. This is especially true on the last business day of each calendar quarter or year, although such swings tend to come back into equilibrium on the first business day of the succeeding calendar quarter or year.

Earnings per Share

Earnings per share ("EPS") are computed in accordance with FASB ASC Topic 260, "Earnings per Share." Basic EPS is computed by dividing the net income available for common stockholders by the weighted average number of shares outstanding for that 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 our stock-based compensation plans, with no adjustments to net income available for common stockholders for dilutive potential common shares.

Stock-Based Compensation

We follow FASB ASC Topic 718, “Compensation—Stock Compensation” (“ASC Topic 718”), to account for our stock-based compensation plans. ASC Topic 718 requires all share-based payments to employees to be recognized in the consolidated financial statements using a fair value-based method. Grants, which are denominated in U.S. dollars, are communicated to employees in the year of grant, thereby establishing the fair value of each grant. The fair value of awards granted to employees are generally expensed as follows: 50% in the year of grant in recognition of the plans’ post-employment provisions (as described below) and the remaining 50% over the related vesting period utilizing the “graded vesting” method permitted under ASC Topic 718. In the case of “retirement eligible” employees (those employees older than 59), 100% of awards are expensed when granted.

Awards granted under the stock-based compensation plans are subject to the plans’ post-employment provisions in the event an employee ceases employment with us. The plans provide that employees who discontinue employment with us without cause and continue to meet the terms of the plans’ post-employment provisions will be eligible to earn 50% of previously granted, but not yet earned awards, unless the employee is over the age of 59, in which case the employee would be eligible to receive 100% of previously granted, but not yet earned awards.

Contingencies

Our policy is to estimate and accrue for potential losses that may arise out of litigation and regulatory proceedings, to the extent that such losses are probable and can be estimated, in accordance with FASB ASC Topic 450, “Contingencies.” Significant judgment is required in making these estimates and our final liabilities may ultimately be materially different. Our total liability accrued with respect to litigation and regulatory proceedings is determined on a case-by-case basis and represents an estimate of probable losses based on, among other factors, the progress of each case, our experience with and industry experience with similar cases and the opinions and views of internal and external legal counsel. Given the inherent difficulty of predicting the outcome of our litigation and regulatory matters, particularly in cases or proceedings in which substantial or indeterminate damages or fines are sought, or where cases or proceedings are in the early stages, we cannot estimate losses or ranges of losses for cases or proceedings where there is only a reasonable possibility that a loss may be incurred.

We have been from time to time subject to certain pending and legal actions which arise out of the normal course of business. Litigation is inherently unpredictable, particularly in proceedings where claimants seek substantial or indeterminate damages, or which are in their early stages. We cannot predict with certainty the actual loss or range of loss related to such legal proceedings, the manner in which they will be resolved, the timing of final resolution or the ultimate settlement. Consequently, we cannot estimate losses or ranges of losses related to such legal matters, even in instances where it is reasonably possible that a future loss will be incurred. As of December 31, 2016, we, along with certain of our subsidiaries, have been named parties to legal actions, which we and/or such subsidiaries intend to defend vigorously. Although the results of legal actions cannot be predicted with certainty, it is the opinion of management that the resolution of these actions is not expected to have a material adverse effect, if any, on our business or financial condition, but may have a material impact on the results of operations for a given period. As of December 31, 2016 and December 31, 2015, reserves provided for potential losses related to litigation matters were not material.

Income Taxes

We account for income taxes in accordance with FASB ASC Topic 740, “Income Taxes” (“ASC Topic 740”). Our income tax expense, deferred tax assets and liabilities, and reserves for unrecognized tax benefits are based on enacted tax laws and reflect management’s best assessment of estimated future taxes to be paid. We are subject to income taxes in both the U.S. and numerous foreign jurisdictions. Determining income tax expense requires significant judgments and estimates.

We recognize interest related to income tax matters as interest income or interest expense and penalties related to income tax matters as income tax expense.

Deferred income tax assets and liabilities arise from temporary differences between the tax and financial statement recognition of the underlying assets and liabilities. In evaluating our ability to recover our deferred tax assets within the jurisdictions from which they arise, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax-planning strategies, and results of recent operations. In projecting future taxable income, historical results are adjusted for changes in accounting policies and incorporate assumptions including the amount of future state, federal and foreign pre-tax operating income, the reversal of temporary differences, and the implementation of feasible and prudent tax-planning strategies. These assumptions require significant judgment about the forecasts of future taxable income and are consistent with the plans and estimates we are using to manage the underlying businesses. In evaluating the objective evidence that historical results provide, three years of cumulative operating income (loss) are considered. Deferred income taxes have not been provided for U.S. tax liabilities or for additional foreign taxes on the unremitted earnings of foreign subsidiaries that have been indefinitely reinvested.

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax laws and regulations in a multitude of jurisdictions across our global operations. Changes in tax laws and rates could also affect recorded deferred tax assets and liabilities in the future. Management is not aware of any such changes that would have a material effect on our results of operations, cash flows, or financial position.

We recognize that a tax benefit from an uncertain tax position may be recognized only when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, on the basis of the technical merits. A tax position that meets this standard is measured at the largest amount of benefit that will more likely than not be realized on settlement.

We record tax liabilities in accordance with ASC Topic 740 and adjust these liabilities when management’s judgment changes as a result of the evaluation of new information not previously available. Because of the complexity of some of these uncertainties, the ultimate resolution may result in payments that are different from the current estimates of these tax liabilities. These differences will be reflected as increases or decreases to income tax expense in the period in which new information becomes available.

Recently Issued Accounting Pronouncements

Following is a summary of recently issued FASB Accounting Standards Updates (“ASUs”) that have affected or may affect our consolidated financial statements:

	<u>Affects</u>	<u>Status</u>
ASU 2015-14	<i>Revenue from Contracts with Customers (Topic 606):</i> Deferral of the Effective Date.	Effective for annual reporting periods beginning after December 15, 2017.
ASU 2016-01	<i>Financial Instruments—Overall (Subtopic 825-10):</i> Recognition and Measurement of Financial Assets and Financial Liabilities.	Effective for fiscal years beginning after December 15, 2017.
ASU 2016-02	<i>Leases (Topic 842):</i> Requires that, at lease inception, a lessee recognize a right-of-use asset, representing the right to use the underlying asset for the lease term, and a lease liability, representing the liability to make lease payments, in the statements of financial condition, among other requirements.	Effective for fiscal years beginning after December 15, 2018.
ASU 2016-07	<i>Investments—Equity Method and Joint Ventures (Topic 323):</i> Simplifying the Transition to the Equity Method of Accounting.	Effective for fiscal years beginning after December 15, 2016.
ASU 2016-08	<i>Revenue from Contracts with Customers (Topic 606):</i> Principal versus Agent Considerations (Reporting Revenue Gross versus Net).	Effective for annual reporting periods beginning after December 15, 2017.
ASU 2016-09	<i>Compensation—Stock Compensation (Topic 718):</i> Improvements to Employee Share-Based Payment Accounting.	Effective for annual reporting periods beginning after December 15, 2016.
ASU 2016-10	<i>Revenue from Contracts with Customers (Topic 606):</i> Identifying Performance Obligations and Licensing.	Effective for annual reporting periods beginning after December 15, 2017.
ASU 2016-12	<i>Revenue from Contracts with Customers (Topic 606):</i> Narrow-Scope Improvements and Practical Expedients.	Effective for annual reporting periods beginning after December 15, 2017.
ASU 2016-13	<i>Financial Instruments—Credit Losses (Topic 326):</i> Measurement of Credit Losses on Financial Instruments.	Effective for fiscal years beginning after December 15, 2019.
ASU 2016-15	<i>Statement of Cash Flows (Topic 230):</i> Classification of Certain Cash Receipts and Cash Payments.	Effective for fiscal years beginning after December 15, 2017.
ASU 2016-16	<i>Income Taxes (Topic 740):</i> Intra-Entity Transfers of Assets Other Than Inventory.	Effective for annual reporting periods beginning after December 15, 2017.

	Affects	Status
ASU 2016-17	<i>Consolidation (Topic 810):</i> Interests Held through Related Parties That Are under Common Control.	Effective for fiscal years beginning after December 15, 2016.
ASU 2016-19	Technical Corrections and Improvements.	Effective upon issuance.
ASU 2016-20	<i>Technical Corrections and Improvements to Topic 606:</i> Revenue from Contracts with Customers.	Effective for annual reporting periods beginning after December 15, 2017.
ASU 2017-01	<i>Business Combinations (Topic 805):</i> Clarifying the Definition of a Business.	Effective for annual periods beginning after December 15, 2017.
ASU 2017-04	<i>Intangibles—Goodwill and Other (Topic 350):</i> Simplifying the Test for Goodwill Impairment.	Effective for fiscal years beginning after December 15, 2019.

Adoption of those ASUs that became effective during 2016 and 2017 prior to the issuance of our consolidated financial statements, did not have a material effect on these financial statements.

The Company early adopted ASU 2016-09 Compensation—Stock Compensation (Topic 718), Improvements to Employee Share-Based Payment Accounting, as of April 1, 2016. This early adoption did not have a material impact on the Company’s consolidated financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to various market risks. Our exposures to market risks arise from assumptions built into our pricing models, equity price risk, foreign currency exchange rate fluctuations related to our international operations, changes in interest rates which impact our variable-rate debt obligations, if any, and risks relating to the extension of margin credit to our customers.

Market risk refers to the risk that a change in the level of one or more market prices, rates, indices, implied volatilities (the price volatility of the underlying instrument imputed from option prices), correlations or other market factors, such as market liquidity, will result in losses for a position or portfolio. Generally, we incur trading-related market risk as a result of activities in the market making segment, where the substantial majority of our Value-at-Risk (“VaR”) for market risk exposures is generated. In addition, we incur non-trading-related market risk primarily from investment activities and from foreign currency exposure held in the equity of our foreign affiliates, i.e., our non-U.S. brokerage affiliates and information technology affiliates, and held to meet target balances in our currency diversification strategy.

We use various risk management tools in managing our market risk, which are embedded in our real-time market making systems. We employ certain hedging and risk management techniques to protect us from a severe market dislocation. Our risk management policies are developed and implemented by our Chairman and our steering committee, which is comprised of senior executives of our various companies. Our strategy is to calculate quotes a few seconds ahead of the market and execute small trades at a tiny but favorable differential as a result. This is made possible by our proprietary pricing model, which evaluates and monitors the risks inherent in our portfolio, assimilates external market data and reevaluates the outstanding quotes in our portfolio many times per second. Our model automatically rebalances our positions throughout each trading day to manage risk exposures on our options and futures positions and the underlying securities, and will price the increased risk that a position would add to the overall portfolio into the bid and offer prices we post. Under risk management policies implemented and monitored primarily through our computer systems, reports to management, including risk profiles, profit and loss analysis and trading performance, are

prepared on a real-time basis as well as daily and periodical bases. Although our market making is completely automated, the trading process and our risk are monitored by a team of individuals who, in real time, observe various risk parameters of our consolidated positions. Our assets and liabilities are marked-to-market daily for financial reporting purposes and re-valued continuously throughout the trading day for risk management and asset/liability management purposes.

We use a covariant VaR methodology to measure, monitor and review the market risk of our market making portfolios, with the exception of fixed income products, and our currency exposures. The risk of fixed income products, which comprise primarily U.S. government securities, is measured using a stress test.

Pricing Model Exposure

As described above, our proprietary pricing model, which continuously evaluates and monitors the risks inherent in our portfolio, assimilates external market data and reevaluates the outstanding quotes in our entire portfolio many times per second. Certain aspects of the model rely on historical prices of securities. If the behavior of price movements of individual securities diverges substantially from what their historical behavior would predict, we might incur trading losses. We attempt to limit such risks by diversifying our portfolio across many different options, futures and underlying securities and avoiding concentrations of positions based on the same underlying security. Historically, our losses from these events have been immaterial in comparison to our annual trading profits.

Foreign Currency Exposure

As a result of our international market making activities and accumulated earnings in our foreign subsidiaries, our income and net worth is exposed to fluctuations in foreign exchange rates. For example, our European operations and some of our Asian operations are conducted by our Swiss subsidiary, THE. THE is regulated by the Swiss Financial Market Supervisory Authority as a securities dealer and its financial statements are presented in Swiss francs. Accordingly, THE is exposed to certain foreign exchange risks as described below:

- THE buys and sells futures contracts and securities denominated in various currencies and carries bank balances and borrows and lends such currencies in its regular course of business. At the end of each accounting period, THE's assets and liabilities are revalued into Swiss francs for presentation in its financial statements. The resulting foreign currency gains or losses are reported in THE's income statement and, as translated into U.S. dollars for U.S. GAAP purposes, in our consolidated statement of comprehensive income, as a component of other income.
- THE's financial statements are presented in Swiss francs (i.e., its functional currency) as noted above. At the end of each accounting period, THE's net worth is translated at the then prevailing exchange rate into U.S. dollars and the resulting translation gain or loss is reported as OCI in our consolidated statement of financial condition and consolidated statement of comprehensive income. OCI is also produced by our other non-U.S. subsidiaries.

Historically, we have taken the approach of not hedging the above exposures, based on the notion that the cost of constantly hedging over the years would amount to more than the random impact of rate changes on our non-U.S. dollar balances. For instance, an increase in the value of the Swiss franc would be unfavorable to the earnings of THE but would be counterbalanced to some extent by the fact that the translation gain or loss into U.S. dollars is likely to move in the opposite direction.

Our market making systems incorporate cash forex and forex options to hedge our currency exposure at little or no cost throughout each day on a continuous basis. The majority of currency spot positions held as part of our currency diversification strategy are regularly transferred from the market making segment to the parent holding company, IBG LLC, where they are held and reported in the corporate segment. In connection with the development of our currency diversification strategy, we determined to base our net worth in GLOBALs, a basket of currencies.

The table below shows a comparison of the U.S. dollar equivalent of the GLOBAL as of December 31, 2016 and 2015.

Currency	Composition	As of 12/31/2015				As of 12/31/2016				CHANGE in % of Comp.	
		FX Rate	GLOBAL in USD Equiv.	% of Comp.	Net Equity (in USD millions)	New Composition	FX Rate	GLOBAL in USD Equiv.	% of Comp.		Net Equity (in USD millions)
USD . . .	0.41	1.0000	0.410	42.8%	2,287	0.45	1.0000	0.450	47.4%	2,759	4.6%
EUR . . .	0.17	1.0858	0.185	19.3%	1,030	0.17	1.0519	0.179	18.8%	1,096	-0.4%
JPY . . .	10.00	0.0083	0.083	8.7%	464	8.00	0.0086	0.068	7.2%	420	-1.5%
GBP . . .	0.03	1.4738	0.044	4.6%	247	0.03	1.2341	0.037	3.9%	227	-0.7%
HKD . . .	0.26	0.1290	0.034	3.5%	187	0.26	0.1290	0.034	3.5%	206	0.0%
INR . . .	2.00	0.0151	0.030	3.2%	168	2.00	0.0147	0.029	3.1%	180	-0.1%
CHF . . .	0.03	0.9976	0.030	3.1%	167	0.03	0.9819	0.029	3.1%	181	0.0%
CAD . . .	0.04	0.7227	0.029	3.0%	161	0.04	0.7445	0.030	3.1%	183	0.1%
CNH . . .	0.00					0.19	0.1434	0.027	2.9%	167	2.9%
AUD . . .	0.03	0.7286	0.022	2.3%	122	0.03	0.7216	0.022	2.3%	133	0.0%
MXN . . .	0.30	0.0582	0.017	1.8%	97	0.30	0.0482	0.014	1.5%	89	-0.3%
SEK . . .	0.09	0.1184	0.011	1.1%	59	0.09	0.1098	0.010	1.0%	61	-0.1%
SGD . . .	0.01	0.7051	0.007	0.7%	39	0.01	0.6905	0.007	0.7%	42	0.0%
NOK . . .	0.06	0.1131	0.007	0.7%	38	0.06	0.1158	0.007	0.7%	43	0.0%
DKK . . .	0.04	0.1455	0.006	0.6%	32	0.04	0.1416	0.006	0.6%	35	0.0%
KRW . . .	28.00	0.0009	0.024	2.5%	133	0.00					-2.5%
BRL . . .	0.08	0.2525	0.020	2.1%	113	0.00					-2.1%
			0.958	100.0%	5,344			0.949	100.0%	5,820	0.0%

Because we conduct business in many countries and many currencies and because we consider ourselves a global enterprise based in a diversified basket of currencies rather than a U.S. dollar based company, we actively manage our global currency exposure by maintaining our equity in GLOBALs. The U.S. dollar value of the GLOBAL decreased from \$0.958 to \$0.949, or 0.93%, as of December 31, 2016 compared to December 31, 2015. As of December 31, 2016, approximately 53% of our equity was denominated in currencies other than the U.S. dollar.

Changes in the Composition of the “GLOBAL”

As a result of a periodic assessment, and in light of the increasing importance of China to our business, we changed the composition of the GLOBAL by adding the Chinese renminbi (specifically, the offshore currency known by the symbol CNH), removing the South Korean won (KRW) and Brazilian real (BRL) components, and realigning the relative weights of the U.S. dollar (USD) and Japanese yen (JPY) components to better reflect the global diversification of our businesses. The new composition contains 15 currencies, one fewer than the prior composition. The new composition was effective as of the close of business on June 30, 2016 and the conversion to the new targeted currency holdings took place shortly thereafter.

The effects of our currency diversification strategy appear in two places in the consolidated financial statements: (1) as a component of other income in the consolidated statement of comprehensive income and (2) as OCI in the consolidated statement of financial condition and the consolidated statement of comprehensive income. The full effect of the GLOBAL is captured in the consolidated statement of comprehensive income.

Reported results on a comprehensive basis reflect the U.S. GAAP convention that requires the reporting of currency translation results contained in OCI as part of reportable earnings.

Interest Rate Risk

We had no variable-rate debt outstanding as of December 31, 2016.

We pay our electronic brokerage customers interest based on benchmark overnight interest rates in various currencies, on balances above \$10 thousand, or equivalent, and on accounts holding more than \$100 thousand (or equivalent) net asset value. In a normal rate environment, we typically invest a portion of these funds in U.S. government securities with maturities of up to seven years. If interest rates were to increase rapidly and substantially, our net interest income would not increase proportionally with the interest rates for the portion of the funds invested in the U.S. government securities with fixed yields. In addition, the mark-to-market changes in the value of these fixed rate securities will be reflected in other income, instead of net interest income. Based on customer balances and investments outstanding as of December 31, 2016, and assuming reinvestment of maturing instruments in instruments of similar initial maturity at purchase, an increase of 0.25% over current interest rate levels would increase our net interest income by approximately \$46 million over the first year and approximately \$62 million on an annualized basis, assuming the full effect of reinvestment at higher rates. We do not approximate mark-to-market impact from interest rate changes; if U.S. government securities whose prices were to fall under these scenarios were held to maturity, as intended, then the reduction in other income would be temporary, as the securities would mature at par value.

We also face the potential for reduced net interest income from customer deposits due to interest rate spread compression in a low rate environment. Based on customer balances and investments outstanding as of December 31, 2016, and assuming reinvestment of maturing instruments in instruments of similar initial maturity at purchase, a decrease in interest rates of 0.25%, would reduce our net interest income by approximately \$11 million over the first year and approximately \$7 million on an annualized basis, assuming the full effect of reinvestment at lower rates.

We also face substantial interest rate risk due to positions carried in our market making business to the extent that long or short stock positions may have been established for future or forward dates on options or futures contracts and the value of such positions are impacted by interest rates. We hedge such risks by entering into interest rate futures contracts. To the extent that these futures positions do not perfectly hedge this interest rate risk, our trading gains may be adversely affected. The amount of such risk cannot be quantified.

Dividend Risk

We face dividend risk in our market making business as we derive significant revenues and incur significant expenses in the form of dividend income and expense, respectively, from our inventory of equity securities, and must make significant payments in lieu of dividends on short positions in equity securities within our portfolio. Projected future dividends are an important component of pricing equity options and other derivatives, and incorrect projections may lead to trading losses. The amount of such risk cannot be quantified.

Margin Credit

We extend margin credit to our customers, which is subject to various regulatory requirements. Margin credit is collateralized by cash and securities in the customers' accounts. The risks associated with margin credit increase during periods of fast market movements or in cases where collateral is concentrated and market movements occur. During such times, customers who utilize margin credit and who have collateralized their obligations with securities may find that the securities have a rapidly depreciating value and may not be sufficient to cover their obligations in the event of a liquidation. We are also exposed to credit risk when our customers execute transactions, such as short sales of options and equities that can expose them to risk beyond their invested capital.

We expect this kind of exposure to increase with the growth of our overall business. Because we indemnify and hold harmless our clearing firms from certain liabilities or claims, the use of margin credit and short sales may expose us to significant off-balance-sheet risk in the event that collateral requirements are not sufficient to fully cover losses that customers may incur and those customers fail to satisfy their obligations. As of December 31, 2016, we had \$19.4 billion in margin credit extended to our customers. The amount of risk to which we are exposed from the margin credit we extend to our customers and from short sale transactions by our customers is unlimited and not quantifiable as the risk is dependent upon analysis of a potential significant and undeterminable rise or fall in stock prices. Our account level margin credit requirements meet or exceed those required by Regulation T of the Board of Governors of the Federal Reserve and SEC portfolio margin rules, as applicable. As a matter of practice, we enforce real-time margin compliance monitoring and liquidate customers' positions if their equity falls below required margin requirements.

We have a comprehensive policy implemented in accordance with regulatory standards to assess and monitor the suitability of investors to engage in various trading activities. To mitigate our risk, we also continuously monitor customer accounts to detect excessive concentration, large orders or positions, patterns of day trading and other activities that indicate increased risk to us.

Our credit exposure is to a great extent mitigated by our policy of automatically evaluating each account throughout the trading day and closing out positions automatically for accounts that are found to be under-margined. While this methodology is effective in most situations, it may not be effective in situations where no liquid market exists for the relevant securities or commodities or where, for any reason, automatic liquidation for certain accounts has been disabled.

Value-at-Risk

We estimate VaR using an historical approach, which uses the historical daily price returns of underlying assets as well as estimates of the end of day implied volatility for options. Our one-day VaR is defined as the unrealized loss in portfolio value that, based on historically observed market risk factors, would have been exceeded with a frequency of one percent, based on a calculation with a confidence interval of 99%.

Our VaR model generally takes into account exposures to equity and commodity price risk and foreign exchange rates.

We use VaR as one of a range of risk management tools. Among their benefits, VaR models permit estimation of a portfolio's aggregate market risk exposure, incorporating a range of varied market risks and portfolio assets. One key element of the VaR model is that it reflects risk reduction due to portfolio diversification or hedging activities. However, VaR has various strengths and limitations, which include, but are not limited to: use of historical changes in market risk factors, which may not be accurate predictors of future market conditions, and may not fully incorporate the risk of extreme market events that are outsized relative to observed historical market behavior or reflect the historical distribution of results beyond the confidence interval; and reporting of losses in a single day, which does not reflect the risk of positions that cannot be liquidated or hedged in one day. A small proportion of market risk generated by trading positions is not included in VaR. The modeling of the risk characteristics of some positions relies on approximations that, under certain circumstances, could produce significantly different results from those produced using more precise measures. VaR is most appropriate as a risk measure for trading positions in liquid financial markets and will understate the risk associated with severe events, such as periods of extreme illiquidity.

The VaR calculation simulates the performance of the portfolio based on several years of the daily price changes of the underlying assets and determines the VaR as the calculated loss that occurs at the 99th percentile.

Since the reported VaR statistics are estimates based on historical data, VaR should not be viewed as predictive of our future revenues or financial performance or of our ability to monitor and manage risk. There can be no assurance that our actual losses on a particular day will not exceed the indicated VaR or that such losses will not occur more than one time in 100 trading days. VaR does not predict the magnitude of losses which, should they occur, may be significantly greater than the VaR amount.

Stress Test

We estimate the market risk of our fixed income portfolio using a risk analysis model provided by a leading external vendor. For corporate bonds, this stress test is configured to calculate the change in value of each fixed income security in the portfolio over one day in seven scenarios each of which represents a parallel shift of the U.S. Treasury yield curve. The scenarios are shifts of +/- 100, +/- 200 and +/- 300 basis points. For U.S. government securities, the stress test is configured to calculate the change in value of each fixed income security in the portfolio over one day in three scenarios each of which represents a parallel shift of the U.S. Treasury yield curve. The scenarios are shifts of +/- 25 basis points.

VaR and Stress Test Measures

<u>Market Risk Category</u>	<u>At December 31, 2016</u>	<u>At December 31, 2015</u>	<u>Average 2016</u>	<u>High 2016</u>
		(in millions)		
Trading(1)				
Equities and Currencies(2)	\$ 7	\$13	\$12	\$14
Fixed Income(3)	—	1	—	—
Trading Total	<u>\$ 7</u>	<u>\$14</u>	<u>\$12</u>	<u>\$14</u>
Non-Trading(1)				
Equities and Currencies	\$22	\$25	\$24	\$26
Fixed Income, Other(4)	11	43	26	41
Non-Trading Total	<u>\$33</u>	<u>\$68</u>	<u>\$50</u>	<u>\$67</u>

(1) The product categories displayed in the table as “Trading” reflect activities undertaken in the Company’s market making segment. The “Non-trading” category reflects investment activities and foreign currency exposures held in the equity of the Company’s non-market making affiliates, i.e., its brokerage affiliates and information technology affiliates. This category also includes corporate segment activities in foreign exchange designed to achieve the Company’s currency diversification strategy.

The average and high VaR and stress test amounts are based on the four quarter ending calculations performed in 2016.

- (2) Equities and currencies held for market making purposes are combined because these products are part of an integrated, hedged market making portfolio, on which the risk is measured using VaR.
- (3) The Trading—Fixed Income category contains primarily foreign government securities held in connection with market making activities and a small value of corporate bonds. The risks on these products were managed separately and measured using the stress test analysis.
- (4) The Non-Trading—Fixed Income, Other category contains primarily U.S. government securities held in segregated safekeeping accounts for the exclusive benefit of our brokerage customers, on which the risk is measured using a stress test analysis.

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
Interactive Brokers Group, Inc.
Greenwich, CT

We have audited the accompanying consolidated statements of financial condition of Interactive Brokers Group, Inc. and subsidiaries (the “Company”) as of December 31, 2016 and 2015, 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, 2016. These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Interactive Brokers Group, Inc. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company’s internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2017 expressed an unqualified opinion on the Company’s internal control over financial reporting.

/s/ Deloitte & Touche LLP
New York, New York
February 28, 2017

Interactive Brokers Group, Inc. and Subsidiaries
Consolidated Statements of Financial Condition

<u>(in millions, except share amounts)</u>	December 31,	
	2016	2015
Assets		
Cash and cash equivalents	\$ 1,925	\$ 1,601
Cash and securities—segregated for regulatory purposes	24,017	21,309
Securities borrowed	3,629	3,924
Securities purchased under agreements to resell	111	195
Financial instruments owned, at fair value:		
Financial instruments owned	2,104	1,987
Financial instruments owned and pledged as collateral	1,933	1,433
Total financial instruments owned, at fair value	4,037	3,420
Receivables:		
Customers, less allowance for doubtful accounts of \$97 and \$130 as of December 31, 2016 and 2015	19,409	17,050
Brokers, dealers and clearing organizations	1,040	692
Interest	57	63
Total receivables	20,506	17,805
Other assets	448	480
Total assets	\$54,673	\$48,734
Liabilities and equity		
Short-term borrowings	\$ 74	\$ —
Securities loaned	4,293	2,894
Financial instruments sold, but not yet purchased, at fair value	2,145	2,617
Payables:		
Customers	41,731	37,084
Brokers, dealers and clearing organizations	239	423
Affiliate	285	291
Accounts payable, accrued expenses and other liabilities	80	78
Interest	6	3
Total payables	42,341	37,879
Total liabilities	48,853	43,390
Commitments, contingencies and guarantees (see Note 13)		
Equity		
Stockholders' equity		
Common stock, \$0.01 par value per share:		
Class A—Authorized—1,000,000,000, Issued—68,119,412 and 64,121,150 shares, Outstanding—67,984,973 and 63,985,335 shares as of December 31, 2016 and 2015	1	1
Class B—Authorized, Issued and Outstanding—100 shares as of December 31, 2016 and 2015	—	—
Additional paid-in capital	775	718
Retained earnings	203	145
Accumulated other comprehensive income, net of income taxes of \$0 and \$0 as of December 31, 2016 and 2015	(2)	2
Treasury stock, at cost, 134,439 and 135,815 shares as of December 31, 2016 and 2015	(3)	(3)
Total stockholders' equity	974	863
Noncontrolling interests	4,846	4,481
Total equity	5,820	5,344
Total liabilities and equity	\$54,673	\$48,734

See accompanying notes to the consolidated financial statements.

Interactive Brokers Group, Inc. and Subsidiaries
Consolidated Statements of Comprehensive Income

(in millions, except share or per share amounts)	Year-Ended December 31,		
	2016	2015	2014
Revenues			
Trading gains	\$ 163	\$ 269	\$ 261
Commissions and execution fees	612	617	549
Interest income	606	492	416
Other income (loss)	94	(122)	(111)
Total revenues	1,475	1,256	1,115
Interest expense	79	67	72
Total net revenues	1,396	1,189	1,043
Non-interest expenses			
Execution and clearing	244	231	212
Employee compensation and benefits	242	227	205
Occupancy, depreciation and amortization	51	44	39
Communications	30	25	24
General and administrative	62	58	54
Customer bad debt	6	146	3
Total non-interest expenses	635	731	537
Income before income taxes	761	458	506
Income tax expense	62	43	47
Net income	699	415	459
Less net income attributable to noncontrolling interests	615	366	414
Net income available for common stockholders	\$ 84	\$ 49	\$ 45
Earnings per share			
Basic	\$ 1.28	\$ 0.80	\$ 0.79
Diluted	\$ 1.25	\$ 0.78	\$ 0.77
Weighted average common shares outstanding			
Basic	66,013,247	61,043,071	56,492,381
Diluted	67,299,413	62,509,796	57,709,668
Comprehensive income			
Net income available for common stockholders	\$ 84	\$ 49	\$ 45
Other comprehensive income			
Cumulative translation adjustment, before income taxes	(4)	(10)	(15)
Income taxes related to items of other comprehensive income	—	—	—
Other comprehensive loss, net of tax	(4)	(10)	(15)
Comprehensive income available for common stockholders	\$ 80	\$ 39	\$ 30
Comprehensive income attributable to noncontrolling interests			
Net income attributable to noncontrolling interests	\$ 615	\$ 366	\$ 414
Other comprehensive loss—cumulative translation adjustment	(21)	(53)	(92)
Comprehensive income attributable to noncontrolling interests	\$ 594	\$ 313	\$ 322

See accompanying notes to the consolidated financial statements.

Interactive Brokers Group, Inc. and Subsidiaries
Consolidated Statements of Cash Flows

<u>(in millions)</u>	Year-Ended December 31,		
	2016	2015	2014
Cash flows from operating activities			
Net income	\$ 699	\$ 415	\$ 459
Adjustments to reconcile net income to net cash from operating activities			
Deferred income taxes	27	15	18
Depreciation and amortization	25	22	20
Employee stock plan compensation	51	50	41
Unrealized loss on other investments, net	1	7	10
Bad debt expense	6	146	3
Change in operating assets and liabilities			
Cash and securities—segregated for regulatory purposes	(2,708)	(5,905)	(1,409)
Securities borrowed	295	(264)	(908)
Securities purchased under agreements to resell	84	191	—
Financial instruments owned, at fair value	(647)	568	468
Receivables from customers	(2,365)	(144)	(3,458)
Other receivables	(342)	413	(283)
Other assets	3	13	36
Securities loaned	1,399	(305)	635
Financial instruments sold, but not yet purchased, at fair value	(454)	38	(585)
Payable to customers	4,647	5,288	5,476
Other payables	(177)	177	(106)
Net cash provided by operating activities	544	725	417
Cash flows from investing activities			
Purchases of other investments	(17)	(16)	(443)
Distributions received and proceeds from sales of other investments	38	11	516
Purchase of property, equipment and intangible assets	(27)	(30)	(19)
Net cash provided by (used in) investing activities	(6)	(35)	54
Cash flows from financing activities			
Short-term borrowings, net	74	(34)	10
Dividends paid to stockholders	(26)	(25)	(23)
Distributions to noncontrolling interests	(219)	(227)	(279)
Repurchases of common stock for employee tax withholdings under stock incentive plans	(26)	(25)	—
Proceeds from the sale of treasury stock	25	29	—
Payments made under the Tax Receivable Agreement	(17)	(13)	(16)
Net cash used in financing activities	(189)	(295)	(308)
Effect of exchange rate changes on cash and cash equivalents	(25)	(63)	(107)
Net increase in cash and cash equivalents	324	332	56
Cash and cash equivalents at beginning of period	1,601	1,269	1,213
Cash and cash equivalents at end of period	\$ 1,925	\$ 1,601	\$ 1,269
Supplemental disclosures of cash flow information			
Cash paid for interest	\$ 77	\$ 68	\$ 73
Cash paid for taxes, net	\$ 29	\$ 31	\$ 37
Non-cash financing activities			
Issuance of Common Stock in exchange of member interests in IBG LLC	\$ 56	\$ 132	\$ 35
Redemption of member interests from IBG Holdings LLC	\$ (56)	\$ (132)	\$ (35)
Adjustments to additional paid-in capital for changes in proportionate ownership in IBG LLC	\$ 25	\$ 26	\$ 10
Adjustments to noncontrolling interests for changes in proportionate ownership in IBG LLC	\$ (25)	\$ (26)	\$ (10)
Non-cash distribution to noncontrolling interests	\$ (5)	\$ —	\$ —

See accompanying notes to the consolidated financial statements.

Interactive Brokers Group, Inc. and Subsidiaries
Consolidated Statements of Changes in Equity
Three Years Ended December 31, 2016, 2015, and 2014

	Common Stock		Additional Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income	Total Stockholders' Equity	Non- controlling Interests	Total Equity
	Issued Shares	Par Value							
(in millions, except share amounts)									
Balance, December 31, 2013	54,788,049	\$1	\$583	\$ (3)	\$ 99	\$ 27	\$707	\$4,385	\$5,092
Issuance of common stock in follow-on offering	1,358,478		35				35	(35)	—
Common stock distributed pursuant to stock incentive plans	2,445,200								—
Compensation for stock grants vesting in the future			6				6	35	41
Stock incentive plan adjustment	20,518							1	1
Deferred tax benefit retained—follow-on offering			1				1		1
Dividends paid to stockholders					(23)		(23)		(23)
Distributions from IBG LLC to noncontrolling interests								(279)	(279)
Adjustments for changes in proportionate ownership in IBG LLC			10				10	(10)	—
Comprehensive income					45	(15)	30	322	352
Balance, December 31, 2014	58,612,245	1	635	(3)	121	12	766	4,419	5,185
Issuance of common stock in follow-on offering	3,021,778		39				39	(39)	—
Common stock distributed pursuant to stock incentive plans	2,487,127								—
Compensation for stock grants vesting in the future			9				9	41	50
Deferred tax benefit retained—follow-on offering			5				5		5
Repurchases of common stock for employee tax withholdings under stock incentive plan				(25)			(25)		(25)
Sales of treasury stock				25			25		29
Dividends paid to stockholders					(25)		(25)		(25)
Distributions from IBG LLC to noncontrolling interests								(227)	(227)
Adjustments for changes in proportionate ownership in IBG LLC			26		49	(10)	26	(26)	—
Comprehensive income					145	2	39	313	352
Balance, December 31, 2015	64,121,150	1	718	(3)	145	2	863	4,481	5,344
Issuance of common stock in follow-on offering	1,596,200		22				22	(22)	—
Common stock distributed pursuant to stock incentive plans	2,402,062								—
Compensation for stock grants vesting in the future			8				8	43	51
Deferred tax benefit retained—follow-on offering			2				2		2
Repurchases of common stock for employee tax withholdings under stock incentive plan				(26)			(26)		(26)
Sales of treasury stock				26			26		25
Dividends paid to stockholders					(26)		(26)	(1)	(26)
Distributions from IBG LLC to noncontrolling interests								(224)	(224)
Adjustments for changes in proportionate ownership in IBG LLC			25		84	(4)	25	(25)	—
Comprehensive income					\$203	\$ (2)	80	594	674
Balance, December 31, 2016	68,119,412	\$1	\$775	\$ (3)	\$203	\$ (2)	\$974	\$4,846	\$5,820

See accompanying notes to the consolidated financial statements.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements

1. Organization of Business

Interactive Brokers Group, Inc. (“IBG, Inc.”) is a Delaware holding company whose primary asset is its ownership of approximately 16.6% of the membership interests of IBG LLC, which, in turn, owns operating subsidiaries (collectively, “IBG LLC”). IBG, Inc. together with IBG LLC and its consolidated subsidiaries (collectively, “the Company”), is an automated global electronic broker and market maker specializing in executing and clearing trades in securities, futures, foreign exchange instruments, bonds and mutual funds on more than 120 electronic exchanges and market centers around the world and offering custody, prime brokerage, securities and margin lending services to customers. In the United States of America (“U.S.”), the Company conducts its business primarily from its headquarters in Greenwich, Connecticut and from Chicago, Illinois. Abroad, the Company conducts its business through offices located in Canada, England, Switzerland, Liechtenstein, India, China (Hong Kong and Shanghai), Japan, and Australia. As of December 31, 2016, the Company had 1,204 employees worldwide.

IBG LLC is a Connecticut limited liability company that conducts its business through its operating subsidiaries (collectively, the “Operating Companies”): Interactive Brokers LLC (“IB LLC”); Interactive Brokers Canada Inc. (“IBC”); Interactive Brokers (U.K.) Limited and its subsidiary, Interactive Brokers (U.K.) Nominee Limited (collectively, “IBUK”); Interactive Brokers Securities Japan, Inc. (“IBSJ”); Interactive Brokers Hong Kong Limited (“IBHK”); Interactive Brokers (India) Private Limited (“IBI”); Interactive Brokers Australia Pty Limited and its subsidiary, Interactive Brokers Australia Nominees Pty Limited (collectively, “IBA”); IB Business Services (Shanghai) Company Limited (“IBBSS”); Timber Hill LLC (“TH LLC”); Timber Hill Europe AG and its subsidiary, Timber Hill (Liechtenstein) AG (collectively, “THE”); Timber Hill Australia Pty Limited (“THA”); Timber Hill Canada Company (“THC”); Interactive Brokers Financial Products S.A. (“IBFP”); Interactive Brokers Hungary KFT (“IBH”); Interactive Brokers Software Services Estonia OU (“IBEST”); Interactive Brokers Software Services Russia (“IBRUS”); Interactive Brokers Software Services (India) Private Limited (“IBSSI”); and IB Exchange Corp. (“IBEC”) and its subsidiaries, Interactive Brokers Corp. (“IB Corp”), Covestor, Inc. and its subsidiary, Covestor Limited (collectively, “Covestor”), and Greenwich Advisor Compliance Services Corp. (“GACS”).

The Company operates in two business segments: electronic brokerage and market making, both supported by corporate. The Company conducts its electronic brokerage business through certain Interactive Brokers subsidiaries, which provide electronic execution and clearing services to customers worldwide. The Company conducts its market making business principally through its Timber Hill subsidiaries on the world’s leading exchanges and market centers, primarily in exchange-traded equities, equity options and equity-index options and futures. Corporate enables the Company to operate cohesively and effectively by providing support via development services and control functions to the business segments and also by executing the Company’s currency diversification strategy.

Certain of the Operating Companies are members of various securities and commodities exchanges in North America, Europe and the Asia/Pacific region and are subject to regulatory capital and other requirements (see Note 15). IB LLC, IBC, IBUK, IBSJ, IBHK, and IBI carry securities accounts for customers or perform custodial functions relating to customer securities.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies

Basis of Presentation

These consolidated financial statements are presented in U.S. dollars and have been prepared in accordance with accounting principles generally accepted in the U.S. (“U.S. GAAP”) and pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (“SEC”) regarding financial reporting with respect to Form 10-K.

These consolidated financial statements include the accounts of the Company and its consolidated subsidiaries and reflect all adjustments of a normal and recurring nature that are, in the opinion of management, necessary for the fair presentation of the results for the periods presented.

Principles of Consolidation, including Noncontrolling Interests

These consolidated financial statements include the accounts of IBG, Inc. and its majority and wholly owned subsidiaries. As sole managing member of IBG LLC, IBG, Inc. exerts control over IBG LLC’s operations. In accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 810, “Consolidation,” the Company consolidates IBG LLC’s financial statements and records the interests in IBG LLC that it does not own as noncontrolling interests.

The Company’s policy is to consolidate all other entities in which it owns more than 50% unless it does not have control. All inter-company balances and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts and disclosures in these consolidated financial statements and accompanying notes. These estimates and assumptions are based on judgment and the best available information at the time. Therefore, actual results could differ materially from those estimates. Such estimates include the allowance for doubtful accounts, valuation of certain investments, compensation accruals, current and deferred income taxes, and contingency reserves.

Fair Value

Substantially all of the Company’s assets and liabilities, including financial instruments are carried at fair value based on published market prices and are marked to market, or are assets and liabilities which are short-term in nature and are carried at amounts that approximate fair value.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

The Company applies the fair value hierarchy in accordance with FASB ASC Topic 820, “Fair Value Measurement” (“ASC Topic 820”), to prioritize the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets and liabilities and the lowest priority to unobservable inputs. The three levels of the fair value hierarchy are:

- 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 considered to be active or financial instruments for which all significant inputs are observable, either directly or indirectly.
- Level 3 Prices or valuations that require inputs that are both significant to fair value measurement and unobservable.

Financial instruments owned, at fair value and financial instruments sold, but not yet purchased, at fair value are generally classified as Level 1 of the fair value hierarchy. The Company’s Level 1 financial instruments, which are valued using quoted market prices as published by exchanges and clearing houses or otherwise broadly distributed in active markets, include active listed stocks, options, warrants and discount certificates, and U.S. and foreign government securities. The Company does not adjust quoted prices for financial instruments classified as Level 1 of the fair value hierarchy, even in the event that the Company may hold a large position whereby a purchase or sale could reasonably impact quoted prices.

Currency forward contracts are valued using broadly distributed bank and broker prices, and are classified as Level 2 of the fair value hierarchy as such instruments are not exchange-traded. Other securities that are not traded in active markets are also classified in Level 2 of the fair value hierarchy. Level 3 financial instruments are comprised of securities that have been delisted or otherwise are no longer tradable and have been valued by the Company based on internal estimates.

Earnings per Share

Earnings per share (“EPS”) is computed in accordance with FASB ASC Topic 260, “Earnings per Share.” Basic EPS is computed by dividing the net income available for common stockholders by the weighted average number of shares outstanding for that 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 stock-based compensation plans, with no adjustments to net income available for common stockholders for dilutive potential common shares.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

Stock-Based Compensation

The Company follows FASB ASC Topic 718, “Compensation—Stock Compensation” (“ASC Topic 718”), to account for its stock-based compensation plans. ASC Topic 718 requires all share-based payments to employees to be recognized in the consolidated financial statements using a fair value-based method. Grants, which are denominated in U.S. dollars, are communicated to employees in the year of grant, thereby establishing the fair value of each grant. The fair value of awards granted to employees are generally expensed as follows: 50% in the year of grant in recognition of the plans’ post-employment provisions (as described below) and the remaining 50% over the related vesting period utilizing the “graded vesting” method permitted under ASC Topic 718. In the case of “retirement eligible” employees (those employees older than 59), 100% of awards are expensed when granted.

Awards granted under stock-based compensation plans are subject to the plans’ post-employment provisions in the event an employee ceases employment with the Company. The plans provide that employees who discontinue employment with the Company without cause and continue to meet the terms of the plans’ post-employment provisions will be eligible to earn 50% of previously granted but not yet earned awards, unless the employee is over the age of 59, in which case the employee would be eligible to receive 100% of previously granted but not yet earned awards.

Cash and Cash Equivalents

Cash and cash equivalents consist of deposits with banks and all highly liquid investments, with maturities of three months or less, that are not segregated and deposited for regulatory purposes or to meet margin requirements at clearing houses.

Cash and Securities—Segregated for Regulatory Purposes

As a result of customer activities, certain Operating Companies are obligated by rules mandated by their primary regulators to segregate or set aside cash or qualified securities to satisfy such regulations, which have been promulgated to protect customer assets. Securities segregated for regulatory purposes consisted of U.S. government securities of \$7.4 billion and \$15.2 billion as of December 31, 2016 and December 31, 2015, respectively, and securities purchased under agreements to resell in the amount of \$11.0 billion and \$0.6 billion as of December 31, 2016 and December 31, 2015, respectively, which amounts approximate fair value.

Securities Borrowed and Securities Loaned

Securities borrowed and securities loaned are recorded at the amount of the cash collateral advanced or received. Securities borrowed transactions require the Company to provide counterparties with collateral, which may be in the form of cash, letters of credit or other securities. With respect to securities loaned, the Company receives collateral, which may be in the form of cash or other securities in an amount generally in excess of the fair value of the securities loaned. The Company monitors the market value of securities borrowed and loaned on a daily basis, with additional collateral obtained or refunded as permitted contractually. It is the Company’s policy to net, in the consolidated statements of financial condition, securities borrowed and securities loaned entered into with the same counterparty that meet the offsetting requirements prescribed in FASB ASC Topic 210-20, “Balance Sheet—Offsetting” (“ASC Topic 210-20”).

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

Securities lending fees received and paid by the Company are included in interest income and interest expense, respectively, in the consolidated statements of comprehensive income.

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

Securities purchased under agreements to resell, which are reported as collateralized financing transactions, are recorded at contract value, which approximates fair value. 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. It is the Company's policy to net, in the consolidated statements of financial condition, securities purchased under agreements to resell transactions and securities sold under agreements to repurchase transactions entered into with the same counterparty that meet the offsetting requirements prescribed in ASC Topic 210-20.

Financial Instruments Owned and Financial Instruments Sold, But Not Yet Purchased, at Fair Value

Financial instrument transactions are accounted for on a trade date basis. Financial instruments owned and financial instruments sold, but not yet purchased are stated at fair value based upon quoted market prices. The Company's financial instruments pledged to counterparties where the counterparty has the right, by contract or custom, to sell or repledge the financial instruments are reported as financial instruments owned and pledged as collateral in the consolidated statements of financial condition.

The Company also enters into currency forward contracts. These transactions, which are also accounted for on a trade date basis, are agreements to exchange a fixed amount of one currency for a specified amount of a second currency at completion of the currency forward contract term. Unrealized mark-to-market gains and losses on currency forward contracts are included in financial instruments owned, at fair value or financial instruments sold, but not yet purchased, at fair value in the consolidated statements of financial condition.

Customer Receivables and Payables

Customer securities transactions are recorded on a settlement date basis and customer commodities transactions are recorded on a trade date basis. Receivables from and payables to customers include amounts due on cash and margin transactions, including futures contracts transacted on behalf of customers. Securities owned by customers, including those that collateralize margin loans or other similar transactions, are not reported in the consolidated statements of financial condition. Amounts receivable from customers that are determined by management to be uncollectible are recorded as customer bad debt expense in the consolidated statements of comprehensive income.

Receivables from and Payables to Brokers, Dealers and Clearing Organizations

Receivables from and payables to brokers, dealers and clearing organizations include net receivables and payables from unsettled trades, including amounts related to futures and options on futures contracts executed on behalf of customers, amounts receivable for securities not delivered by the Company to the purchaser by the settlement date ("fails to deliver") and cash deposits. Payables to brokers, dealers and clearing organizations also include amounts payable for securities not received by the Company from a seller by the settlement date ("fails to receive").

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

Investments

The Company makes certain strategic investments related to its business and accounts for these investments under the cost method of accounting or under the equity method of accounting as required under FASB ASC Topic 323, “Investments—Equity Method and Joint Ventures.” Investments accounted for under the equity method, including where the investee is a limited partnership or limited liability company, are recorded at the fair value amount of the Company’s initial investment and are adjusted each period for the Company’s share of the investee’s income or loss. The Company’s share of the income or losses from equity method investments is included in other income in the consolidated statements of comprehensive income. The recorded amounts of the Company’s equity method investments, \$22 million as of December 31, 2016 (\$32 million as of December 31, 2015), which are included in other assets in the consolidated statements of financial condition, increase or decrease accordingly. Contributions paid to and distributions received from equity method investees are recorded as additions or reductions, respectively, to the respective investment balance.

The Company also holds exchange memberships and investments in equity securities of certain exchanges, as required to qualify as a clearing member, and strategic investments in corporate stock that do not qualify for equity method accounting. Such investments, \$33 million as of December 31, 2016 (\$34 million as of December 31, 2015), are recorded at cost or, if an other-than-temporary impairment in value has occurred, at a value that reflects management’s estimate of the impairment, and are also included in other assets in the consolidated statements of financial condition. Dividends received from cost basis investments are included in other income in the consolidated statements of comprehensive income when such dividends are received.

A judgmental aspect of accounting for investments is evaluating whether an other-than-temporary decline in the value of an investment has occurred. The evaluation of an other-than-temporary impairment is dependent on specific quantitative and qualitative factors and circumstances surrounding an investment, including recurring operating losses, credit defaults and subsequent rounds of financing. The Company’s equity investments do not have readily determinable market values. All investments are reviewed for changes in circumstances or occurrence of events that suggest the Company’s investment may not be recoverable. If an unrealized loss on any investment is considered to be other-than-temporary, the loss is recognized in the period the determination is made.

Property, Equipment, and Intangible Assets

Property, equipment, and intangible assets, which are included in other assets in the consolidated statements of financial condition, consist of leasehold improvements, computer equipment, software developed for the Company’s internal use, office furniture, equipment, and acquired technology.

Property and equipment are recorded at historical cost, less accumulated depreciation and amortization. Additions and improvements that extend the lives of assets are capitalized, while expenditures for repairs and maintenance are expensed as incurred. Depreciation and amortization are computed using the straight-line method. Equipment is depreciated over the estimated useful lives of the assets, while leasehold improvements are amortized over the lesser of the estimated economic useful life of the asset or the term of the lease. Computer equipment is depreciated over three to five years and office furniture and equipment are depreciated over five to seven years. Intangible assets with a finite life are amortized on a straight line basis over their estimated useful lives of three years, and tested for recoverability whenever events indicate that the carrying amounts may not be

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

recoverable. Qualifying costs for internally developed software are capitalized and amortized over the expected useful life of the developed software, not to exceed three years. Upon retirement or disposition of property and equipment, the cost and related accumulated depreciation are removed from the consolidated statements of financial condition and any resulting gain or loss is recorded in other income in the consolidated statements of comprehensive income. Fully depreciated (or amortized) assets are retired on an annual basis.

Comprehensive Income and Foreign Currency Translation

The Company's operating results are reported in the consolidated statements of comprehensive income pursuant to FASB ASC Topic 220, "Comprehensive Income."

Comprehensive income consists of two components: net income and other comprehensive income ("OCI"). The Company's OCI is comprised of gains and losses resulting from translating foreign currency financial statements of non-U.S. subsidiaries, net of related income taxes, where applicable. In general, the practice and intention of the Company is to reinvest the earnings of its non-U.S. subsidiaries in those operations, therefore tax is usually not accrued.

The Company's non-U.S. domiciled subsidiaries have a functional currency that is other than the U.S. dollar. Such subsidiaries' assets and liabilities are translated into U.S. dollars at period-end exchange rates, and revenues and expenses are translated at average exchange rates prevailing during the period. Adjustments that result from translating amounts from a subsidiary's functional currency to the U.S. dollar (as described above) are reported net of tax, where applicable, in accumulated OCI in the consolidated statements of financial condition.

Revenue Recognition

Trading Gains

Trading gains and losses are recorded on trade date and are reported on a net basis. Trading gains and losses are comprised of changes in the fair value of financial instruments owned, at fair value and financial instruments sold, but not yet purchased, at fair value (i.e., unrealized gains and losses) and realized gains and losses related to the Company's market making business segment. Included in trading gains are net gains and losses on stocks, U.S. and foreign government securities, options, futures, foreign exchange and other derivative instruments. Dividends are integral to the valuation of stocks and interest is integral to the valuation of fixed income instruments. Accordingly, both dividends and interest income and expense attributable to financial instruments owned, at fair value and financial instruments sold, but not yet purchased, at fair value are reported on a net basis in trading gains in the consolidated statements of comprehensive income.

Commissions and Execution Fees

Commissions earned for executing and clearing transactions are accrued on a trade date basis and are reported as commissions and execution fees in the consolidated statements of comprehensive income.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

Interest Income and Expense

The Company earns interest income and incurs interest expense primarily in connection with its electronic brokerage customer business and its securities lending activities, which are recorded on an accrual basis and are included in interest income and interest expense, respectively, in the consolidated statements of comprehensive income.

Foreign Currency Gains and Losses

Foreign currency balances are assets and liabilities in currencies other than the Company's functional currency. At every reporting date, the Company revalues its foreign currency balances to its functional currency at the spot exchange rate and records the associated foreign currency gains and losses. These foreign currency gains and losses are reported in the consolidated statements of comprehensive income, as follows: (a) foreign currency gains and losses related to the Company's currency diversification strategy are reported in other income; (b) foreign currency gains and losses related to the market making core-business activities are reported in trading gains; (c) foreign currency gains and losses arising from currency swap transactions in the electronic brokerage business are reported in interest income; and (d) all other foreign currency gains and losses are reported in other income.

Rebates

Rebates consist of volume discounts, credits or payments received from exchanges or other market centers 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 execution and clearing expenses in the consolidated statements of comprehensive income. Rebates received for trades executed on behalf of customers that elect tiered pricing are passed, in whole or part, to these customers; and such pass-through amounts are recorded net within commissions and execution fees in the consolidated statements of comprehensive income.

Income Taxes

The Company accounts for income taxes in accordance with FASB ASC Topic 740, "Income Taxes" ("ASC Topic 740"). The Company's income tax expense, deferred tax assets and liabilities, and reserves for unrecognized tax benefits are based on enacted tax laws (see Note 11) and reflect management's best assessment of estimated future taxes to be paid. The Company is subject to income taxes in both the U.S. and numerous foreign jurisdictions. Determining income tax expense requires significant judgments and estimates.

The Company recognizes interest related to income tax matters as interest income or interest expense and penalties related to income tax matters as income tax expense in the consolidated statements of comprehensive income.

Deferred income tax assets and liabilities arise from temporary differences between the tax and financial statements recognition of the underlying assets and liabilities. In evaluating the ability to recover deferred tax assets within the jurisdictions from which they arise, the Company considers all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax-planning strategies, and results of recent operations. In projecting future taxable income, historical results are adjusted for changes in accounting policies and incorporate

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

assumptions including the amount of future state, federal and foreign pre-tax operating income, the reversal of temporary differences, and the implementation of feasible and prudent tax-planning strategies. These assumptions require significant judgment about the forecasts of future taxable income and are consistent with the plans and estimates the Company is using to manage the underlying businesses. In evaluating the objective evidence that historical results provide, three years of cumulative operating income (loss) are considered. Deferred income taxes have not been provided for U.S. tax liabilities or for additional foreign taxes on the unremitted earnings of foreign subsidiaries that have been indefinitely reinvested.

The calculation of the Company's tax liabilities involves dealing with uncertainties in the application of complex tax laws and regulations in a multitude of jurisdictions across the Company's global operations. Changes in tax laws and rates could also affect recorded deferred tax assets and liabilities in the future. The Company is not aware of any such changes that would have a material effect on the Company's results of operations, cash flows, or financial position.

The Company recognizes a tax benefit from an uncertain tax position only when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, on the basis of the technical merits. A tax position that meets this standard is measured at the largest amount of benefit that will more likely than not be realized on settlement.

The Company records tax liabilities in accordance with ASC Topic 740 and adjusts these liabilities when management's judgment changes as a result of the evaluation of new information not previously available. Because of the complexity of some of these uncertainties, the ultimate resolution may result in payments that are different from the current estimates of these tax liabilities. These differences will be reflected as increases or decreases to income tax expense in the period in which new information becomes available.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

Recently Issued Accounting Pronouncements

Following is a summary of recently issued FASB Accounting Standards Updates (“ASUs”) that have affected or may affect the Company’s consolidated financial statements:

	<u>Affects</u>	<u>Status</u>
ASU 2015-14	<i>Revenue from Contracts with Customers (Topic 606):</i> Deferral of the Effective Date.	Effective for annual reporting periods beginning after December 15, 2017.
ASU 2016-01	<i>Financial Instruments—Overall (Subtopic 825-10):</i> Recognition and Measurement of Financial Assets and Financial Liabilities.	Effective for fiscal years beginning after December 15, 2017.
ASU 2016-02	<i>Leases (Topic 842):</i> Requires that, at lease inception, a lessee recognize a right-of-use asset, representing the right to use the underlying asset for the lease term, and a lease liability, representing the liability to make lease payments, in the statements of financial condition, among other requirements.	Effective for fiscal years beginning after December 15, 2018.
ASU 2016-07	<i>Investments—Equity Method and Joint Ventures (Topic 323):</i> Simplifying the Transition to the Equity Method of Accounting.	Effective for fiscal years beginning after December 15, 2016.
ASU 2016-08	<i>Revenue from Contracts with Customers (Topic 606):</i> Principal versus Agent Considerations (Reporting Revenue Gross versus Net).	Effective for annual reporting periods beginning after December 15, 2017.
ASU 2016-09	<i>Compensation—Stock Compensation (Topic 718):</i> Improvements to Employee Share-Based Payment Accounting.	Effective for annual reporting periods beginning after December 15, 2016.
ASU 2016-10	<i>Revenue from Contracts with Customers (Topic 606):</i> Identifying Performance Obligations and Licensing.	Effective for annual reporting periods beginning after December 15, 2017.
ASU 2016-12	<i>Revenue from Contracts with Customers (Topic 606):</i> Narrow-Scope Improvements and Practical Expedients.	Effective for annual reporting periods beginning after December 15, 2017.
ASU 2016-13	<i>Financial Instruments—Credit Losses (Topic 326):</i> Measurement of Credit Losses on Financial Instruments.	Effective for fiscal years beginning after December 15, 2019.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

	<u>Affects</u>	<u>Status</u>
ASU 2016-15	<i>Statement of Cash Flows (Topic 230):</i> Classification of Certain Cash Receipts and Cash Payments.	Effective for fiscal years beginning after December 15, 2017.
ASU 2016-16	<i>Income Taxes (Topic 740):</i> Intra-Entity Transfers of Assets Other Than Inventory.	Effective for annual reporting periods beginning after December 15, 2017.
ASU 2016-17	<i>Consolidation (Topic 810):</i> Interests Held through Related Parties That Are under Common Control.	Effective for fiscal years beginning after December 15, 2016.
ASU 2016-19	Technical Corrections and Improvements.	Effective upon issuance.
ASU 2016-20	<i>Technical Corrections and Improvements to Topic 606:</i> Revenue from Contracts with Customers.	Effective for annual reporting periods beginning after December 15, 2017.
ASU 2017-01	<i>Business Combinations (Topic 805):</i> Clarifying the Definition of a Business.	Effective for annual periods beginning after December 15, 2017.
ASU 2017-04	<i>Intangibles—Goodwill and Other (Topic 350):</i> Simplifying the Test for Goodwill Impairment.	Effective for fiscal years beginning after December 15, 2019.

Adoption of those ASUs that became effective during 2016 and 2017, prior to the issuance of the Company's consolidated financial statements, did not have a material effect on these financial statements.

The Company early adopted ASU 2016-09 Compensation—Stock Compensation (Topic 718), Improvements to Employee Share-Based Payment Accounting, as of April 1, 2016. This early adoption did not have a material impact on the Company's consolidated financial statements.

3. Trading Activities and Related Risks

The Company's trading activities include providing securities market making and brokerage services. Trading activities expose the Company to market and credit risks. These risks are managed in accordance with established risk management policies and procedures. To accomplish this, management has established a risk management process that includes:

- a regular review of the risk management process by executive management as part of its oversight role;
- defined risk management policies and procedures supported by a rigorous analytic framework; and
- articulated risk tolerance levels as defined by executive management that are regularly reviewed to ensure that the Company's risk-taking is consistent with its business strategy, capital structure, and current and anticipated market conditions.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

3. Trading Activities and Related Risks (Continued)

Market Risk

The Company is exposed to various market risks. Exposures to market risks arise from equity price risk, foreign currency exchange rate fluctuations and changes in interest rates. The Company seeks to mitigate market risk associated with trading inventories by employing hedging strategies that correlate rate, price and spread movements of trading inventories and related financing and hedging activities. The Company uses a combination of cash instruments and exchange traded derivatives to hedge its market exposures. The Company does not apply hedge accounting. The following discussion describes the types of market risk faced:

Equity Price Risk

Equity price risk arises from the possibility that equity security prices will fluctuate, affecting the value of equity securities and other instruments that derive their value from a particular stock, a defined basket of stocks, or a stock index. The Company is subject to equity price risk primarily in financial instruments. The Company attempts to limit such risks by continuously reevaluating prices and by diversifying its portfolio across many different options, futures and underlying securities and avoiding concentrations of positions based on the same underlying security.

Currency Risk

Currency risk arises from the possibility that fluctuations in foreign exchange rates will impact the value of financial instruments. The Company manages this risk using spot (i.e., cash) currency transactions, currency futures contracts and currency forward contracts. As a global electronic broker and market maker trading on exchanges around the world in multiple currencies, the Company is exposed to foreign currency risk. The Company actively manages its currency exposure using hedging strategies that are based on a defined basket of 15 currencies internally referred to as the "GLOBAL." These strategies minimize the fluctuation of the Company's net worth as expressed in GLOBALs, thereby diversifying its risk in alignment with these global currencies, weighted by the Company's view of their importance. As the Company's financial results are reported in U.S. dollars, the change in the value of the GLOBAL as expressed in U.S. dollars affects the Company's earnings. The impact of this currency diversification strategy in the Company's earnings is included in other income in the consolidated statements of comprehensive income. As a result of a periodic assessment, the Company changed the composition of the GLOBAL by adding the Chinese renminbi (specifically, the offshore currency known by the symbol CNH), removing the South Korean won (KRW) and Brazilian real (BRL) components, and realigning the relative weights of the U.S. dollar (USD) and Japanese yen (JPY). The new composition of the GLOBAL went into effect as of the close of business on June 30, 2016.

Interest Rate Risk

Interest rate risk arises from the possibility that changes in interest rates will affect the value of financial instruments. The Company is exposed to interest rate risk on cash and margin balances, positions carried in equity and fixed income securities, options, and futures and on its borrowings. These risks are managed through investment policies and by entering into interest rate futures contracts.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

3. Trading Activities and Related Risks (Continued)

Credit Risk

The Company is exposed to risk of loss if an individual, counterparty or issuer fails to perform its obligations under contractual terms (“default risk”). Both cash instruments and derivatives expose the Company to default risk. The Company has established policies and procedures for mitigating credit risk on principal transactions, including reviewing and establishing limits for credit exposure, maintaining collateral, and continually assessing the creditworthiness of counterparties.

The Company’s credit risk is limited in that substantially all of the contracts entered into are settled directly at securities and commodities clearing houses and a small portion is settled through member firms and banks with substantial financial and operational resources. The Company seeks to control the risks associated with its customer margin activities by requiring customers to maintain collateral in compliance with regulatory and internal guidelines.

In the normal course of business, the Company executes, settles, and finances various customer securities transactions. Execution of these transactions includes the purchase and sale of securities which exposes the Company to default risk arising from the potential that customers or counterparties may fail to satisfy their obligations. In these situations, the Company may be required to purchase or sell financial instruments at unfavorable market prices to satisfy obligations to customers or counterparties. Liabilities to other brokers and dealers related to unsettled transactions (i.e., securities fails to receive) are recorded at the amount for which the securities were purchased, and are paid upon receipt of the securities from other brokers or dealers. In the case of aged securities fails to receive, the Company may purchase the underlying security in the market and seek reimbursement for any losses from the counterparty.

For cash management purposes, the Company enters into short-term securities purchased under agreements to resell and securities sold under agreements to repurchase transactions (“repos”) in addition to securities borrowing and lending arrangements, all of which may result in credit exposure in the event the counterparty to a transaction is unable to fulfill its contractual obligations. Repos are collateralized by securities with a market value in excess of the obligation under the contract. Similarly, securities lending agreements are collateralized by deposits of cash or securities. The Company attempts to minimize credit risk associated with these activities by monitoring collateral values on a daily basis and requiring additional collateral to be deposited with or returned to the Company as permitted under contractual provisions.

Concentrations of Credit Risk

The Company’s exposure to credit risk associated with its trading and other activities is measured on an individual counterparty basis, as well as by groups of counterparties that share similar attributes. Concentrations of credit risk can be affected by changes in political, industry, or economic factors. To reduce the potential for risk concentration, credit limits are established and exposure is monitored in light of changing counterparty and market conditions. As of December 31, 2016, the Company did not have any material concentrations of credit risk outside the ordinary course of business.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

3. Trading Activities and Related Risks (Continued)

Off-Balance Sheet Risks

The Company may be exposed to a risk of loss not reflected in the consolidated financial statements to settle futures and certain over-the-counter contracts at contracted prices, which may require repurchase or sale of the underlying products in the market at prevailing prices. Accordingly, these transactions result in off-balance sheet risk as the Company's cost to liquidate such contracts may exceed the amounts reported in the Company's consolidated statements of financial condition.

4. Equity and Earnings per Share

In connection with IBG, Inc.'s initial public offering of Class A common stock ("IPO") in May 2007, it purchased 10.0% of the membership interests in IBG LLC from IBG Holdings LLC ("Holdings"), became the sole managing member of IBG LLC and began to consolidate IBG LLC's financial results into its financial statements. Holdings owns all of IBG, Inc.'s Class B common stock, which has voting rights in proportion to its ownership interests in IBG LLC. The table below shows the amount of IBG LLC membership interests held by IBG, Inc. and Holdings as of December 31, 2016.

	IBG, Inc.	Holdings	Total
Ownership %	16.6%	83.4%	100.0%
Membership interests	67,989,967	341,444,304	409,434,271

These consolidated financial statements reflect the results of operations and financial position of IBG, Inc., including consolidation of its investment in IBG LLC and its subsidiaries. The noncontrolling interests in IBG LLC attributable to Holdings are reported as a component of total equity in the consolidated statements of financial condition.

Recapitalization and Post-IPO Capital Structure

Immediately prior to and immediately following the consummation of the IPO, IBG, Inc., Holdings, IBG LLC and the members of IBG LLC consummated a series of transactions collectively referred to herein as the "Recapitalization." In connection with the Recapitalization, IBG, Inc., Holdings and the historical members of IBG LLC entered into an exchange agreement, dated as of May 3, 2007 (the "Exchange Agreement"), pursuant to which the historical members of IBG LLC received membership interests in Holdings in exchange for their membership interests in IBG LLC. Additionally, IBG, Inc. became the sole managing member of IBG LLC.

In connection with the consummation of the IPO, Holdings used the net proceeds to redeem 10.0% of members' interests in Holdings in proportion to their interests. Immediately following the Recapitalization and IPO, Holdings owned approximately 90% of IBG LLC and 100% of IBG, Inc.'s Class B common stock, which has voting power in IBG, Inc. in proportion to Holdings' ownership of IBG LLC.

Since consummation of the IPO and Recapitalization, IBG, Inc.'s equity capital structure has been comprised of Class A and Class B common stock. All shares of common stock have a par value of \$0.01 per share and have identical rights to earnings and dividends and in liquidation. As of December 31, 2016 and December 31, 2015, 1,000,000,000 shares of Class A common stock were authorized, of which 68,119,412 and 64,121,150 shares have been issued; and 67,984,973 and 63,985,335 shares were outstanding, respectively. Class B common stock is comprised of 100 authorized shares, of

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

4. Equity and Earnings per Share (Continued)

which 100 shares were issued and outstanding as of December 31, 2016 and December 31, 2015, respectively. In addition, 10,000 shares of preferred stock have been authorized, of which no shares are issued or outstanding as of December 31, 2016 and December 31, 2015, respectively.

As a result of a federal income tax election made by IBG LLC applicable to the acquisition of IBG LLC member interests by IBG, Inc., the income tax basis of the assets of IBG LLC acquired by IBG, Inc. have been adjusted based on the amount paid for such interests. Deferred tax assets were recorded as of the IPO date and in connection with subsequent redemptions of Holdings member interests in exchange for common stock. These deferred tax assets are included in other assets in the Company's consolidated statements of financial condition and are being amortized as additional deferred income tax expense over 15 years from the IPO date and from the additional redemption dates, respectively, as allowable under current tax law. As of December 31, 2016 and December 31, 2015, the unamortized balance of these deferred tax assets was \$273 million and \$288 million, respectively.

IBG, Inc. also entered into an agreement (the "Tax Receivable Agreement") with Holdings to pay Holdings (for the benefit of the former members of IBG LLC) 85% of the tax savings that IBG, Inc. actually realizes as the result of tax basis increases. These payables to Holdings are reported as payable to affiliate in the Company's consolidated statements of financial condition. The remaining 15% is accounted for as a permanent increase to additional paid-in capital in the Company's consolidated statements of financial condition.

The cumulative amounts of deferred tax assets, payables to Holdings and additional paid-in capital arising from stock offerings from the date of the IPO through December 31, 2016 were \$472 million, \$401 million, and \$71 million, respectively. Amounts payable under the Tax Receivable Agreement are payable to Holdings annually following the filing of IBG, Inc.'s federal income tax return. The Company has paid Holdings a cumulative total of \$116 million through December 31, 2016 pursuant to the terms of the Tax Receivable Agreement.

The Exchange Agreement, as amended, provides for future redemptions of member interests and for the purchase of member interests in IBG LLC by IBG, Inc. from Holdings, which could result in IBG, Inc. acquiring the remaining member interests in IBG LLC that it does not own. On an annual basis, members of Holdings are able to request redemption of their interests.

At the time of IBG, Inc.'s IPO in 2007, three hundred sixty (360) million shares of authorized common stock were reserved for future sales and redemptions. From 2008 through 2010, Holdings redeemed 5,013,259 IBG LLC interests with a total value of \$114 million, which redemptions were funded using cash on hand at IBG LLC. Upon cash redemption these IBG LLC interests were retired. From 2011 through 2015, IBG, Inc. issued 11,047,295 shares of common stock (with a fair value of \$306 million) directly to Holdings in exchange for an equivalent number of member interests in IBG LLC.

On July 28, 2016, the Company filed a Supplemental Prospectus on Form 424B5 (File Number 333-192275) with the SEC to issue 1,596,200 shares of common stock in exchange for an equivalent number of shares of member interests in IBG LLC. This issuance of shares increased the Company's ownership in IBG LLC from 16.2% to 16.6%.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

4. Equity and Earnings per Share (Continued)

As a consequence of these redemption transactions, and distribution of shares to employees (see Note 10), IBG, Inc.'s interest in IBG LLC has increased to approximately 16.6%, with Holdings owning the remaining 83.4% as of December 31, 2016. The redemptions also resulted in an increase in the Holdings interest held by Mr. Thomas Peterffy and his affiliates from approximately 84.6% at the IPO to approximately 89.1% as of December 31, 2016.

Earnings per Share

Basic earnings per share is calculated utilizing net income available for common stockholders divided by the weighted average number of shares of Class A and Class B common stock outstanding for that period.

	Year-Ended December 31,		
	2016	2015	2014
	(in millions, except share or per share amounts)		
Basic earnings per share			
Net income available for common stockholders	\$ 84	\$ 49	\$ 45
Weighted average shares of common stock outstanding			
Class A	66,013,147	61,042,971	56,492,281
Class B	100	100	100
	<u>66,013,247</u>	<u>61,043,071</u>	<u>56,492,381</u>
Basic earnings per share	<u>\$ 1.28</u>	<u>\$ 0.80</u>	<u>\$ 0.79</u>

Diluted earnings per share are calculated utilizing the Company's basic net income available for common stockholders divided by diluted weighted average shares outstanding with no adjustments to net income available to common stockholders for potentially dilutive common shares.

	Year-Ended December 31,		
	2016	2015	2014
	(in millions, except share or per share amounts)		
Diluted earnings per share			
Net income available for common stockholders	\$ 84	\$ 49	\$ 45
Weighted average shares of common stock outstanding			
Class A			
Issued and outstanding	66,013,147	61,042,971	56,492,281
Potentially dilutive common shares			
Issuable pursuant to employee stock incentive plans	1,286,166	1,466,725	1,217,287
Class B	100	100	100
	<u>67,299,413</u>	<u>62,509,796</u>	<u>57,709,668</u>
Diluted earnings per share	<u>\$ 1.25</u>	<u>\$ 0.78</u>	<u>\$ 0.77</u>

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

4. Equity and Earnings per Share (Continued)

Member Distributions and Stockholder Dividends

During the three years ended December 31, 2016, 2015, and 2014, IBG LLC made distributions totaling \$267 million, \$267 million, and \$324 million, to its members, of which IBG, Inc.'s proportionate share was \$43 million, \$40 million, and \$45 million, respectively. The Company paid quarterly cash dividends of \$0.10 per share of common stock, totaling \$26 million, \$25 million, and \$23 million during 2016, 2015, and 2014, respectively.

On January 17, 2017, the Company declared a cash dividend of \$0.10 per common share, payable on March 14, 2017 to stockholders of record as of March 1, 2017.

5. Comprehensive Income

The following table presents comprehensive income and earnings per share on comprehensive income:

	Year-Ended December 31,		
	2016	2015	2014
	(in millions, except share or per share amounts)		
Comprehensive income available for common stockholders . .	\$ 80	\$ 39	\$ 30
Earnings per share on comprehensive income			
Basic	\$ 1.21	\$ 0.64	\$ 0.52
Diluted	\$ 1.19	\$ 0.62	\$ 0.51
Weighted average common shares outstanding			
Basic	66,013,247	61,043,071	56,492,381
Diluted	67,299,413	62,509,796	57,709,668

6. Financial Assets and Financial Liabilities

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following tables set forth, by level within the fair value hierarchy (see Note 2), financial assets and liabilities, measured at fair value on a recurring basis as of December 31, 2016 and December 31, 2015.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

6. Financial Assets and Financial Liabilities (Continued)

As required by ASC Topic 820, financial assets and financial liabilities are classified in their entirety based on the lowest level of input that is significant to the respective fair value measurement.

	Financial Assets At Fair Value as of December 31, 2016			
	Level 1	Level 2	Level 3	Total
	(in millions)			
Securities segregated for regulatory purposes	\$ 7,398	\$—	\$—	\$ 7,398
Financial instruments owned, at fair value				
Stocks	1,821	—	—	1,821
Options	1,804	—	—	1,804
Warrants and discount certificates	43	—	—	43
U.S. and foreign government securities	363	—	—	363
Corporate and municipal bonds	—	2	1	3
Currency forward contracts	—	3	—	3
Total financial instruments owned, at fair value	4,031	5	1	4,037
Total financial assets at fair value	\$11,429	\$ 5	\$ 1	\$11,435

	Financial Liabilities At Fair Value as of December 31, 2016			
	Level 1	Level 2	Level 3	Total
	(in millions)			
Financial instruments sold, but not yet purchased, at fair value				
Stocks	\$ 839	\$—	\$—	\$ 839
Options	1,286	—	—	1,286
Warrants and discount certificates	1	—	—	1
Currency forward contracts	—	19	—	19
Total financial instruments sold, but not yet purchased, at fair value	2,126	19	—	2,145
Total financial liabilities at fair value	\$2,126	\$19	\$—	\$2,145

	Financial Assets At Fair Value as of December 31, 2015			
	Level 1	Level 2	Level 3	Total
	(in millions)			
Securities segregated for regulatory purposes	\$15,214	\$—	\$—	\$15,214
Financial instruments owned, at fair value				
Stocks	1,650	—	—	1,650
Options	1,156	—	—	1,156
Warrants and discount certificates	81	—	—	81
U.S. and foreign government securities	527	—	—	527
Corporate and municipal bonds	—	3	—	3
Currency forward contracts	—	3	—	3
Total financial instruments owned, at fair value	3,414	6	—	3,420
Total financial assets at fair value	\$18,628	\$ 6	\$—	\$18,634

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

6. Financial Assets and Financial Liabilities (Continued)

	Financial Liabilities At Fair Value as of December 31, 2015			
	Level 1	Level 2	Level 3	Total
	(in millions)			
Financial instruments sold, but not yet purchased, at fair value				
Stocks	\$1,565	\$—	\$—	\$1,565
Options	1,042	—	—	1,042
Warrants and discount certificates	1	—	—	1
Currency forward contracts	—	9	—	9
Total financial instruments sold, but not yet purchased, at fair value .	2,608	9	—	2,617
Total financial liabilities at fair value	\$2,608	\$ 9	\$—	\$2,617

Transfers between Level 1 and Level 2

Transfers of financial assets and financial liabilities at fair value to or from Levels 1 and 2 arise where the market for a specific financial instrument has become active or inactive during the period. The fair values transferred are ascribed as if the financial assets or financial liabilities had been transferred as of the end of the period. During the years ended December 31, 2016 and 2015, there were no transfers between levels for financial assets and liabilities, at fair value.

Level 3 Financial Assets and Financial Liabilities

The Company's Level 3 financial assets are comprised of delisted and illiquid securities reported within financial instruments owned, at fair value in the consolidated statements of financial condition. During the year ended December 31, 2016 financial assets included \$1 million of Level 3 securities which were transferred from Level 2 as a result of a security becoming illiquid.

Trading Gains from Market Making Transactions

Trading gains and losses from market making transactions reported in the statements of comprehensive income, by major product type, are comprised of:

	Year-Ended December 31,		
	2016	2015	2014
	(in millions)		
Equities	\$155	\$254	\$247
Fixed income	—	1	21
Foreign exchange	8	14	(7)
Total trading gains, net	\$163	\$269	\$261

These transactions are related to the Company's financial instruments owned and financial instruments sold, but not yet purchased, at fair value and include both derivative and non-derivative financial instruments, including exchange traded options and futures. These gains and losses also include market making related dividend and fixed income trading related interest income and expense.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

6. Financial Assets and Financial Liabilities (Continued)

The gains (losses) in the table above are not representative of the integrated trading strategies applied by the Company, which utilizes financial instruments across various product types. Gains and losses in one product type frequently offset gains and losses in other product types.

Financial Assets and Liabilities Not Measured at Fair Value

The following tables represent the carrying value, fair value, and fair value hierarchy category of certain financial assets and liabilities that are not recorded at fair value in the Company's consolidated statements of financial condition. The following table excludes certain financial instruments such as equity investments and all non-financial assets and liabilities:

	December 31, 2016				
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
	(in millions)				
Financial assets, not measured at fair value					
Cash and cash equivalents	\$ 1,925	\$ 1,925	\$1,925	\$ —	\$—
Cash and securities segregated for regulatory purposes	16,619	16,619	5,624	10,995	—
Securities borrowed	3,629	3,629	—	3,629	—
Securities purchased under agreements to resell	111	111	—	111	—
Receivables from customer	19,409	19,409	—	19,409	—
Receivables from broker, dealers, and clearing organizations	1,040	1,040	—	1,040	—
Interest receivable	57	57	—	57	—
Other assets	28	32	—	32	—
Total financial assets, not measured at fair value	<u>\$42,818</u>	<u>\$42,822</u>	<u>\$7,549</u>	<u>\$35,273</u>	<u>\$—</u>
Financial liabilities, not measured at fair value					
Short-term borrowings	\$ 74	\$ 74	\$ —	\$ 74	\$—
Securities loaned	4,293	4,293	—	4,293	—
Payables to customer	41,731	41,731	—	41,731	—
Payables to brokers, dealers and clearing organizations	239	239	—	239	—
Interest payable	6	6	—	6	—
Total financial liabilities, not measured at fair value	<u>\$46,343</u>	<u>\$46,343</u>	<u>\$ —</u>	<u>\$46,343</u>	<u>\$—</u>

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

6. Financial Assets and Financial Liabilities (Continued)

	December 31, 2015				
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
	(in millions)				
Financial assets, not measured at fair value					
Cash and cash equivalents	\$ 1,601	\$ 1,601	\$1,601	\$ —	\$—
Cash and securities segregated for regulatory purposes	6,095	6,095	5,533	562	—
Securities borrowed	3,924	3,924	—	3,924	—
Securities purchased under agreements to resell	195	195	—	195	—
Receivables from customer	17,050	17,050	—	17,050	—
Receivables from broker, dealers, and clearing organizations	692	692	—	692	—
Interest receivable	63	63	—	63	—
Other assets	28	31	—	31	—
Total financial assets, not measured at fair value	<u>\$29,648</u>	<u>\$29,651</u>	<u>\$7,134</u>	<u>\$22,517</u>	<u>\$—</u>
Financial liabilities, not measured at fair value					
Securities loaned	\$ 2,894	\$ 2,894	\$ —	\$ 2,894	\$—
Payables to customer	37,084	37,084	—	37,084	—
Payables to brokers, dealers and clearing organizations	423	423	—	423	—
Interest payable	3	3	—	3	—
Total financial liabilities, not measured at fair value . . .	<u>\$40,404</u>	<u>\$40,404</u>	<u>\$ —</u>	<u>\$40,404</u>	<u>\$—</u>

Netting of Financial Assets and Financial Liabilities

It is the Company's policy to net securities borrowed and securities loaned, and securities purchased under agreements to resell and securities sold under agreements to repurchase that meet the offsetting requirements prescribed in ASC Topic 210-20. In the tables below, the amounts of financial instruments that are not offset in the consolidated statements of financial condition, but could be netted against cash or financial instruments with specific counterparties under master netting agreements, according to the terms of the agreements, including clearing houses (exchange traded options, warrants and discount certificates) or over the counter currency forward contract counterparties, are presented to provide financial statement readers with the Company's net payable or receivable with counterparties for these financial instruments.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

6. Financial Assets and Financial Liabilities (Continued)

The following tables set forth the netting of financial assets and of financial liabilities as of December 31, 2016 and December 31, 2015:

	December 31, 2016			Amounts Not Offset in the Consolidated Statement of Financial Condition	Cash or Financial Instruments	Net Amount
	Gross Amounts of Financial Assets and Liabilities Recognized	Amounts Offset in the Consolidated Statement of Financial Condition(2)	Net Amounts Presented in the Consolidated Statement of Financial Condition (in millions)			
Offsetting of Financial Assets						
Securities segregated for regulatory purposes—purchased under agreements to resell	\$10,995(1)	\$—	\$10,995	\$(10,995)		\$ —
Securities borrowed	3,629	—	3,629	(3,488)		141
Securities purchased under agreements to resell	111	—	111	(111)		—
Financial Instruments owned, at fair value						
Options	1,804	—	1,804	(1,230)		574
Warrants and discount certificates	43	—	43	(1)		42
Currency forward contracts	3	—	3	—		3
Total	<u>\$16,585</u>	<u>\$—</u>	<u>\$16,585</u>	<u>\$(15,825)</u>		<u>\$760</u>
Offsetting of Financial Liabilities						
Securities loaned	\$ 4,293	\$—	\$ 4,293	\$ (4,158)		\$135
Financial instruments sold, but not yet purchased, at fair value						
Options	1,286	—	1,286	(1,230)		56
Warrants and discount certificates	1	—	1	(1)		—
Currency forward contracts	19	—	19	—		19
Total	<u>\$ 5,599</u>	<u>\$—</u>	<u>\$ 5,599</u>	<u>\$ (5,389)</u>		<u>\$210</u>

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

6. Financial Assets and Financial Liabilities (Continued)

	December 31, 2015			Amounts Not Offset in the Consolidated Statement of Financial Condition	
	Gross Amounts of Financial Assets and Liabilities Recognized	Amounts Offset in the Consolidated Statement of Financial Condition(2)	Net Amounts Presented in the Consolidated Statement of Financial Condition (in millions)	Cash or Financial Instruments	Net Amount
Offsetting of Financial Assets					
Securities segregated for regulatory purposes—purchased under agreements to resell . . .	\$ 562(1)	\$—	\$ 562	\$ (562)	\$ —
Securities borrowed . . .	3,924	—	3,924	(3,816)	108
Securities purchased under agreements to resell	195	—	195	(195)	—
Financial Instruments owned, at fair value					
Options	1,156	—	1,156	(1,032)	124
Warrants and discount certificates	81	—	81	(1)	80
Currency forward contracts	3	—	3	—	3
Total	<u>\$5,921</u>	<u>\$—</u>	<u>\$5,921</u>	<u>\$(5,606)</u>	<u>\$315</u>
Offsetting of Financial Liabilities					
Securities loaned	\$2,894	\$—	\$2,894	\$(2,773)	\$121
Financial instruments sold, but not yet purchased, at fair value					
Options	1,042	—	1,042	(1,032)	10
Warrants and discount certificates	1	—	1	(1)	—
Currency forward contracts	9	—	9	—	9
Total	<u>\$3,946</u>	<u>\$—</u>	<u>\$3,946</u>	<u>\$(3,806)</u>	<u>\$140</u>

- (1) As of December 31, 2016 and December 31, 2015, the Company had \$11.0 billion and \$0.6 billion, respectively, of securities purchased under agreements to resell that were segregated to satisfy regulatory requirements. These securities are included in “Cash and securities—segregated for regulatory purposes” in the consolidated statements of financial condition.
- (2) The Company did not have any balances eligible for netting in accordance with ASC Topic 210-20 at December 31, 2016 and 2015.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

6. Financial Assets and Financial Liabilities (Continued)

Secured Financing Transactions—Maturities and Collateral Pledged

The following tables present gross obligations for securities loaned transactions by remaining contractual maturity and class of collateral pledged as of December 31, 2016 and December 31, 2015:

	December 31, 2016				Total
	Remaining Contractual Maturity				
	Overnight and Open	Less than 30 days	30 - 90 days	Over 90 days	
	(in millions)				
Securities Loaned					
Stocks	\$4,269	\$—	\$—	\$—	\$4,269
Corporate bonds	24	—	—	—	24
Total	<u>\$4,293</u>	<u>\$—</u>	<u>\$—</u>	<u>\$—</u>	<u>\$4,293</u>

	December 31, 2015				Total
	Remaining Contractual Maturity				
	Overnight and Open	Less than 30 days	30 - 90 days	Over 90 days	
	(in millions)				
Securities Loaned					
Stocks	\$2,873	\$—	\$—	\$—	\$2,873
Corporate bonds	21	—	—	—	21
Total	<u>\$2,894</u>	<u>\$—</u>	<u>\$—</u>	<u>\$—</u>	<u>\$2,894</u>

7. Collateralized Transactions

The Company enters into securities borrowing and lending transactions and agreements to repurchase and resell securities to finance trading inventory, to obtain securities for settlement and to earn residual interest rate spreads. In addition, the Company's customers pledge their securities owned to collateralize margin loans. Under these transactions, the Company either receives or provides collateral, including equity, corporate debt and U.S. government securities. Under many agreements, the Company is permitted to sell or repledge securities received as collateral and use these securities to secure securities purchased under agreements to resell, enter into securities lending transactions or deliver these securities to counterparties to cover short positions.

The Company also engages in securities financing transactions with and for customers through margin lending. Customer receivables generated from margin lending activity are collateralized by customer-owned securities held by the Company. Customers' required margin levels and established credit limits are monitored continuously by risk management staff using automated systems. Pursuant to the Company's policy and as enforced by such systems, customers are required to deposit additional collateral or reduce positions, when necessary to avoid automatic liquidation of their positions.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

7. Collateralized Transactions (Continued)

Margin loans are extended to customers on a demand basis and are not committed facilities. Factors considered in the acceptance or rejection of margin loans are the amount of the loan, the degree of leverage being employed in the customer account and an overall evaluation of the customer's portfolio to ensure proper diversification or, in the case of concentrated positions, appropriate liquidity of the underlying collateral. Additionally, transactions relating to concentrated or restricted positions are limited or prohibited by raising the level of required margin collateral (to 100% in the extreme case). Underlying collateral for margin loans is evaluated with respect to the liquidity of the collateral positions, valuation of securities, volatility analysis and an evaluation of industry concentrations. Adherence to the Company's collateral policies significantly limits the Company's credit exposure to margin loans in the event of a customer's default. Under margin lending agreements, the Company may request additional margin collateral from customers and may sell securities that have not been paid for or purchase securities sold but not delivered from customers, if necessary. As of December 31, 2016 and December 31, 2015, approximately \$19.4 billion and \$17.0 billion, respectively, of customer margin loans were outstanding.

The following table summarizes the amounts related to collateralized transactions as of December 31, 2016 and December 31, 2015:

	December 31, 2016		December 31, 2015	
	Permitted to Repledge	Sold or Repledged	Permitted to Repledge	Sold or Repledged
	(in millions)			
Securities lending transactions	\$13,768	\$ 3,621	\$12,131	\$2,229
Securities purchased under agreements to resell transactions(1)	11,117	11,117	757	743
Customer margin assets	17,773	7,172	14,905	6,279
	\$42,658	\$21,910	\$27,793	\$9,251

(1) As of December 31, 2016, \$11.0 billion or 99% (as of December 31, 2015, \$0.6 billion or 76%) of securities acquired through agreements to resell that are shown as repledged have been deposited in a separate bank account for the exclusive benefit of customers in accordance with SEC Rule 15c3-3.

In the normal course of business, the Company pledges qualified securities with clearing organizations to satisfy daily margin and clearing fund requirements. As of December 31, 2016 and December 31, 2015, the majority of the Company's U.S. and foreign government securities owned were pledged to clearing organizations.

Financial instruments owned and pledged as collateral, including amounts pledged to affiliates, where the counterparty has the right to repledge, as of December 31, 2016 and December 31, 2015 are presented in the following table:

	December 31, 2016	December 31, 2015
	(in millions)	
Stocks	\$1,574	\$ 915
U.S. and foreign government securities	359	518
	\$1,933	\$1,433

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

8. Short-Term Borrowings

Short-term borrowings consist primarily of collateralized borrowing facilities with clearing banks in multiple currencies that bear interest at variable overnight rates based on interbank funds rates prevailing in the respective currencies. In addition, the Company has available secured and unsecured overnight bank loan facilities. All short-term borrowings outstanding as of December 31, 2016 and 2015 were either repaid on the next business day or rolled forward and, accordingly, their carrying values approximated fair values.

As of December 31, 2016 and 2015, short-term borrowings consisted of:

	December 31, 2016		December 31, 2015	
	Principal (in millions)	Weighted Average Rates	Principal (in millions)	Weighted Average Rates
Overnight borrowing facilities	\$74	1.53%	\$—	0.51%
	\$74		\$—	

Interest expense on short term borrowings for each of the three years ended December 31, 2016, 2015, and 2014 was \$0 million, \$0 million, and \$1 million, respectively.

9. Other Income

The components of other income for the years ended December 31, 2016, 2015, and 2014 were:

	Year-Ended December 31,		
	2016	2015	2014
	(in millions)		
Payments for order flow	\$ 14	\$ 17	\$ 25
Market data fees	35	30	24
Account activity fees	18	16	14
Risk exposure fees	19	21	6
Gains (losses) on financial instruments, at fair value and other investments, net .	35	(18)	(5)
Gains (losses) from currency diversification strategy, net	(40)	(206)	(185)
Other, net	13	18	10
	\$ 94	\$(122)	\$(111)

Payments for order flow are earned from various options exchanges based upon options trading volume originated by the Operating Companies. Market data fees are charged to customers based upon market data services provided and are largely offset by the related cost to obtain the underlying market data from third party vendors. Risk exposure fees are earned from a small minority of customer accounts with positions on which market risk exceeds certain thresholds. Account activity fees are charged to customers that generate commissions below the minimum level in any given month. The fee is based on the difference between the minimum monthly required commission and the actual commissions generated by the customer's account. Gains and losses on financial instruments, at fair value and other investments include realized and unrealized gains and losses on financial instruments that are not held for the Company's market making operations or from securities that are subject to restrictions, and the Company's interests in the earnings of equity method investees and dividends received on cost-basis investments.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

10. Employee Incentive Plans

Defined Contribution Plan

The Company offers substantially all employees of U.S.-based Operating Companies who have met minimum service requirements the opportunity to participate in defined contribution retirement plans qualifying under the provisions of Section 401(k) of the Internal Revenue Code. The general purpose of this plan is to provide employees with an incentive to make regular savings in order to provide additional financial security during retirement. This plan provides for the Company to match 50% of the employees' pre-tax contribution, up to a maximum of 10% of eligible earnings. The employee is vested in the matching contribution incrementally over six years of service. Included in employee compensation and benefits expenses in the consolidated statements of comprehensive income were \$3 million of plan contributions for the three years ended December 31, 2016, 2015, and 2014, respectively.

2007 ROI Unit Stock Plan

In connection with the IPO, the Company adopted the IBG, Inc. 2007 ROI Unit Stock Plan ("ROI Unit Stock Plan"). An aggregate of 1,271,009 shares of restricted common stock (consisting of 1,250,000 shares issued under the ROI Unit Stock Plan and 21,009 shares under the 2007 Stock Incentive Plan, as described below), with a fair value at the date of grant of \$38 million were issued to IBG LLC and held as treasury stock.

As of December 31, 2016, the Company has 4,994 shares of common stock remaining to be distributed to former employees under the ROI Unit Stock Plan.

2007 Stock Incentive Plan

Under the Company's 2007 Stock Incentive Plan (the "Stock Incentive Plan"), up to 30 million shares of the Company's common stock may be granted and issued to directors, officers, employees, contractors and consultants of the Company. The purpose of the Stock Incentive Plan is to promote the Company's long-term financial success by attracting, retaining and rewarding eligible participants.

As a result of the Company's organizational structure, a description of which can be found in "Business—Our Organizational Structure" in Part I Item 1 of this Annual Report on Form 10-K, there is no dilutive effect upon ownership of common stockholders of issuing shares under the Stock Incentive Plan. The issuances do not dilute the book value of the ownership of common stockholders since the restricted stock units are granted at market value, and upon their vesting and the related issuance of shares of common stock, the ownership of IBG, Inc. in IBG LLC, increases proportionately to the shares issued. As a result of such proportionate increase in share ownership, the dilution upon issuance of common stock is borne by IBG LLC's majority member (i.e., noncontrolling interest), Holdings, and not by IBG, Inc. or its common stockholders. Additionally, dilution of earnings that may take place after issuance of common stock is reflected in EPS reported in the Company's financial statements. The EPS dilution can be neither estimated nor projected, but historically it has not been material.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

10. Employee Incentive Plans (Continued)

The Stock Incentive Plan is administered by the Compensation Committee of the Company's Board of Directors. The Compensation Committee has discretionary authority to determine the eligibility to participate in the Stock Incentive Plan and establishes the terms and conditions of the stock awards, including the number of awards granted to each participant and all other terms and conditions applicable to such awards in individual grant agreements. Awards are expected to be made primarily through grants of restricted common stock. Stock Incentive Plan awards are subject to issuance over time. All previously granted but not yet earned awards may be cancelled by the Company upon the participant's termination of employment or violation of certain applicable covenants prior to issuance, unless determined otherwise by the Compensation Committee.

The Stock Incentive Plan provides that, upon a change in control, the Compensation Committee may, at its discretion, fully vest any granted but not yet earned awards under the Stock Incentive Plan, or provide that any such granted but not yet earned awards will be honored or assumed, or new rights substituted by the new employer on a substantially similar basis and on terms and conditions substantially comparable to those of the Stock Incentive Plan.

The Company expects to continue to grant awards on or about December 31 of each year to eligible participants as part of an overall plan of equity compensation. Shares of common stock vest, and become distributable to participants in accordance with the following schedule:

- 10% on the first vesting date, which is on or about May 9 of each year; and
- an additional 15% on each of the following six anniversaries of the first vesting, assuming continued employment with the Company and compliance with non-competition and other applicable covenants.

Awards granted to external directors vest, and are distributed, over a five-year period (20% per year) commencing one year after the date of grant. A total of 22,996 shares have been granted to the external directors cumulatively since the plan inception.

Stock Incentive Plan share grants (excluding 21,009 shares issued pursuant to the ROI Unit Stock Plan described above) and the related fair values since the plan inception are presented in the table below:

	Shares	Fair Value at Date of Grant (\$ millions)
Prior periods (since inception)	19,178,500	\$348
December 31, 2014	1,709,968	49
December 31, 2015	1,211,533(1)	52
December 31, 2016	1,445,479	55
	23,545,480	\$504

(1) Stock Incentive Plan number of granted shares related to 2015 was adjusted by 12,454 additional shares during the year ended December 31, 2016.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

10. Employee Incentive Plans (Continued)

Estimated future grants under the Stock Incentive Plan are accrued for ratably during each year (see Note 2). In accordance with the vesting schedule, outstanding awards vest and are distributed to participants yearly on or about May 9 of each year. At the end of each year, there are no vested awards that remain undistributed.

Compensation expense related to the Stock Incentive Plan recognized in the consolidated statements of comprehensive income was \$51 million, \$50 million, and \$41 million for the years ended December 31, 2016, 2015, and 2014, respectively. Estimated future compensation costs for unvested awards, net of credits for cancelled awards, as of December 31, 2016 are \$39 million.

The following summarizes the Stock Incentive Plan and ROI Unit Stock Plan activities from December 31, 2013 through December 31, 2016:

	<u>Stock Incentive Plan Shares</u>	<u>Intrinsic Value of SIP Shares which Vested and were Distributed (\$ millions)(1)</u>	<u>ROI Unit Stock Plan Shares</u>
Balance, December 31, 2013	11,647,117		—
Granted	1,709,968		—
Cancelled	(535,085)		15,518(2)
Distributed	(2,445,200)	\$56	(5,904)
Balance, December 31, 2014	<u>10,376,800</u>		<u>9,614</u>
Granted	1,211,533		—
Cancelled	(163,221)		—
Distributed	(2,487,127)	\$86	(3,244)
Balance, December 31, 2015	<u>8,937,985</u>		<u>6,370</u>
Granted	1,445,479		—
Cancelled	(69,340)		—
Distributed	(2,402,062)	\$88	(1,376)
Balance, December 31, 2016	<u>7,912,062</u>		<u>4,994</u>

(1) Intrinsic value of SIP shares distributed represents the compensation value reported to the participants.

(2) ROI Unit Stock Plan number of cancelled unearned shares related to prior years was adjusted by 15,518 shares during the period

Awards previously granted but not yet earned under the stock plans are subject to the plans' post-employment provisions in the event a participant ceases employment with the Company. Through December 31, 2016, a total of 447,374 shares have been distributed under these post-employment provisions. These distributions are included in the table above.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

11. Income Taxes

Income tax expense for the three years ended December 31, 2016, 2015, and 2014 differs from the U.S. federal statutory rate primarily due to the taxation treatment of income attributable to noncontrolling interests in IBG LLC. These noncontrolling interests are subject to U.S. taxation as partnerships. Accordingly, 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.

Deferred income taxes arise primarily due to the amortization of the deferred tax assets recognized in connection with the common stock offerings (see Note 4), differences in the valuation of financial assets and liabilities, and for other temporary differences arising from the deductibility of compensation and depreciation expenses in different time periods for book and income tax return purposes.

For the three years ended December 31, 2016, 2015, and 2014, the provision for income taxes consisted of:

	Year-Ended December 31,		
	2016	2015	2014
	(in millions)		
Current			
Federal	\$ 1	\$ 4	\$ 1
State and local	—	—	—
Foreign	34	24	28
Total current	<u>35</u>	<u>28</u>	<u>29</u>
Deferred			
Federal	30	14	21
State and local	—	—	—
Foreign	(3)	1	(3)
Total deferred	<u>27</u>	<u>15</u>	<u>18</u>
	<u>\$62</u>	<u>\$43</u>	<u>\$47</u>

A reconciliation of the statutory U.S. Federal income tax rate of 35% to the Company's effective tax rate for the three years ending December 31, 2016, 2015, and 2014 is set forth below:

	Year-Ended December 31,		
	2016	2015	2014
U.S. Statutory Tax Rate	35.0%	35.0%	35.0%
Less: rate attributable to noncontrolling interests	(28.2)%	(28.2)%	(28.6)%
State, local and foreign taxes, net of federal benefit	1.3%	2.6%	2.9%
	<u>8.1%</u>	<u>9.4%</u>	<u>9.3%</u>

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

11. Income Taxes (Continued)

Significant components of the Company's deferred tax assets and liabilities, which are reported in other assets and in other liabilities and accrued expenses, respectively, in the consolidated statements of financial condition, as of December 31, 2016, 2015, and 2014 were as follows:

	December 31,		
	2016	2015	2014
	(in millions)		
Deferred tax assets			
Arising from the acquisition of interests in IBG LLC	\$273	\$288	\$279
Deferred compensation	6	5	6
Other	18	18	8
Total deferred tax assets	297	311	293
Deferred tax liabilities			
Foreign, primarily THE	2	3	3
Other comprehensive income	—	—	—
Other	1	—	—
Total deferred tax liabilities	3	3	3
Net deferred tax assets	\$294	\$308	\$290

As of and for the years ended December 31, 2016 and 2015, the Company had no unrecognized tax and no valuation allowances on deferred tax assets were required. The Company is subject to taxation in the U.S. and various states and foreign jurisdictions. As of December 31, 2016, the Company is no longer subject to U.S. Federal and State income tax examinations for tax years prior to 2010, and to non-U.S. income tax examinations for tax years prior to 2006.

As of December 31, 2016, accumulated earnings held by non-U.S. subsidiaries totaled \$1.0 billion (as of December 31, 2015 \$1.0 billion). Of this amount, approximately \$0.3 billion (as of December 31, 2015 \$0.4 billion) is attributable to earnings of the Company's foreign subsidiaries that are considered "pass-through" entities for U.S. income tax purposes. Since the Company accounts for U.S. income taxes on these earnings on a current basis, no additional U.S. tax consequences would result from the repatriation of these earnings other than that which would be due arising from currency fluctuations between the time the earnings are reported for U.S. tax purposes and when they are remitted. With respect to certain of these subsidiaries' accumulated earnings (approximately \$0.2 billion and \$0.3 billion as of December 31, 2016 and December 31, 2015, respectively), repatriation would result in additional foreign taxes in the form of dividend withholding tax imposed on the recipient of the distribution or dividend distribution tax imposed on the payor of the distribution. The Company has not provided for its proportionate share of these additional foreign taxes as it does not intend to repatriate these earnings in the foreseeable future. For the same reason, the Company has not provided deferred U.S. tax on cumulative translation adjustments associated with these earnings.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

11. Income Taxes (Continued)

The remainder of the accumulated earnings are attributable to non-U.S. subsidiaries that are not considered “pass-through” entities for U.S. tax purposes. The Company’s U.S. tax basis in the stock of most of these entities exceeds its book basis. Establishing a deferred tax asset pursuant to ASC Topic 740 is not permitted as this difference will not reverse in the foreseeable future. In the instances in which the Company’s book basis were to exceed its U.S. tax basis, no deferred tax liability would be established as the Company would consider the earnings of those entities to be indefinitely reinvested.

12. Property, Equipment and Intangible Assets

Property, equipment and intangible assets, which are included in other assets in the consolidated statements of financial condition, consist of leasehold improvements, computer equipment, software developed for the Company’s internal use, office furniture, equipment and acquired technology. As of December 31, 2016 and 2015, property, equipment and intangible assets consisted of:

	<u>December 31,</u>	
	<u>2016</u>	<u>2015</u>
	<u>(in millions)</u>	
Leasehold improvements	\$ 6	\$ 16
Computer equipment	14	9
Office furniture and equipment	2	2
	<u>22</u>	<u>27</u>
Less—accumulated depreciation and amortization	(9)	(17)
Property and equipment, net	<u>13</u>	<u>10</u>
Internally developed software	49	47
Intangible assets (acquired technology)	7	8
Less—accumulated amortization	(28)	(25)
Intangible assets, net	<u>28</u>	<u>30</u>
Total property, equipment, and intangible assets, net	<u>\$ 41</u>	<u>\$ 40</u>

Depreciation and amortization of \$25 million, \$22 million, and \$20 million, for the three years ended December 31, 2016, 2015, and 2014, respectively, is included in occupancy, depreciation and amortization expenses in the consolidated statements of comprehensive income. Amortization expense related to intangible assets is expected to be approximately \$16 million, \$9 million, and \$3 million, for years ended December 31, 2017, 2018, and 2019, respectively.

13. Commitments, Contingencies and Guarantees

Claims against Customers

On January 15, 2015, due to the sudden move in the value of the Swiss franc that followed an unprecedented action by the Swiss National Bank, which removed a previously instituted and repeatedly reconfirmed cap of the currency relative to the Euro, several of the Company’s customers who held currency futures and spot positions suffered losses in excess of their deposits with the Company. The Company took immediate action to hedge its exposure to the foreign currency receivables from these customers. The Company estimates the cumulative losses related to this event, net of hedging activity

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

13. Commitments, Contingencies and Guarantees (Continued)

and debt collection efforts, to be approximately \$118 million. The Company is actively pursuing collection of the debts. The ultimate effect of this incident on the Company's results will depend upon the outcome of the Company's debt collection efforts.

Litigation

The Company is subject to certain pending and threatened legal actions which arise out of the normal course of business. Litigation is inherently unpredictable, particularly in proceedings where claimants seek substantial or indeterminate damages, or which are in their early stages. The Company has not been able to quantify the actual loss or range of loss related to such legal proceedings, the manner in which they will be resolved, the timing of final resolution or the ultimate settlement. Management believes that the resolution of these actions will not have a material effect, if any, on the Company's business or financial condition, but may have a material impact on the results of operations for a given period.

The Company accounts for potential losses related to litigation in accordance with FASB ASC Topic 450, "Contingencies." As of December 31, 2016 and 2015, reserves provided for potential losses related to litigation matters were not material.

Trading Technologies Matter

On February 3, 2010, Trading Technologies International, Inc. ("Trading Technologies") filed a complaint in the U.S. District Court for the Northern District of Illinois, Eastern Division, against IBG, Inc., IBG LLC, Holdings, and IB LLC. Thereafter, Trading Technologies dismissed IBG, Inc. and Holdings from the case, leaving only IBG LLC and IB LLC as defendants ("Defendants"). The operative complaint, as amended, alleges that the Defendants have infringed and continue to infringe twelve U.S. patents held by Trading Technologies. Trading Technologies is seeking, among other things, unspecified damages and injunctive relief ("the Litigation").

The Defendants filed an answer to Trading Technologies' amended complaint, as well as related counterclaims. The defendants deny Trading Technologies' claims, assert that the asserted patents are not infringed and are invalid, and assert several other defenses as well.

Trading Technologies also filed patent infringement lawsuits against approximately a dozen other companies in the same court, many of which are still pending. The Litigation was consolidated with the other lawsuits filed by Trading Technologies.

The United States Patent and Trademark Office ("USPTO") issued decisions instituting Covered Business Method Review ("CBM Review") on all of the asserted patents and has made a finding that it is more likely than not that the patents are invalid. The District Court granted the Defendants' motion to stay the Litigation pending the CBM Reviews. On February 17, 2017, the USPTO issued two decisions finding that the claims of one patent are patentable and the claims of another patent are not patentable. On February 28, 2017, the USPTO issued a decision finding that most of the claims of another patent are not patentable and finding three claims of the same patent to be patentable. The Defendants plan to appeal to the extent any claims were held to be patentable.

It is difficult to predict the outcome of the matter, however, the Company believes it has meritorious defenses to the allegations made in the complaint and intends to defend itself vigorously against them.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

13. Commitments, Contingencies and Guarantees (Continued)

However, litigation is inherently uncertain and there can be no guarantee that the Company will prevail or that the Litigation can be settled on favorable terms.

Class Action Matter

On December 18, 2015, a former individual customer filed a purported class action complaint against IB LLC, IBG, Inc., and Thomas Frank, PhD, the Company's Executive Vice President and Chief Information Officer, in the U.S. District Court for the District of Connecticut. The complaint alleges that the former customer and members of the purported class of IB LLC's customers were harmed by alleged "flaws" in the computerized system used by the Company to close out (i.e., liquidate) positions in customer brokerage accounts that have margin deficiencies. The complaint seeks, among other things, undefined compensatory damages and declaratory and injunctive relief.

On February 19, 2016, the Company filed a motion to dismiss the class action complaint. On September 28, 2016, the Court issued an order granting the Company's motion to dismiss and dismissing the complaint in its entirety, and without providing plaintiff leave to amend. On October 5, 2016, the Court entered judgment in the Company's favor. On October 12, 2016, plaintiff filed motions for leave to file an amended complaint and to vacate or amend judgment, which the Company opposed. The Court has not yet ruled on these motions. We believe that the proposed amended complaint, like the original complaint, lacks merit. Further, even if the complaint ultimately were to survive a motion to dismiss, we do not believe that a purported class action is appropriate given the great differences in portfolios, markets and many other circumstances surrounding the liquidation of any particular customer's margin-deficient account. IB LLC and the related defendants intend to continue to defend themselves vigorously against the case and, consistent with past practice in connection with this type of unwarranted action, any potential claims for counsel fees and expenses incurred in defending the case shall be fully pursued against the plaintiff.

Leases

Operating Companies have non-cancelable operating leases covering office space. All but one of the office space leases are subject to escalation clauses based on specified costs incurred by the respective landlords and contain renewal elections. Rent expense calculated on a straight-line basis for the Company was \$16 million, \$14 million and \$13 million for the three years ended December 31, 2016, 2015, and 2014, respectively, and is included in occupancy, depreciation and amortization expenses in the consolidated statements of comprehensive income. As of December 31, 2016, the Company's minimum annual lease commitments totaled \$49 million, as follows:

<u>Year</u>	<u>(in millions)</u>
2017	\$14
2018	13
2019	4
2020	4
2021	4
Thereafter	<u>10</u>
	<u>\$49</u>

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

13. Commitments, Contingencies and Guarantees (Continued)

Guarantees

Certain of the Operating Companies provide guarantees to securities and commodities clearing houses and exchanges which meet the accounting definition of a guarantee under FASB ASC Topic 460, "Guarantees." Under standard membership agreements, clearing house and exchange members are required to guarantee collectively the performance of other members. Under the agreements, if a member becomes unable to satisfy its obligations, other members would be required to meet shortfalls. In the opinion of management, the Operating Companies' liability under these arrangements is not quantifiable and could exceed the cash and securities they have posted as collateral. However, the potential for these Operating Companies to be required to make payments under these arrangements is remote. Accordingly, no contingent liability is carried in the consolidated statements of financial condition for these arrangements.

In connection with its retail brokerage business, IB LLC or other electronic brokerage Operating Companies perform securities and commodities execution, clearance and settlement on behalf of their customers for whom they commit to settle trades submitted by such customers with the respective clearing houses. If a customer fails to fulfill its settlement obligations, the respective Operating Company must fulfill those settlement obligations. No contingent liability is carried on the consolidated statements of financial condition for such customer obligations.

Other Commitments

Certain clearing houses, clearing banks and firms used by certain Operating Companies are given a security interest in certain assets of those Operating Companies held by those clearing organizations. These assets may be applied to satisfy the obligations of those Operating Companies to the respective clearing organizations.

14. Segment and Geographic Information

The Company has two operating business segments: electronic brokerage and market making. These segments are supported by the corporate segment, which provides centralized services and executes the Company's currency diversification strategy.

The Company conducts its electronic brokerage business through certain Interactive Brokers subsidiaries, which provide electronic trade execution and clearing services to customers worldwide. The Company conducts its market making business principally through its Timber Hill subsidiaries on the world's leading exchanges and market centers, primarily in exchange-traded equities, equity options and equity-index options and futures.

Significant transactions and balances between the Operating Companies occur, primarily as a result of certain Operating Companies holding exchange or clearing organization memberships, which are utilized to provide execution and clearing services to affiliates. Charges for transactions between segments are designed to approximate full costs. Intra-segment and intra-region income and expenses and related balances have been eliminated in this segment and geographic information to reflect the external business conducted in each segment or geographic region. Corporate items include non-allocated corporate income and expenses that are not attributed to segments for performance measurement, net gains and losses on positions held as part of our overall currency diversification strategy, corporate assets and eliminations.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

14. Segment and Geographic Information (Continued)

Management believes that the following information by business segment provides a reasonable representation of each segment's contribution to total net revenues and income before income taxes for the years ended December 31, 2016, 2015, and 2014, and total assets as of December 31, 2016, 2015, and 2014:

	<u>Year-Ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(in millions)		
Net revenues			
Electronic brokerage	\$1,239	\$1,097	\$ 952
Market making	190	298	284
Corporate	(33)	(206)	(193)
Total net revenues	<u>\$1,396</u>	<u>\$1,189</u>	<u>\$1,043</u>
Income before income taxes			
Electronic brokerage	\$ 756	\$ 536	\$ 589
Market making	44	130	114
Corporate	(39)	(208)	(197)
Total income before income taxes	<u>\$ 761</u>	<u>\$ 458</u>	<u>\$ 506</u>
	<u>December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(in millions)		
Segment assets			
Electronic brokerage	\$50,072	\$44,421	\$38,280
Market making	11,765	10,825	12,172
Corporate	(7,164)	(6,512)	(7,067)
Total assets	<u>\$54,673</u>	<u>\$48,734</u>	<u>\$43,385</u>

The Company operates its automated global business in the U.S. and international markets on more than 120 electronic exchanges and market centers. A significant portion of the Company's net revenues are generated by subsidiaries operating outside the U.S. International operations are comprised of electronic brokerage and market making activities in 24 countries in Europe, Asia and the Americas (outside the U.S.). The following table presents total net revenues and income before income taxes by geographic area for the years ended December 31, 2016, 2015, and 2014. The geographic analysis

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

14. Segment and Geographic Information (Continued)

presented below is based on the location of the subsidiaries in which the transactions are recorded. This geographic information does not reflect the way the Company's business is managed.

	Year-Ended December 31,		
	2016	2015	2014
	(in millions)		
Net revenues			
United States	\$1,046	\$ 832	\$ 773
International	350	357	270
Total net revenues	\$1,396	\$1,189	\$1,043
Income before income taxes			
United States	\$ 632	\$ 294	\$ 425
International	129	164	81
Total income before income taxes	\$ 761	\$ 458	\$ 506

15. Regulatory Requirements

As of December 31, 2016, aggregate excess regulatory capital for all of the Operating Companies was \$4.2 billion.

IB LLC, TH LLC and IB Corp are subject to the Uniform Net Capital Rule (Rule 15c3-1) under the Exchange Act and the Commodities and Futures Trading Commission's minimum financial requirements (Regulation 1.17), and THE is subject to the Swiss Financial Market Supervisory Authority eligible equity requirement. THA and IBA are subject to the Australian Securities Exchange liquid capital requirement, THLI is subject to the Financial Market Authority Liechtenstein eligible capital requirements, THC and IBC are subject to the Investment Industry Regulatory Organization of Canada risk adjusted capital requirement, IBUK is subject to the U.K. Financial Conduct Authority Capital Requirements Directive, IBHK is subject to the Hong Kong Securities Futures Commission liquid capital requirement, IBI is subject to the National Stock Exchange of India net capital requirements and IBSJ is subject to the Japanese Financial Supervisory Agency capital requirements. The following table summarizes capital, capital requirements and excess regulatory capital:

	Net Capital/ Eligible Equity	Requirement	Excess
	(in millions)		
IB LLC	\$3,254	\$294	\$2,960
TH LLC	306	1	305
THE	577	174	403
Other regulated Operating Companies	659	96	563
	\$4,796	\$565	\$4,231

Regulatory capital requirements could restrict the Operating Companies from expanding their business and declaring dividends if their net capital does not meet regulatory requirements. Also, certain Operating Companies are subject to other regulatory restrictions and requirements.

Interactive Brokers Group, Inc. and Subsidiaries
Notes to Consolidated Financial Statements (Continued)

15. Regulatory Requirements (Continued)

As of December 31, 2016, all of the regulated Operating Companies were in compliance with their respective regulatory capital requirements.

16. Related Party Transactions

Receivable from affiliate, reported in other assets in the consolidated statement of financial condition, represents amounts advanced to Holdings and payable to affiliate represents amounts payable to Holdings under the Tax Receivable Agreement (see Note 4).

Included in receivables from and payables to customers in the consolidated statements of financial condition as of December 31, 2016 and December 31, 2015 were accounts receivable from directors, officers and their affiliates of \$78 million and \$85 million and payables of \$468 million and \$698 million, respectively. The Company may extend credit to these related parties in connection with margin loans. Such loans are (i) made in the ordinary course of business, (ii) are made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable loans with persons not related to the company, and (iii) do not involve more than the normal risk of collectability or present other unfavorable features.

17. Subsequent Events

As required by FASB ASC Topic 855, "Subsequent Events," the Company has evaluated subsequent events for adjustment to or disclosure in its consolidated financial statements through the date the consolidated financial statements were issued.

Except as disclosed in Note 4 and Note 13, no other recordable or disclosable events occurred.

SUPPLEMENTARY DATA

Unaudited Quarterly results

The Company's unaudited quarterly results for 2016 and 2015 reflect the condensed consolidated operating results of IBG, Inc. and its subsidiaries.

	2016 Quarterly Data			
	First	Second	Third	Fourth
	(in millions)			
Revenues	\$ 507	\$ 387	\$ 366	\$ 215
Interest expense	18	18	21	22
Net revenues	489	369	345	193
Non-interest expenses				
Execution and clearing	62	59	62	61
Employee compensation and benefits	58	58	58	68
Other	32	39	42	36
Total non-interest expenses	152	156	162	165
Income before income taxes	337	213	183	28
Income tax expense	27	13	15	7
Less net income attributable to noncontrolling interests	277	173	148	17
Net income available for common stockholders	\$ 33	\$ 27	\$ 20	\$ 4
Basic earnings per share	\$0.52	\$0.41	\$0.30	\$0.07
Diluted earnings per share	\$0.51	\$0.40	\$0.30	\$0.07
Net income available for common stockholders	\$ 33	\$ 27	\$ 20	\$ 4
Other comprehensive income				
Cumulative translation adjustment, before income taxes	6	(3)	—	(7)
Income taxes related to items of other comprehensive income	—	—	—	—
Other comprehensive income (loss), net of tax	6	(3)	—	(7)
Comprehensive income (loss) available for common stockholders	\$ 39	\$ 24	\$ 20	\$ (3)
Comprehensive income attributable to noncontrolling interests				
Net income attributable to noncontrolling interests	\$ 277	\$ 173	\$ 148	\$ 17
Other comprehensive income (loss)—cumulative translation adjustment	33	(16)	2	(40)
Comprehensive income (loss) attributable to noncontrolling interests	\$ 310	\$ 157	\$ 150	\$ (23)

	2015 Quarterly Data			
	First	Second	Third	Fourth
	(in millions)			
Revenues	\$ 187	\$ 405	\$ 375	\$ 289
Interest expense	15	18	16	18
Net revenues	<u>172</u>	<u>387</u>	<u>359</u>	<u>271</u>
Non-interest expenses				
Execution and clearing	55	59	63	54
Employee compensation and benefits	57	58	56	56
Other	171	30	38	34
Total non-interest expenses	<u>283</u>	<u>147</u>	<u>157</u>	<u>144</u>
Income (loss) before income taxes	(111)	240	202	127
Income tax expense	(2)	19	20	6
Less net income (loss) attributable to noncontrolling interests	<u>(96)</u>	<u>198</u>	<u>160</u>	<u>104</u>
Net income (loss) available for common stockholders	<u>\$ (13)</u>	<u>\$ 23</u>	<u>\$ 22</u>	<u>\$ 17</u>
Basic earnings per share	<u>\$(0.22)</u>	<u>\$0.38</u>	<u>\$0.35</u>	<u>\$0.26</u>
Diluted earnings per share	<u>\$(0.22)</u>	<u>\$0.37</u>	<u>\$0.35</u>	<u>\$0.25</u>
Net income (loss) available for common stockholders	\$ (13)	\$ 23	\$ 22	\$ 17
Other comprehensive income				
Cumulative translation adjustment, before income taxes	(1)	4	(8)	(5)
Income taxes related to items of other comprehensive income	—	—	—	—
Other comprehensive income (loss), net of tax	<u>(1)</u>	<u>4</u>	<u>(8)</u>	<u>(5)</u>
Comprehensive income (loss) available for common stockholders	<u>\$ (14)</u>	<u>\$ 27</u>	<u>\$ 14</u>	<u>\$ 12</u>
Comprehensive income attributable to noncontrolling interests				
Net income (loss) attributable to noncontrolling interests	\$ (96)	\$ 198	\$ 160	\$ 104
Other comprehensive income (loss)—cumulative translation adjustment	<u>(9)</u>	<u>24</u>	<u>(44)</u>	<u>(24)</u>
Comprehensive income (loss) attributable to noncontrolling interests	<u>\$ (105)</u>	<u>\$ 222</u>	<u>\$ 116</u>	<u>\$ 80</u>

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed in the reports it files or submits under the Securities Exchange Act of 1934 (the “Exchange Act”) is recorded, processed, summarized and reported accurately and within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to management, including the Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), as appropriate, to allow timely decisions regarding required disclosure.

Under the supervision and with the participation of our management, including our CEO and our CFO, we conducted an evaluation of our disclosure controls and procedures; as such term is defined under Exchange Act Rule 13a-15(e). Based on this evaluation, our CEO and our CFO concluded that our disclosure controls and procedures were effective as of the end of the period covered by this annual report.

Management’s Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. IBG, Inc.’s internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

Our internal control over financial reporting includes those policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of IBG, Inc.; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of IBG, Inc.’s management and directors; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

In 2012, the Company’s management created the Accounting Policy Committee (the “APC”) to provide a robust framework for the design and implementation of all relevant controls. The APC is comprised of eight (8) experienced subject matter experts from within the Company’s accounting, tax and regulatory disciplines, and includes the CFO and the Chief Accounting Officer. The APC is responsible for assessing the effects of complex transactions and related accounting guidance on the Company’s financial statements and to report the results of its assessments to management and to the Audit Committee. The APC’s mandate includes review and approval of the adoption and implementation of accounting guidance (new or newly applicable) by the Company.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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, including our CEO and our CFO, assessed the effectiveness of IBG, Inc.'s internal control over financial reporting as of December 31, 2016. In making this assessment, management used the criteria set forth in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Based on management’s assessment and those criteria, management concluded that IBG, Inc. maintained effective internal control over financial reporting as of December 31, 2016.

The effectiveness of the Company’s internal control over financial reporting as of December 31, 2016, has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which appears herein.

Changes to Internal Control over Financial Reporting

No changes to our internal control over financial reporting for the year ended December 31, 2016 have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Interactive Brokers Group, Inc.
Greenwich, CT

We have audited the internal control over financial reporting of Interactive Brokers Group, Inc. and subsidiaries (the “Company”) as of December 31, 2016, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company’s internal control over financial reporting is a process designed by, or under the supervision of, the company’s principal executive and principal financial officers, or persons performing similar functions, and effected by the company’s board of directors, management, and other personnel 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. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated statements of financial condition as of December 31, 2016 and 2015, and the related consolidated statements of comprehensive income, cash flows, and change in

equity for each of the three years in the period ended December 31, 2016, of the Company and our report dated February 28, 2017 expressed an unqualified opinion on those financial statements.

/s/ Deloitte & Touche LLP
New York, New York
February 28, 2017

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information related to the Company's directors and nominees under the following captions in the Company's Proxy Statement is incorporated by reference herein:

- "Item 1—Election of Directors"
- "Item 1—Election of Directors—Board Meetings and Committees"

Code of Ethics

IBG, Inc.'s Code of Ethics and Business Conduct applies to all directors, officers and employees, including its Chief Executive Officer, its Chief Financial Officer and its Chief Accounting Officer. Information relating to our Code of Business Conduct and Ethics is included in Part I, Item 1 of this Annual Report on Form 10-K. We will post any amendments to the Code of Ethics and Business Conduct, and any waivers that are required to be disclosed by the rules of either the SEC or NASDAQ on the investor relations section of our website located at www.interactivebrokers.com/ir.

ITEM 11. EXECUTIVE COMPENSATION

Information relating to director and executive officer compensation under the following captions in the Company's Proxy Statement is incorporated by reference herein:

- "Compensation of Directors"
- "Executive Compensation"

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Other information relating to security ownership of certain beneficial owners and management is set forth under the caption "Beneficial Ownership of Directors, Executive Officers and Owners of More than Five Percent" in the Company's Proxy Statement and such information is incorporated by reference herein.

ITEM 13. TRANSACTIONS WITH RELATED PERSONS, PROMOTERS AND CERTAIN CONTROL PERSONS

Information regarding certain relationships and related transactions under the following caption in the Company's Proxy Statement and such information is incorporated by reference herein:

- "Certain Relationships and Related Transactions"

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information regarding principal accounting fees and under the following caption in the Company's Proxy Statement is incorporated by reference herein:

- "Item 2—Ratification of Appointment of Independent Registered Public Accounting Firm"

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

Documents filed as part of this report

1. Consolidated Financial Statements

The consolidated financial statements required to be filed in the Annual Report on Form 10-K are listed on page F-1 hereof and in Part II, Item 8 hereof.

2. Financial Statement Schedule

The financial statement schedule required in the Annual Report on Form 10-K is listed on page F-1 hereof. The required schedule appears on pages F-1 through F-5 hereof.

ITEM 6. EXHIBITS

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation of Interactive Brokers Group, Inc. (filed as Exhibit 3.1 to Amendment No. 2 to the Registration Statement on Form S-1 filed by the Company on April 4, 2007).**
3.2	Amended bylaws of Interactive Brokers Group, Inc. (filed as Exhibit 3.1 to the Form 8-K filed by the Company on February 24, 2016).**
10.1	Amended and Restated Operating Agreement of IBG LLC (filed as Exhibit 10.1 to the Quarterly Report on Form 10-Q for the Quarterly Period Ended March 31, 2007 filed by the Company on June 15, 2007).**
10.2	Form of Limited Liability Company Operating Agreement of IBG Holdings LLC (filed as Exhibit 10.5 to Amendment No. 1 to the Registration Statement on Form S-1 filed by the Company on February 12, 2007).**
10.3	Exchange Agreement by and among Interactive Brokers Group, Inc., IBG Holdings LLC, IBG LLC and the Members of IBG LLC (filed as Exhibit 10.3 to the Quarterly Report on Form 10-Q for the Quarterly Period Ended September 30, 2009 filed by the Company on November 11, 2009).**
10.4	Tax Receivable Agreement by and between Interactive Brokers Group, Inc. and IBG Holdings LLC (filed as Exhibit 10.3 to the Quarterly Report on Form 10-Q for the Quarterly Period Ended March 31, 2007 filed by the Company on June 15, 2007).**
10.5	Amended Interactive Brokers Group, Inc. 2007 Stock Incentive Plan. (filed as Exhibit 10.5 to Form 10-K for the Year Ended December 31, 2014 filed by the Company on March 2, 2015)**+
10.6	Interactive Brokers Group, Inc. 2007 ROI Unit Stock Plan. (filed as Exhibit 10.9 to Amendment No. 2 to the Registration Statement on Form S-1 filed by the Company on April 4, 2007).**+
10.7	Interactive Brokers Group, Inc. Amendment to the Exchange Agreement (filed as Exhibit 10.1 to the Form 8-K filed by the Company on June 6, 2012).**+
10.8	Second Amendment to Exchange Agreement by and among Interactive Brokers Group, Inc., IBG Holdings LLC, IBG (filed as Exhibit 10.1 to the Quarterly Report on Form 10-Q for the Quarterly Period Ended September 31, 2015 filed by the Company on November 9, 2015).**
10.9	First Amendment to Limited Liability Company Agreement of IBG Holdings LLC (filed as Exhibit 10.2 to the Quarterly Report on Form 10-Q for the Quarterly Period Ended September 31, 2015 filed by the Company on November 9, 2015).**
11.1	Statement Re; Computation of Earnings per Common Share (the calculation of per share earnings is disclosed in Part II, Item 8, Note 4 to the Consolidated Financial Statements “Equity and Earnings per Share” and is omitted in accordance with Item 601 Section (b)(11) of Regulation S-K).
21.1	Subsidiaries of the registrant.
23.1	Consent of Independent Registered Public Accounting Firm.

Exhibit Number	Description
31.1	Certification of Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document*
101.SCH	XBRL Extension Schema*
101.CAL	XBRL Extension Calculation Linkbase*
101.DEF	XBRL Extension Definition Linkbase*
101.LAB	XBRL Extension Label Linkbase*
101.PRE	XBRL Extension Presentation Linkbase*

** Previously filed; incorporated herein by reference.

+ These exhibits relate to management contracts or compensatory plans or arrangements.

* Attached as Exhibit 101 to this Annual Report on Form 10-K for the annual period ended December 31, 2016, are the following materials formatted in XBRL (Extensible Business Reporting Language) (i) the Consolidated Statements of Financial Condition, (ii) the Consolidated Statements of Comprehensive Income, (iii) the Consolidated Statements of Cash Flows, (iv) the Consolidated Statement of Changes in Stockholders' Equity and (v) Notes to the Consolidated Financial Statements tagged in detail levels 1-4.

ITEMS. 15 (a)(1) and 15 (a)(2) INDEX TO FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULE

Financial Statement Schedule

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Condensed Statements of Financial Condition as of December 31, 2016 and 2015	F-2
Condensed Statements of Comprehensive Income for the Years ended December 31, 2016, 2015, and 2014	F-3
Condensed Statements of Cash Flow for the Years ended December 31, 2016, 2015, and 2014	F-4
Notes to Condensed Financial Statements	F-5

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Interactive Brokers Group, Inc.
Greenwich, CT

We have audited the consolidated financial statements of Interactive Brokers Group, Inc. and subsidiaries (the “Company”) as of December 31, 2016 and 2015, and for each of the three years in the period ended December 31, 2016, and the Company’s internal control over financial reporting as of December 31, 2016, and have issued our reports thereon dated February 28, 2017; such reports are included elsewhere in this Form 10-K. Our audits also included the financial statement schedules of the Company listed at Item 15. These condensed financial statement schedules are the responsibility of the Company’s management. Our responsibility is to express an opinion based on our audits. In our opinion, such condensed financial statement schedules, when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

/s/ Deloitte & Touche LLP
New York, New York
February 28, 2017

INTERACTIVE BROKERS GROUP, INC.
(Parent Company Only)
CONDENSED STATEMENTS OF FINANCIAL CONDITION

<u>(in millions, except share amounts)</u>	December 31,	
	2016	2015
Assets		
Cash and cash equivalents	\$ —	\$ 1
Investments in subsidiaries, equity basis	964	839
Other assets	297	317
Total assets	\$1,261	\$1,157
Liabilities and Equity		
Liabilities:		
Payable to affiliates	\$ 285	\$ 291
Accrued expenses and other liabilities	2	4
	287	295
Stockholders' equity:		
Common stock, \$0.01 par value per share:		
Class A—Authorized—1,000,000,000, Issued—68,119,412 and 64,121,150 shares, Outstanding—67,984,973 and 63,985,335 shares as of December 31, 2016 and 2015	1	1
Class B—Authorized, Issued and Outstanding—100 shares as of December 31, 2016 and 2015	—	—
Additional paid-in capital	775	718
Retained earnings	203	144
Accumulated other comprehensive income, net of income taxes of \$0 and \$0 as of December 31, 2016 and 2015	(2)	2
Treasury stock, at cost, 134,439 and 135,815 shares as of December 31, 2016 and 2015	(3)	(3)
Total equity	974	862
Total liabilities and equity	\$1,261	\$1,157

See accompanying notes to the condensed financial statements.

INTERACTIVE BROKERS GROUP, INC.
(Parent Company Only)
CONDENSED STATEMENTS OF COMPREHENSIVE INCOME

<u>(in millions)</u>	<u>Year-Ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
Loss before income from subsidiaries	\$ (1)	\$ —	\$ —
Undistributed gains of subsidiaries, net	117	67	63
Income tax expense	<u>32</u>	<u>18</u>	<u>18</u>
Net income	<u>\$ 84</u>	<u>\$ 49</u>	<u>\$ 45</u>
Net income available for common stockholders	\$ 84	\$ 49	\$ 45
Cumulative translation adjustment, net of tax	<u>(4)</u>	<u>(10)</u>	<u>(15)</u>
Comprehensive income available for common stockholders	<u>\$ 80</u>	<u>\$ 39</u>	<u>\$ 30</u>

See accompanying notes to the condensed financial statements.

INTERACTIVE BROKERS GROUP, INC.
(Parent Company Only)
CONDENSED STATEMENTS OF CASH FLOWS

<u>(in millions)</u>	Year-Ended December 31,		
	2016	2015	2014
Cash flows from operating activities			
Net income	\$ 84	\$ 49	\$ 45
Adjustments to reconcile net income to net cash provided by operating activities			
Undistributed gains of subsidiaries, net	(117)	(67)	(63)
Deferred income taxes	30	13	22
Changes in operating assets and liabilities	9	9	5
Net cash provided by operating activities	6	4	9
Cash flows provided by investing activities	42	40	45
Cash flows used in financing activities	(44)	(34)	(39)
Effect of exchange rate changes on cash and cash equivalents	(5)	(10)	(15)
Net increase in cash and cash equivalents	(1)	—	—
Cash and cash equivalents at beginning of period	1	1	1
Cash and cash equivalents at end of period	\$ —	\$ 1	\$ 1
Supplemental disclosures of cash flow information			
Cash paid for interest	\$ —	\$ —	\$ —
Cash paid for taxes, net	\$ (1)	\$ —	\$ 6
Non-cash investing activities:			
Non-cash distributions from subsidiaries	\$ 1	\$ —	\$ —

See accompanying notes to the condensed financial statements.

INTERACTIVE BROKERS GROUP, INC.
(Parent Company Only)
NOTES TO CONDENSED FINANCIAL STATEMENTS

1. Basis of Presentation

The accompanying condensed financial statements (the “Parent Company Financial Statements”) of Interactive Brokers Group, Inc. (“IBG, Inc.”), a Delaware holding company, including the notes thereto, should be read in conjunction with the consolidated financial statements of IBG, Inc. and its subsidiaries (the “Company”) and the notes thereto. IBG, Inc.’s primary asset is its ownership interest in IBG LLC, an automated global electronic broker and market maker specializing in executing and clearing trades in securities, futures, foreign exchange instruments, bonds and mutual funds on more than 120 electronic exchanges and market centers around the world and offering custody, prime brokerage, securities and margin lending services to customers.

The preparation of the Parent Company Financial Statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts and disclosures in the condensed financial statements and accompanying notes.

Income Taxes

Refer to Note 2 to the consolidated financial statements.

2. Related Party Transactions

As of December 31, 2016 and 2015, respectively, there were no receivables from affiliates. Dividends received from IBG LLC for the three years ended December 31, 2016, 2015, and 2014, were \$43 million, \$40 million, and \$45 million, respectively.

As of December 31, 2016 and 2015, respectively, payable to affiliates of \$285 million and \$291 million consisted primarily of amounts payable to Holdings under the Tax Receivable Agreement.

3. Stockholders’ Equity

Refer to Note 4 to the consolidated financial statements.

4. Employee Incentive Plans

Refer to Note 10 to the consolidated financial statements.

5. Commitments, Contingencies and Guarantees

Refer to Note 13 to the consolidated financial statements.

6. Subsequent Events

As required by FASB ASC Topic, “Subsequent Events,” IBG, Inc. has evaluated subsequent events for adjustment to or disclosure in its condensed financial statements through the date the condensed financial statements were issued. No recordable or disclosable events, not otherwise reported in these condensed financial statements or the notes thereto, occurred.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

INTERACTIVE BROKERS GROUP, INC.

/s/ PAUL J. BRODY

Name: Paul J. Brody

Title: *Chief Financial Officer, Treasurer and Secretary*

(Signing both in his capacity as a duly authorized officer and as principal financial officer of the registrant)

Date: February 28, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ THOMAS PETERFFY</u> Thomas Peterffy	Chairman of the Board of Directors and Chief Executive Officer (Principal Executive Officer)	February 28, 2017
<u>/s/ DENIS MENDONCA</u> Denis Mendonca	Chief Accounting Officer (Principal Accounting Officer)	February 28, 2017
<u>/s/ LAWRENCE E. HARRIS</u> Lawrence E. Harris	Director	February 28, 2017
<u>/s/ GARY KATZ</u> Gary Katz	Director	February 28, 2017
<u>/s/ RICHARD GATES</u> Richard Gates	Director	February 28, 2017

SUBSIDIARIES OF THE COMPANY

<u>Name</u>	<u>Jurisdiction of Organization</u>
IBG LLC	Connecticut, U.S.A.

The following is a list of subsidiaries of IBG LLC:

<u>Name</u>	<u>Jurisdiction of Organization</u>
Timber Hill LLC(1)	Connecticut, U.S.A.
Interactive Brokers LLC(2)	Connecticut, U.S.A.
Interactive Brokers Canada Inc.	Canada
Interactive Brokers (U.K.) Limited	United Kingdom
Interactive Brokers Hong Kong Limited	China
Interactive Brokers Australia Pty Limited	Australia
Interactive Brokers Business Services (Shanghai) Company Limited	China
Timber Hill (Europe) AG	Switzerland
Timber Hill Australia Pty Limited	Australia
Timber Hill Canada Company	Canada
Interactive Brokers Hungary KFT	Hungary
IB Exchange Corp.	Delaware, U.S.A.
Interactive Brokers (India) Private Limited(3)	India
Interactive Brokers Financial Products S.A.	Luxembourg
Interactive Brokers Securities Japan, Inc.	Japan
Interactive Brokers Software Services Estonia OU	Estonia
Interactive Brokers Software Services Russia	Russia
Interactive Brokers Software Services (India) Private Limited	India

(1) IBG LLC owns 99.99% and Thomas Peterffy owns 0.01%.

(2) IBG LLC owns 99.9% and Thomas Peterffy owns 0.1%.

(3) IB Exchange Corp. owns 0.01%

The following is a list of subsidiaries of IB Exchange Corp:

<u>Name</u>	<u>Jurisdiction of Organization</u>
Interactive Brokers Corp	Connecticut, U.S.A.
Covestor, Inc.	Massachusetts, U.S.A.
Greenwich Advisor Compliance Services Corp	Delaware, U.S.A.

The following is a list of subsidiaries of Timber Hill (Europe) AG:

<u>Name</u>	<u>Jurisdiction of Organization</u>
Timber Hill (Liechtenstein) AG	Liechtenstein

The following is a list of subsidiaries of Interactive Brokers (U.K.) Limited:

<u>Name</u>	<u>Jurisdiction of Organization</u>
Interactive Brokers (U.K.) Nominee Limited	United Kingdom

The following is a list of subsidiaries of Interactive Brokers Australia Pty Limited:

<u>Name</u>	<u>Jurisdiction of Organization</u>
Interactive Brokers Australia Nominees Pty Limited	Australia

The following is a list of subsidiaries of Covestor, Inc.:

<u>Name</u>	<u>Jurisdiction of Organization</u>
Covestor Limited	United Kingdom

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-142686, 333-174913 and 333-203358 on Form S-8 of our reports dated February 28, 2017 relating to the consolidated financial statements and financial statement schedules of Interactive Brokers Group, Inc. and subsidiaries, and the effectiveness of Interactive Brokers Group, Inc. and subsidiaries internal control over financial reporting appearing in this Annual Report on Form 10-K of Interactive Brokers Group, Inc. and subsidiaries for the year ended December 31, 2016.

/s/ Deloitte & Touche LLP
New York, New York
February 28, 2017

CERTIFICATION

I, Thomas Peterffy, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2016 of Interactive Brokers Group, Inc.;
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(s) 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)) 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(s) 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.

By: /s/ THOMAS PETERFFY

Name: Thomas Peterffy

Title: *Chairman and Chief Executive Officer*

Date: February 28, 2017

CERTIFICATION

I, Paul J. Brody, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2016 of Interactive Brokers Group, Inc.;
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(s) 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)) 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(s) 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.

By: /s/ PAUL J. BRODY

Name: Paul J. Brody

Title: *Chief Financial Officer, Treasurer and Secretary*

Date: February 28, 2017

CERTIFICATION

Pursuant to 18 U.S.C. § 1350, the undersigned officer of Interactive Brokers Group, Inc. (the “Company”) hereby certifies that the Company’s Annual Report on Form 10-K for the year ended December 31, 2016 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ THOMAS PETERFFY

Name: Thomas Peterffy

Title: *Chairman and Chief Executive Officer*

Date: February 28, 2017

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.

CERTIFICATION

Pursuant to 18 U.S.C. § 1350, the undersigned officer of Interactive Brokers Group, Inc. (the “Company”) hereby certifies that the Company’s Annual Report on Form 10-K for the year ended December 31, 2016 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ PAUL J. BRODY

Name: Paul J. Brody

Title: *Chief Financial Officer, Treasurer and Secretary*

Date: February 28, 2017

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.

Corporate Information

Officers and Directors

Thomas Peterffy

Chairman of the Board of Directors and
Chief Executive Officer

Earl H. Nemser

Vice Chairman and Director

Milan Galik

President and Director

Thomas A. Frank

Executive Vice President and
Chief Information Officer

Paul J. Brody

Chief Financial Officer, Treasurer,
Secretary and Director

Lawrence E. Harris

Lead Independent Director

Richard Gates

Director

Gary Katz

Director

Wayne H. Wagner

Director

Corporate Headquarters

One Pickwick Plaza, Greenwich, CT 06830
(877) 442-2757

Independent Registered Public Accounting Firm

Deloitte & Touche LLP

Common Stock

Our stock is listed on the NASDAQ Global
Select Market under the symbol "IBKR"

Corporate Website

www.ibkr.com

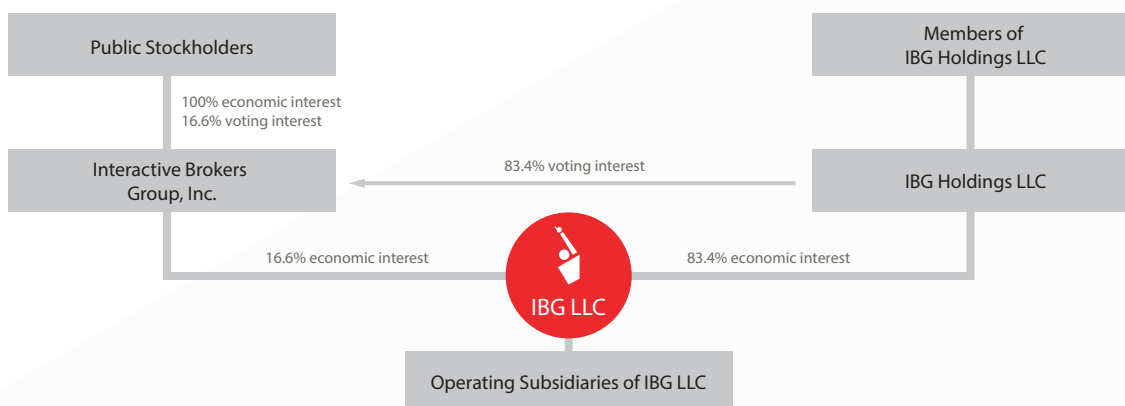
Media

media@ibkr.com
(203) 913-1369

Investor Relations

investor-relations@ibkr.com
(203) 618-4070

Organizational Structure



Interactive Brokers Group
Sales Office Locations

Greenwich, CT

Chicago, IL

San Francisco, CA

West Palm Beach, FL

855-861-6414

Montreal, Canada

514-847-3431

London, United Kingdom

44-207-710-5680

Zug, Switzerland

41-41-726-96-89

Mumbai, India

91-22-61289-836

Hong Kong


852-3410-7500

Tokyo, Japan

81-3-4588-9707

Sydney, Australia

61-2-8093-7301

 **Interactive Brokers**
www.ibkr.com