

2016
Annual Report

Morningstar, Inc.



2016 Overview

Accomplishments

- ▶ Despite some uncertainty related to the future of the U.S. Department of Labor's fiduciary rule, which was previously scheduled to go into effect in April 2017, we believe recent shifts such as a greater emphasis on serving investors' interests and lowering fees are fundamental changes that are here to stay. We introduced several new product offerings and bundled solutions to help financial advisors determine, demonstrate, and document that their advice is in the best interest of the investor. We believe Morningstar is well-positioned to help our clients adapt to this new landscape and have had many positive discussions with financial advisors and asset managers about the solutions we can provide. In particular, we've increased our manager research coverage in response to growing demand for information that helps financial advisors show investors the thought process behind their investment recommendations.
- ▶ We added coverage of private capital markets—an area of growing investor interest—with our acquisition of PitchBook, which delivers data, research, and technology covering the breadth of the private capital markets, including venture capital, private equity, and mergers and acquisitions.
- ▶ To help investors evaluate funds based on environmental, social, and governance (ESG) factors, we introduced the Morningstar Sustainability Rating™ for Funds, which helps investors evaluate mutual funds and exchange-traded funds based on how well the companies held in their funds are managing their ESG risks and opportunities. We now provide ratings and related ESG metrics for approximately 35,000 funds globally. In addition, we purchased InvestSoft Technology, which helps investors analyze fixed-income securities and portfolios. We plan to incorporate InvestSoft's analytics in our software and data offerings during 2017, which will help us meet client requests for more robust fixed-income capabilities.
- ▶ Our Morningstar Managed Portfolios and Workplace Solutions product lines both had asset growth of more than 15% year over year, reflecting both new client additions and higher net inflows from existing clients.

Challenges

- ▶ Overall, transaction-based revenue was down about 24% year over year. While new-issue volume for commercial mortgage-backed securities (CMBS) picked up during the fourth quarter of 2016, it was down about 25% for the full year, which had a negative effect on revenue for Morningstar Credit Ratings. Internet advertising sales also showed continued weakness as many advertisers have been shifting to programmatic buying platforms that target users based on key words instead of specific sites.
- ▶ Political and regulatory uncertainty has made some of our clients more cautious, resulting in longer-than-usual sales cycles for some products and lower revenue growth for some of our license-based products.
- ▶ Some legacy product lines within Morningstar Investment Management (institutional asset management, asset allocation, and manager selection) declined year over year, partly reflecting a strategic shift away from more customized investment advisory work in favor of Morningstar-branded, scalable investment management offerings that are built around a core set of select lists and investment strategies leveraging our proprietary research.

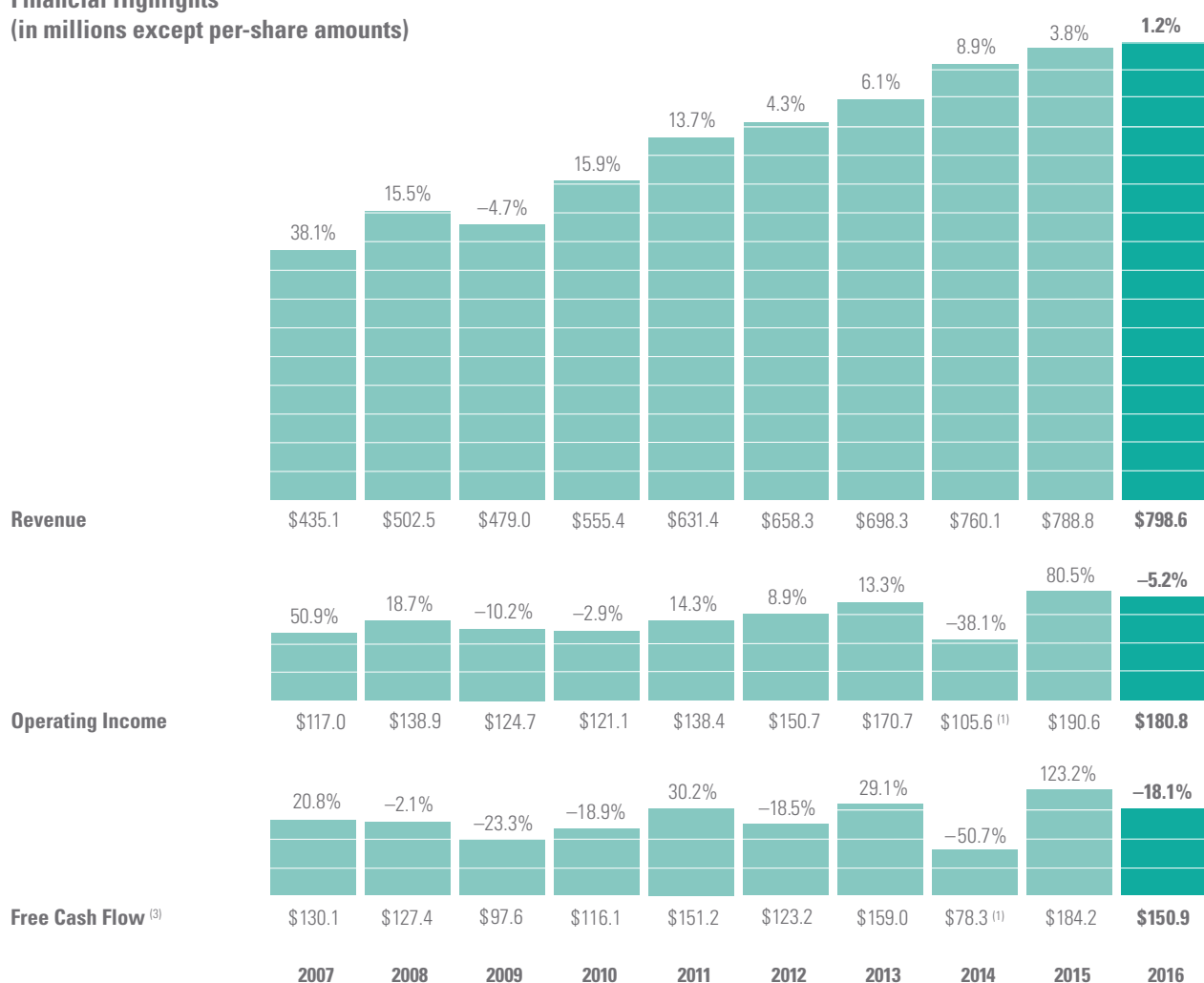
About the Cover

We expanded our global headquarters in Chicago in 2016 with the addition of more than 29,000 square feet of space designed for our technology employees. The new floor accommodates approximately 185 employees and is designed for the working

needs of Morningstar's engineers, user experience designers, and product management teams. Our offices around the world have an open floor plan and modern layout that reflects our culture of transparency and collaboration.

Financial Highlights

(in millions except per-share amounts)



Operating Results

Net income attributable to Morningstar, Inc.	\$73.3	\$89.6	\$82.1	\$86.4	\$98.4	\$108.1	\$123.5	\$78.3	\$132.6	\$161.0 ⁽²⁾
Diluted net income per share	\$1.52	\$1.82	\$1.65	\$1.70	\$1.92	\$2.20	\$2.66	\$1.74	\$3.00	\$3.72 ⁽²⁾
Weighted average shares outstanding—diluted	48.2	49.2	49.8	50.6	51.0	49.1	46.5	44.9	44.3	43.3

Cash Flows

Cash provided by operating activities	\$141.4	\$175.9	\$110.0	\$130.9	\$174.5	\$153.2	\$192.6	\$136.6	\$241.5	\$213.7
Capital expenditures	(11.3)	(48.5)	(12.4)	(14.8)	(23.3)	(30.0)	(33.6)	(58.3)	(57.3)	(62.8)
Free cash flow ⁽³⁾	\$130.1	\$127.4	\$97.6	\$116.1	\$151.2	\$123.2	\$159.0	\$78.3	\$184.2	\$150.9

Balance Sheet Data

Cash, cash equivalents, and investments	\$258.6	\$297.6	\$342.6	\$365.4	\$470.2	\$321.4	\$298.6	\$224.6	\$248.6	\$304.0
Working capital	149.5	179.8	236.6	254.6	336.3	213.5	173.5	97.0	105.5	177.1
Total assets	643.7	803.9	919.1	1,086.3	1,167.0	1,038.3	1,026.8	1,010.3	1,029.0	1,350.9
Deferred revenue	129.3	130.3	127.1	146.3	155.5	146.0	149.2	146.0	140.7	165.4
Long-term liabilities	23.2	39.8	45.8	52.2	39.4	54.0	66.0	62.1	84.0	359.2
Total equity	402.4	530.2	665.8	781.4	857.0	726.9	691.3	654.4	640.6	696.8

(1) Operating income and free cash flow for 2014 include a \$61.0 million litigation settlement expense and corresponding cash outflow.

(2) Net income and diluted net income per share for 2016 include a holding gain of \$37.1 million, or 86 cents per share, in connection with the PitchBook acquisition.

(3) Free cash flow, which we define as cash provided by operating activities less capital expenditures, is considered a non-GAAP financial measure. This measure is not equivalent to any measure required to be reported under U.S. generally accepted accounting principles (GAAP) and may not be comparable to similarly titled measures reported by other companies.

Dear Morningstar shareholders,

While our core values and mission to help investors reach their financial goals haven't changed, 2016 was a transformative year in many ways. We announced an important leadership change with Kunal Kapoor taking over as chief executive officer when I shifted my role to become executive chairman. We made steady progress building next-generation versions of our key software platforms with cloud-based delivery. Our industry has been going through fundamental changes, with a greater focus on serving investors' interests and lowering fees. All of these things make me optimistic about Morningstar's future and the unique role we play in supporting investors through an evolving investment landscape.

Financial Results

For the year, our revenue was just shy of \$800 million (\$798.6 million, to be more specific) and rose about 1% compared with 2015. Many of our clients were more cautious than usual as they grappled with how to adapt to upcoming regulatory changes: the U.S. Department of Labor fiduciary rule originally scheduled to go into effect in April 2017 and the updated version of the Markets in Financial Instruments Directive (also known as MiFID II) that will go into effect in Europe in 2018.

Overall, products that generate revenue from licenses, subscriptions, and asset-based fees showed a revenue increase of about 4%, but our transaction-based revenue

decreased about 24% year over year. New-issue volume for commercial mortgage-backed securities (CMBS) was down about 25% in 2016, which had a negative effect on revenue for Morningstar Credit Ratings. Internet advertising sales also showed continued weakness as many advertisers have been shifting to programmatic buying platforms that target users based on key words instead of specific sites.

Our operating income was \$180.8 million in 2016—a decrease of about 5% from 2015. We hired about 340 employees in 2016 to support our key growth initiatives, including many technology, sales, and analyst roles around the world. That led to higher salary and benefit expense, which was partly offset by lower bonus expense and favorable currency movements, as the strong dollar reduced operating expense in our non-U.S. operations.

Free cash flow, meanwhile, was down about \$33.3 million versus 2015, mainly because of lower cash provided by operating activities. Still, we generated \$150.9 million in free cash flow, which translates into about 19% of revenue. We used part of that cash to make about \$48.8 million in share repurchases and pay \$37.9 million in dividends. We also added about \$250 million in long-term debt (mainly to finance the PitchBook acquisition, which I'll cover in more detail later), but our balance sheet remains in good shape, with about \$304 million of cash, cash equivalents, and investments as of year-end.

Overall, our results were not as strong as we had hoped in 2016. Because of this, we funded our bonus plan at 68%, which helped offset some of the growth in operating expense. But I'd rather return to a stronger growth pattern so we can fully fund the bonus pool and generate better long-term results.

We're focusing on improving our execution and scale to help us make the transition from being a medium-sized company to one that's significantly larger. We want to increase our speed and agility, drive operational excellence as a core capability, improve alignment and accountability within teams, and focus on the convergence of data and technology to improve our core data operations.

2016 Acquisitions

We made three acquisitions in 2016. In March, we purchased RequiSight (which does business as RightPond). RightPond provides business intelligence data and analytics on defined contribution and defined benefit plans for financial services firms. This data set is unique because it sheds light on where investors in retirement plans are investing their money and is particularly relevant in light of upcoming fiduciary regulations in the United States. In May, we acquired InvestSoft Technology, which provides fixed-income analytics. These capabilities will fill an important gap for us. We plan to incorporate InvestSoft's analytics in our software and data offerings during 2017, which will help us meet client requests for more robust fixed-income capabilities.

In December, we acquired PitchBook, a Seattle-based company that delivers data, research, and technology covering the private capital markets, including venture capital, private equity, and mergers and acquisitions (M&A). We were an early investor in PitchBook beginning in 2009 and previously owned about 20% of the company. We thought the company was so compelling that we decided to go all in, purchasing the remaining ownership stake for a net cost of about \$188 million (subject to working capital adjustments).

We found PitchBook attractive because venture capital, private equity, and M&A are all areas of increasing investor interest, and we've also seen more demand for multi-asset portfolio analysis as the private and public capital markets increasingly converge. Data on private capital markets is difficult to find and often in non-standard formats, and PitchBook has carved out a leading market position with its comprehensive private market datasets and robust research process. PitchBook's database includes more than 900,000 companies, 690,000 private market transactions, 200,000 investors, and 37,000 funds.

PitchBook also adds a new client segment for us: private and institutional investors. With this broader client reach, we see an opportunity to cross-sell our products and develop larger relationships with enterprise clients, particularly for our equity data and research offerings. In addition to domestic growth opportunities, we believe PitchBook has meaningful opportunities to expand its business globally.

PitchBook has had an incredibly fast growth trajectory, with its total client count and sales bookings both more than tripling over the past three years. Founder and CEO John Gabbert has created a uniquely entrepreneurial environment with a similar culture as Morningstar. PitchBook also shares many of our company values, including a strong commitment to helping investors and bringing transparency to the investment landscape.

We're keeping PitchBook's operations in Seattle, and it will continue to operate in much the same way it has since it started in 2007. John continues to lead the business, which will remain functionally separate from Morningstar in most respects. However, we do plan to collaborate on certain areas, such as data collection technologies.

Leadership Changes

After giving it a lot of thought over the past year or so, I decided to step down as chief executive officer and transition to an executive chairman role. I still love the company as much as I did when I started it in 1984 and am just as excited about our prospects as ever. But I wanted to have a more flexible schedule and free up more time to think about investing and technology. In my new role, I've stepped back from our day-to-day operations; instead, I'm focusing on strategy, capital allocation, advising our senior team, and leading our board of directors.

Kunal Kapoor stepped into the role of CEO on Jan. 1 and hit the ground running. Kunal has a unique ability to bring people together to help solve problems for investors, and I'm confident that his energy and management talent will help us drive operational excellence and future growth. He's a Morningstar veteran who lives and breathes our mission of creating great products that help investors reach their financial goals. He has a breadth of experience across nearly every area of Morningstar—including research, data and software products, and investment management.

It's been a smooth transition. Kunal and I went on the road to visit many of our clients during the fourth quarter. Many of them had already worked with Kunal and told us they appreciated the drama-free changeover to a new CEO.

Kunal has a strong team behind him. We named Tricia Rothschild to the new role of chief product officer, where she's responsible for product strategy, innovation, development, and execution. During her more than 20 years at Morningstar, Tricia has held many leadership roles across research, products, and business development. She has a great blend of research and product development experience, and she's passionate about Morningstar and our mission.

We also recently hired Danny Dunn as our chief revenue officer. Danny previously held several sales leadership roles at IBM, where he developed a strong background in solutions sales, client service, sales operations, and go-to-market strategy. Most recently, he served as vice president of IBM's Midwest enterprise unit and oversaw sales, marketing, strategy, and customer service in the region for the complete IBM portfolio. Danny will be a great asset as we work toward building a world-class sales organization at Morningstar, and he has already made tangible improvements to our sales and client service operations.

In June, we brought in Pat Maloney as our general counsel. He's responsible for Morningstar's legal and compliance departments, as well as managing our relationships with outside counsel. This is an increasingly important role for Morningstar as our business grows in complexity and we expand our business in regulated areas, such as investment management and credit ratings. We know Pat well after working with him on several legal matters as an outside counsel over the past 20 years, so we're happy he could join us. Before joining Morningstar, Pat was a partner at Sheppard Mullin Richter & Hampton LLP in the firm's corporate and securities practice.

In October, we appointed Mitch Shue chief technology officer. Mitch originally joined us in 2014 when we acquired HelloWallet, where he served as chief technology officer. He's now responsible for Morningstar's long-term technology vision and execution. We promoted Rick Bowman, another great technologist we acquired with HelloWallet, to become our chief software officer. We also named James Rhodes as chief data officer. James oversees data operations at Morningstar, focusing on our

data technology strategy, including data collection, processing, and storage. He previously served as chief technology officer and partner at Rocaton Investment Advisors, LLC, where he drove the company's technical vision and oversaw the software engineering team.

As I mentioned above, we brought in John Gabbert as another key leader with the PitchBook acquisition in December. John is based in Seattle and has more than 17 years of experience developing data, research, and technology on the private capital markets. These new additions join several other leaders who have been at Morningstar for many years. I'm proud of the team we've brought together and am confident they'll do great things for Morningstar going forward.

Strategy

We remain committed to the same strategy we rolled out in 2014. As always, our mission is to create great products that help investors reach their financial goals. In keeping with this mission, our goal is to widen our economic moat, or sustainable competitive advantage, and increase the intrinsic value of our business over time.

As a reminder, here's a quick recap of our three main strategic objectives.

1. Produce the most effective investment data, research, and ratings to help investors reach their financial goals.

Our goal is to leverage our proprietary research and intellectual property to help investors with both decision support (via Morningstar Direct) and outsourced investment management (via our investment management business). Our data and research efforts focus on several different areas, including manager research (covering mutual funds, exchange-traded funds, and separate accounts), equities, corporate and structured credit, and holistic advice methodologies. With the PitchBook acquisition, we added comprehensive data coverage on the private capital markets, including venture capital, private equity, and M&A. Our broad analyst coverage and focus on proprietary research give us a competitive advantage that would be difficult for competitors to replicate.

In 2016, we introduced the new Morningstar Sustainability Rating for funds, which helps investors evaluate funds based on environmental, social, and governance (ESG) factors. Morningstar now provides Sustainability Ratings for approximately 35,000 mutual funds and ETFs, encompassing \$27 trillion in assets under management, or more than half of fund assets globally. We calculate these ratings based on the underlying fund holdings and company-level ESG research and ratings from Sustainalytics, a leading independent provider of ESG and corporate governance ratings and research.

In manager research, we're expanding the solutions we provide for wealth management firms to support the workflow needs of their due diligence groups. Our due diligence offering combines our analyst research content, analyst access, and qualitative ratings with screening, alerts, and scorecard capabilities in Morningstar Direct. Wealth management firms are increasingly facing regulatory pressures to demonstrate the research process behind their recommendations, and our manager research capabilities help them do this.

We also began providing qualitative analyst ratings on ETFs and qualitative research on separately managed accounts, both in response to client demand. In addition, we adjusted the Morningstar Rating calculation methodology for ETFs and open-end funds. Investors can now easily and directly compare these two fund types in a way that wasn't possible before. This is something only Morningstar can provide and an important innovation as investors increasingly use both traditional funds and ETFs.

During 2016, we expanded our equity data coverage by about 5% to 41,800 stocks and increased our real-time data coverage by 16% to 19.8 million securities. We also continued building multi-asset data capabilities, including fixed income and alternative investments.

2. Develop Morningstar Direct as our flagship decision support platform.

We're continuing to develop Morningstar Direct Cloud, the next generation of our flagship software platform. The new software is more intuitive, elegant, and easy

to use, with a strong emphasis on Morningstar's proprietary research. It's fully web-based, which eliminates the need for time-consuming software installations. We also improved the underlying software architecture, which will help us streamline our development process and roll out new features and tools more quickly.

Over the past few years, we've continued migrating many of our core software capabilities to Morningstar Direct. We're enhancing the workflows we provide for existing clients and adding functionality to reach newer client segments, such as institutional research departments and financial advisors. For example, we're developing a Manager Research workflow featuring our data, independent research, and analytics, which we expect to roll out in 2017. We're also developing a new Wealth Management workflow, which will be tailored for financial advisors to use with client portfolios. Both of these configurations will be available in Morningstar Direct for Wealth Management, an enterprise solution configured to meet the unique needs of large wealth management firms for in-depth multi-asset research, market monitoring, and robust portfolio analytics across diverse teams within their organizations. We're also making great progress in bringing more financial-planning capabilities to life within our software.

3. Build world-class investment management solutions based on our proprietary research.

We leverage our research by building world-class investment management solutions that help investors achieve better outcomes. Our goal is to connect our existing capabilities and create an integrated set of services that help financial advisors, asset managers, and individual investors with portfolio construction, monitoring, security selection, and implementation.

We provide several different services for outsourced investment management, including Morningstar Managed Portfolios and Workplace Solutions (our retirement business).

We've made a strategic shift in our investment management business to focus more on our "golden copy" strategies. These are strategies that reflect Morningstar's best thinking, align with our investment principles, and can be scaled across multiple platforms. We've

already successfully used this approach in Australia and other markets outside the United States. As part of this effort, we recently filed to register nine Morningstar funds with the Securities and Exchange Commission. After clearing all regulatory hurdles, the Morningstar funds will become the building blocks for our mutual fund-based Morningstar Managed Portfolios offered in the United States. We expect this will allow us to significantly lower the costs of these portfolios by removing a layer of fees embedded in the current fee structure.

In our investment management business, we're also focusing on low-cost collective investment trusts (CITs) based on Morningstar's indexes. These indexes leverage our Total Wealth Approach to investing (a more holistic approach to asset allocation and portfolio building that incorporates a more complete view of all sources of wealth) and help lower fees for retirement plan participants.

Key Investment Areas

We're also continuing to focus on five main areas for investment at Morningstar. In all five, we see a sizable revenue opportunity and believe we have a sustainable competitive advantage. Moreover, these areas should benefit from some important industrywide trends, such as outsourced investment management, the convergence of the advisor and workplace/retirement spaces, the shift to passive investing and strategic beta strategies, and growing market acceptance of new credit-ratings entrants.

Here are a few highlights on each of our "top five."

1. Workplace Solutions

In the workplace (also known as retirement) market, millions of investors are now charged with planning for their own retirement, mainly through self-directed retirement plans such as 401(k) plans in the United States. Assets in 401(k) plans totaled an estimated \$4.6 trillion as of Dec. 31, 2016, based on data from Cerulli Associates. Our goal is to save retirement for the individual investor by helping individuals navigate through the complexities of investing for retirement and drawing down

assets during retirement. One of the best ways to do this is through managed retirement accounts, which we offer for retirement plan participants who want to outsource management of their retirement savings instead of doing it on their own.

Assets in Morningstar's managed retirement accounts were up more than 16% in 2016 and totaled \$46.9 billion by the end of the year. We currently reach about 1.3 million participants with our managed retirement accounts, and are aiming to reach about 1.7 million by the end of 2017. Other areas of our retirement business—including plan sponsor advice and custom models—have also fared well. In total, our Workplace Solutions business now has more than \$100 billion in assets, and we see plenty of room for future growth.

We also recently introduced Morningstar Plan Advantage, a new digital platform that helps companies implement and monitor retirement plans, including recordkeeper selection, fund selection, and investment management.

2. Morningstar Direct

Licenses for Morningstar Direct rose 9% to about 12,500 by the end of 2016. This growth rate was slightly lower than the double-digit growth rates we've seen in previous years, as political and regulatory uncertainty made many of our clients more cautious during most of 2016. We felt the effects of that uncertainty in two ways: more moderate growth in new licenses as well as a slightly lower (though still strong) renewal rate of about 97% (versus 98% in 2015).

We see great potential for Morningstar Direct. Our goal is to drive adoption and engagement to continue expanding our user base among asset management firms. We're also adding new workflows for financial advisors—particularly high-end wealth managers and registered investment advisors.

In 2016, we continued developing the next-generation version of Morningstar Direct. These ongoing development efforts include rebuilding the platform to make it purely web-based

and retooling existing capabilities to support users' daily workflow needs. We also enhanced the data and research capabilities offered in Morningstar Direct during the year, including the Morningstar Sustainability Rating for funds and a new Global Risk Model, which helps investors understand and visualize the underlying factors that can drive the risk of a stock or portfolio.

3. Morningstar Managed Portfolios

Morningstar Managed Portfolios is our outsourced investment management service for financial advisors. Financial advisors are increasingly using third-party investment management for their clients so they can spend more time building client relationships and providing advice that includes both financial planning and wealth management. These third-party managed account platforms had close to \$5 billion in assets industry-wide in 2016 (based on data from Cerulli Associates), with total assets projected to increase by about 15% per year over the next few years.

In 2016, we continued migrating functionality to the new Morningstar Managed Portfolios website from our legacy platform. In response to growing client interest in low-cost portfolios accessible to smaller investors, we also introduced a new Morningstar Wealth Builder Asset Allocation Series.

Asset growth for Managed Portfolios has been strong. By the end of 2016, assets totaled about \$30 billion—up 15% from the previous year. We've had particularly strong growth outside the United States in markets such as Australia.

4. Morningstar Credit Ratings

Morningstar Credit Ratings, LLC, our credit ratings subsidiary, is a Nationally Recognized Statistical Rating Organization (NRSRO) that has historically focused on structured finance. This was a tough area in 2016. We completed 27 commercial mortgage-backed securities (CMBS) new-issue ratings in 2016, compared with 56 in 2015, reflecting both lower industrywide issuance and negative market share trends.

On the positive side, the SEC approved an expansion of the NRSRO license for Morningstar Credit Ratings to cover credit ratings for corporate issuers and financial institutions. This development will help us bring our investor-focused approach to a much broader portion of the U.S. fixed-income markets. This is a \$6 billion industry that has become more open to smaller players since the financial crisis. We're well-positioned to capitalize on that openness and increase our market share over time.

5. Morningstar Data

We previously identified Morningstar Indexes as our fifth major investment area, but beginning in 2017, we've broadened this to focus on Morningstar Data overall (including our index business and PitchBook). Morningstar Data is Morningstar's single largest product and made up about 19% of our consolidated revenue in 2016.

Data is an area near and dear to our hearts and a classic "wonderful business." The data business is highly scalable because it's based on a model of building something once and selling it many times. Since Morningstar started in 1984, we've steadily invested in building out the depth and breadth of our databases—and we now sell data in many different ways, including data feeds, software, research, and investment management. We excel not just in collecting data, but also in helping investors understand what the data means. We're also increasingly focusing on portfolio analytics that cover multiple asset types. Because many investors wisely diversify their portfolios to include a variety of investment types (including stocks, funds, fixed-income securities, and alternative investments), we want to give them a comprehensive view of their portfolios.

We offer an extensive set of investment indexes—more than 350 at last count—that can be used to benchmark the market and create investment portfolios. This area should benefit from the groundswell of interest in passive investing and semi-passive "strategic beta" strategies. Both of these areas help investors reduce costs. Our Wide Moat Focus Index, which we license for the VanEck Vectors Morningstar Wide

Moat ETF (MOAT), has generated annualized returns about 2.5 percentage points higher than the large-blend category average over the past three years.

In 2016, we introduced a series of Global Sustainability Indexes that incorporate ESG factors into the investment process. We also launched the Morningstar Open Indexes Project, which provides open-source access to our global equity indexes for benchmarking at no cost. The Open Indexes Project has the potential to change the index landscape and, in the long term, contribute to lower costs for institutional and individual investors.

Conclusion

Investors around the world continue to face significant political and regulatory uncertainty. But as the landscape shifts toward a greater emphasis on serving investors' best interests and lowering fees, Morningstar is well-positioned for long-term growth. I'm incredibly proud of everything our company has achieved over the past 33 years and even more optimistic about the years ahead.

As always, we hope you can attend our annual shareholders' meeting at 9 a.m. on May 12 at our company headquarters in Chicago. We're happy to take any questions you might have at the meeting, and look forward to an informative and engaging event.

Sincerely,



Joe Mansueto

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 Fiscal Year Ended December 31, 2016
or

☐ Transition Report Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

For the transition period from _____ to _____
Commission File Number: 000-51280

MORNINGSTAR, INC.

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

Illinois
(State or Other Jurisdiction of
Incorporation or Organization)

**22 West Washington Street
Chicago, Illinois 60602**
(Address of Principal Executive Offices)

36-3297908
(I.R.S. Employer
Identification Number)

312-696-6000
(Registrant's Telephone Number, Including Area Code)
Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class
Common stock, no par value

Name of Each Exchange on Which Registered
The NASDAQ Stock Market LLC

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

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

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 ☐

(Do not check if a smaller reporting company)

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 shares of common stock held by non-affiliates of the Registrant as of June 30, 2016 was \$1.5 billion. As of February 17, 2017, there were 42,930,200 shares of the Registrant's common stock, no par value, outstanding.

Documents Incorporated by Reference

Certain parts of the Registrant's Definitive Proxy Statement for the 2017 Annual Meeting of Shareholders are incorporated into Part III of this Form 10-K.

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Part I

Item 1. Business

Overview

Morningstar is a leading provider of independent investment research in North America, Europe, Australia, and Asia. Our mission is to create great products that help investors reach their financial goals. We offer an extensive line of data, software, research, and investment management offerings for financial advisors, asset managers, retirement plan providers and sponsors, and individual investors. We currently serve approximately 250,000 financial advisors, 1,400 asset management firms, 27 retirement plan providers, 300,000 retirement plan sponsors, and 10.9 million individual investors. We also provide data on the private capital markets to approximately 2,000 institutional clients.

Our data and research are core assets that we seek to leverage to build Morningstar's long-term value. Morningstar provides extensive data and research insights on a wide range of investment offerings, including managed investment products, publicly listed companies, private capital markets, and real-time global market data.

Our data and proprietary analytical tools such as the Morningstar Rating for mutual funds, which rates past performance based on risk- and cost-adjusted returns, and the Morningstar Style Box, which provides a visual summary of a mutual fund's underlying investment style, have become important tools that millions of investors and advisors use in making investment decisions. We've created other tools, such as the Ownership Zone, Sector Delta, and Market Barometer, which allow investors to see how different investments work together to form a portfolio and to track its progress. Our popular Portfolio X-Ray tool helps investors evaluate their portfolios and get a clear view of their underlying holdings.

We've been providing independent analyst research on mutual funds and other investment vehicles since the mid-1980s. We use this analyst research to provide a qualitative, forward-looking Morningstar Analyst Rating for funds. We now provide research reports and Morningstar Analyst Ratings for approximately 4,100 funds globally, including active, passive, multi-asset, ETF, and closed-end fund strategies. We also offer qualitative research and ratings on alternative funds, state-sponsored college savings plan portfolios, and target-date funds. During 2016, we began providing qualitative analyst ratings on ETFs and qualitative coverage of separately managed accounts.

In 2016, we introduced the new Morningstar Sustainability Rating for funds, which helps investors evaluate funds based on environmental, social, and governance (ESG) factors. Morningstar now provides Sustainability Ratings for approximately 34,000 mutual funds and ETFs, encompassing \$27 trillion in assets under management, or more than half of fund assets globally.

As part of our research efforts on individual stocks, we popularized the concepts of economic moat, a measure of competitive advantage originally developed by Warren Buffett, and margin of safety, which reflects the size of the discount in a stock's price relative to its estimated value. The Morningstar Rating for stocks is based on the stock's current price relative to our analyst-generated fair value estimates, as well as the company's level of business risk and economic moat. Our analysts cover approximately 1,500 stocks using a consistent, proprietary methodology that focuses on fundamental analysis, competitive advantage assessment, and intrinsic value estimation.

In addition to our analyst-driven coverage, we provide quantitative ratings and reports for approximately 42,000 companies globally. These equity ratings draw on the fundamental research of our equity analyst team and provide a forward-looking statistical view of the valuation, competitive advantage, and level of uncertainty for stocks that are often under-followed by other research firms.

Through our Morningstar Credit Ratings, LLC subsidiary, which is a Nationally Recognized Statistical Rating Organization (NRSRO), we provide new issue and surveillance ratings and analysis for commercial mortgage-backed securities (CMBS), residential mortgage-backed securities (RMBS), and other types of asset-backed securities. In 2016, the Securities and Exchanges Commission (SEC) authorized Morningstar Credit Ratings to rate corporate issuers and financial institutions under its NRSRO registration.

In our investment management business, we've developed in-depth advice on asset allocation, portfolio construction, and security selection to meet the needs of investors and professionals looking for integrated portfolio solutions. We've published research on "Gamma," an innovative measure that quantifies how much additional retirement income investors can generate by making better financial planning decisions. We use the concept of human capital—or potential future earning ability—to provide a more complete picture of an investor's financial worth and optimize a portfolio's asset mix.

We believe investors rely on these tools because they offer a useful framework for comparing potential investments and making decisions. Our independence and our history of innovation make us a trusted resource for investors.

The Morningstar Rating

We provide Morningstar ratings for funds (based on historical risk and returns) and stocks (based on our fair value estimates).



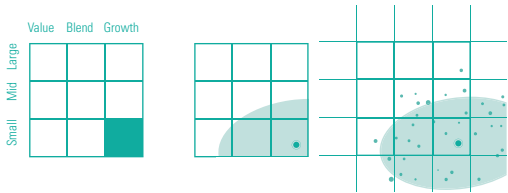
The Morningstar Analyst Rating

The Morningstar Analyst Rating for funds is a global, qualitative measure based on our assessment of five key pillars: process, performance, people, parent, and price.



The Morningstar Style Box

The Morningstar Style Box is a nine-square grid that illustrates the “investment style” of stocks and mutual funds. It classifies securities based on their market capitalization (the vertical axis) and growth and value factors (the horizontal axis).



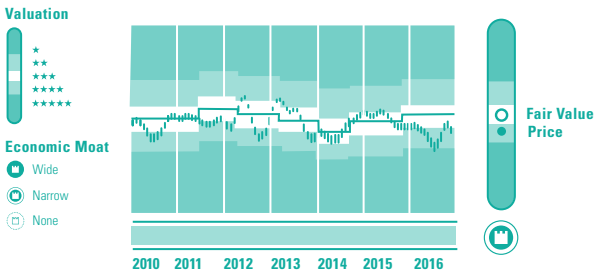
Economic Moat

Our analysts assign Economic Moat ratings of Wide, Narrow, or None based on our view of the company’s sustainable competitive advantage.



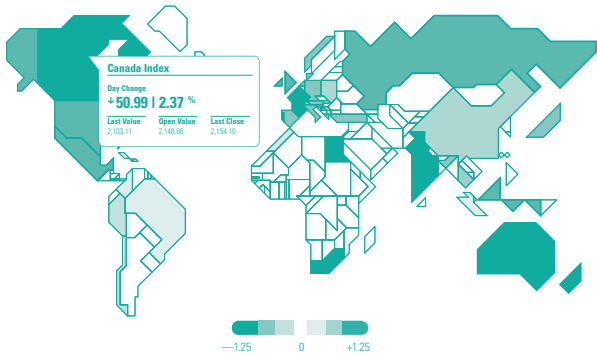
Price vs. Fair Value

Morningstar’s signature Price vs. Fair Value graph compares a stock’s market price with our estimate of the company’s intrinsic value, as well as how our ratings and the stock’s share price have changed over time.



Global Market Barometer

The Global Market Barometer is a current snapshot of the world’s equity markets based on price trends in the Morningstar Indexes.



Portfolio X-Ray

Our popular Portfolio X-Ray tool helps investors reduce risk and understand the key characteristics of their portfolios based on nine different factors.

Portfolio X-Ray

Asset Allocation

	% Net
U.S. Stocks	51.42
Non-U.S. Stocks	38.65
Bond	17.15
Cash	2.41
Other	2.00
Not classified	0.44



Stock Regions

	% Weight
Americas	50.27
North America	33.43
Latin America	7.81



Gamma Methodology

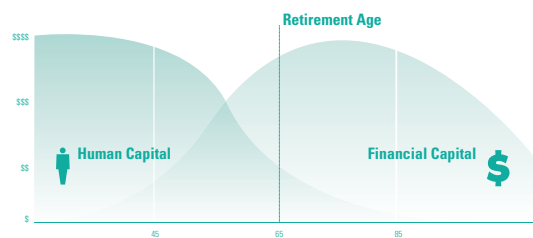
Our research on Gamma quantifies the value of financial planning and incorporates several key components that can improve investor outcomes.



- Asset Location and Withdrawal Sourcing
- Liability Relative Optimization
- Dynamic Withdrawal Strategy
- Annuity Allocation
- Total Wealth Asset Allocation

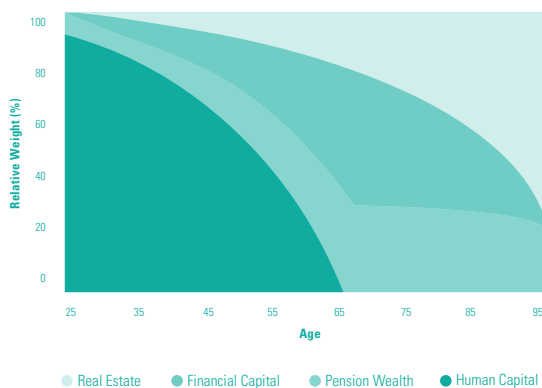
Human Capital

We use the concept of human capital—or potential future earning ability—to provide a more complete picture of an investor's financial worth and optimize the asset mix for retirement portfolios.



Total Wealth Approach

Our Total Wealth Approach provides a more complete view of all sources of an investor's wealth, including financial capital, human capital, housing assets, and retirement and pension benefits.



Morningstar Sustainability Rating

The Morningstar Sustainability Rating for funds helps investors evaluate mutual funds and exchange-traded funds based on environmental, social, and governance (ESG) factors.



Strategy and Key Objectives

Our strategy is to widen our economic moat, or sustainable competitive advantage, and build shareholder value by focusing on our three key objectives, which we describe in more detail below. Our investment data, research, and ratings are at the heart of our strategy, allowing us to help investors achieve better investment outcomes whether they make their own investment decisions or outsource management of their portfolios.

1. Produce the most effective investment data, research, and ratings to help investors reach their financial goals.

We believe our leadership position in independent investment research offers a competitive advantage that would be difficult for competitors to replicate. Our goal is to leverage our proprietary research and intellectual property to help investors with both decision support (via Morningstar Direct) and outsourced investment management (via our investment management business).

We're focusing our research efforts on several different areas, as described below.

▷ Manager research (including mutual funds, ETFs, separate accounts, and other vehicles)

Our goal for manager research is to leverage our leadership position to reach additional customers globally. In contrast to most other companies, we also integrate manager research with our software, which we believe is another competitive advantage.

As of December 31, 2016, we had 120 manager research analysts, including teams in North America, Europe, Australia, and Asia.

▷ Equity research

Our equity research complements our approach to manager research, where we focus on analyzing the individual stocks that make up each fund's portfolio. As of December 31, 2016, we had more than 100 equity analysts globally, making us one of the largest providers of independent equity research. We believe our analysts' long-term approach, deep industry knowledge, and focus on sustainable competitive advantage are important factors that set us apart and help investors achieve better investment outcomes.

▷ Credit ratings

Morningstar Credit Ratings, LLC, our credit ratings subsidiary, is a Nationally Recognized Statistical Rating Organization (NRSRO) that has historically focused on structured finance. As mentioned above, the SEC recently approved an expansion of the NRSRO license for Morningstar Credit Ratings to cover credit ratings for corporate issuers and financial institutions. Our goal is to bring transparency, unique perspectives, and superior client service to investors across the fixed-income markets.

▷ Portfolio advice methodologies (including our research on Gamma and the Total Wealth Approach)

Over the past several years, we've developed new research tools that provide a more holistic approach to investing and asset allocation. Whereas traditional asset allocation methodologies focus solely on financial assets (such as stocks and bonds), we've developed methodologies that provide a more complete view of all sources of wealth, including financial capital, human capital, housing assets, and retirement and pension benefits.

2. Develop Morningstar Direct as our flagship decision support platform.

In 2015, we began rolling out the next-generation version of Morningstar Direct, our institutional investment research platform.

The new software is designed to be more intuitive, elegant, and easy-to-use. It provides a more consistent, cohesive experience with a strong emphasis on Morningstar's proprietary research and tools. We also improved the underlying technology, including a more streamlined development process for commonly used Morningstar capabilities such as portfolio management tools.

The new software is fully web-based, which eliminates the need for desktop software installations and allows immediate access to new features. It allows us to innovate more rapidly and more easily configure our software solutions to meet client needs. It also addresses the growing need for mobile-optimized capabilities to extend the desktop experience onto mobile devices.

Over the past several years, we've started migrating many of our core software capabilities to Morningstar Direct, which will serve as our main platform for clients looking for information to support the investment decisions they make on their own or validate investment recommendations from another party. We're also continuing to expand the user base for Morningstar Direct by enhancing capabilities for our existing asset management clients and adding workflows for new types of clients, such as financial advisors.

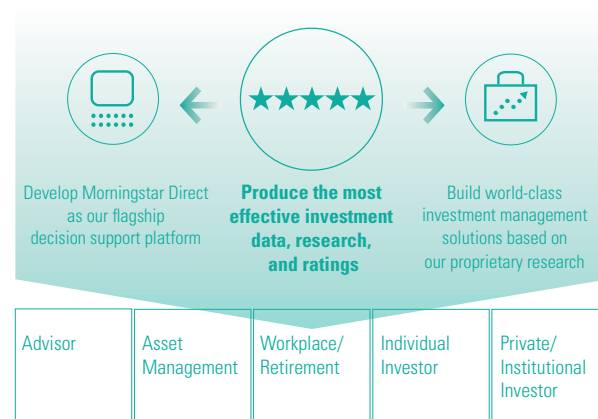
3. Build world-class investment management solutions based on our proprietary research.

We leverage our innovative, proprietary research by building world-class investment management solutions that help investors achieve better outcomes. Our goal is to connect our existing capabilities to create holistic solutions that help financial advisors, asset managers, and individual investors with portfolio construction, monitoring, security selection, and implementation.

Our investment management solutions include Morningstar Managed Portfolios, which had \$29.8 billion in assets under advisement as of December 31, 2016, and Workplace Solutions (formerly Retirement Solutions), which had a total of \$104.4 billion in assets under management and advisement.

We also expect to expand the investment management solutions we offer through our index business. We currently offer more than 350 investment indexes that can be used for both benchmarking and product creation.

Morningstar's Key Objectives and Major Customer Groups



Major Customer Groups

Given the core capabilities discussed above, we're focusing on five primary customer groups:

- ▷ Advisor (including independent financial advisors as well as those affiliated with broker-dealers or other intermediaries);
- ▷ Asset management (including fund companies, insurance companies, and other companies that build and manage portfolios of securities for their clients);
- ▷ Workplace/retirement (including retirement plan providers and plan sponsors);
- ▷ Individual investor; and
- ▷ Private/institutional investor.

Advisor

Financial advisors work with individual investors to help them reach their financial goals. This customer group includes independent advisors at registered investment advisor (RIA) firms, advisors affiliated with independent broker-dealers, dually registered advisors, and "captive" advisors who are employees of a broker-dealer. Captive broker-dealers include wirehouses, regional broker-dealers, and banks. In total, Cerulli Associates estimates there were approximately 310,000 financial advisors in the United States as of the end of 2016.

We believe our deep understanding of individual investors' needs allows us to work with advisors to help them make more efficient use of their time and deliver better investment outcomes for their clients. Our advisor solutions also draw on Morningstar's proprietary investment research methodologies and research insights.

We sell our advisor-related solutions both directly to independent financial advisors and through enterprise licenses, which allow financial advisors associated with the licensing firm to use our products.

We're expanding the range of services we offer to help financial advisors with all aspects of their daily workflow needs, including investment decision-making, portfolio construction, client monitoring and reporting, practice management, portfolio rebalancing that connects with custodial and trading interfaces, and financial planning. Because advisors are increasingly outsourcing investment management, we're continuing to enhance Morningstar Managed Portfolios to help advisors save time and reduce compliance risk.

Our main products for financial advisors are Morningstar Advisor Workstation (including Morningstar Office) and Morningstar Managed Portfolios.

Asset management

Asset management firms manage and distribute investment portfolios. We estimate that there are more than 3,000 asset management firms globally, ranging from large, global firms to firms with small fund lineups and operations in a single market or region. The asset management customer group includes individuals involved in sales, marketing, product development, and distribution, as well as investment management (often referred to as the "buy side"), which includes portfolio management and research.

Our asset management offerings help companies connect with their clients because of Morningstar's strong brand presence with both financial advisors and individual investors. We offer a global reach and have earned investors' trust in our unbiased approach, investor-centric mission, and thought leadership.

Our goal is to expand our reach with asset management clients and individuals at these firms who employ Morningstar's research offerings to help them achieve better results for their clients. We also plan to leverage our proprietary research and data to continue developing differentiated software and data offerings.

The key products we offer for asset management firms include Morningstar Direct, Morningstar Data, and Morningstar Indexes. For the buy side, key products include Morningstar Research, Morningstar Credit Ratings, Morningstar Data, and Morningstar Direct.

Workplace/retirement

In the workplace (also known as retirement) market, millions of investors are now charged with planning for their own retirement, mainly through self-directed retirement plans such as 401(k) plans in the United States. Assets in 401(k) plans totaled an estimated \$4.6 trillion as of December 31, 2016, based on data from Cerulli Associates. In the wake of the financial crisis of 2008 and 2009, we believe individual investors, financial advisors, employers, and government organizations have all become more aware of the need for advice and guidance that helps individuals build assets for retirement and beyond.

Our retirement offerings help retirement plan participants of all ages plan and invest for retirement. We offer these services both through retirement plan providers (typically third-party asset management companies that provide administrative and record-keeping services) and directly to plan sponsors (employers that offer retirement plans to their employees).

Our main product offering for the workplace/retirement customer group is Workplace Solutions, which includes managed retirement accounts, fiduciary services, custom models, and financial wellness services.

Individual investor

We offer products for individual investors who invest to build wealth and save for other goals, such as retirement or college tuition. A Gallup survey released in April 2016 found that approximately 52% of individuals in the United States invest in the stock market either directly or through mutual funds or self-directed retirement plans.

We design most of our products for individual investors who are actively involved in the investing process and want to take charge of their own investment decisions. We also reach individuals who want to learn more about investing or want to validate the advice they receive from brokers or financial advisors.

Our main product for individual investors is Morningstar.com, which includes both paid Premium Memberships and free content available to registered users and visitors. We also reach individual investors through a series of investment newsletters, iPad and mobile applications, and through licensing our content to other websites, such as Yahoo Finance, MSN Money, and Google Finance.

Private/institutional investor

Through PitchBook Data, Inc. (PitchBook), which we acquired in December 2016, we reach approximately 2,000 investment and research firms, including venture capital and private equity firms, corporate development teams, investment banks, limited partners, lenders, law firms, and accounting firms. These clients use PitchBook's industry-leading platform and best-in-class user interface to access data, discover new connections, and conduct research on potential investment opportunities.

PitchBook covers the full lifecycle of venture capital, private equity, and mergers and acquisitions (M&A), including the limited partners, investment funds, and service providers involved. Our main product for this customer group is the PitchBook Platform, an all-in-one research and analysis workstation for sophisticated investment and business professionals.

Acquisitions

Since our founding in 1984, we've supported our organic growth by introducing new products and services and expanding our existing offerings. From 2006 through 2016, we also completed 30 acquisitions to support our growth objectives. We made three acquisitions in 2016: Requisight, LLC (RightPond), a provider of business intelligence data and analytics on defined contribution and defined benefit plans for financial services firms; InvestSoft Technology, a provider of fixed-income analytics; and PitchBook, a leading source for information on the private capital markets, including venture capital, private equity, and M&A.

For more information about our acquisitions, refer to Note 7 of the Notes to our Consolidated Financial Statements.

Major Products and Services

The section below describes some of our major products and services (ranked in order of size based on each product's 2016 revenue).

Morningstar Data

Morningstar Data gives institutions access to a full range of investment data spanning numerous investment databases, including real-time pricing and market data. We offer licenses and data feeds for our proprietary statistics, such as the Morningstar Style Box and Morningstar Rating, and a wide range of other data, including information on investment performance, risk, portfolios, operations data, fees and expenses, cash flows, and ownership. Institutions can use Morningstar Data in a variety of investor communications, including websites, print publications, and marketing fact sheets, as well as for internal research and product development.

We also offer Morningstar Data for equities, including financial statement data, consolidated industry statistics, stock ownership information, and proprietary Morningstar statistics.

In 2016, we added several new sets of data to our suite of offerings, including the Morningstar Sustainability Rating for funds, our new Global Risk Model, and ETF Analyst Ratings. We also continued expanding the breadth and depth of our global data coverage for both equities and real-time data.

We've continued developing our data delivery platforms, including application programming interfaces (APIs), which allow for faster and more flexible client access to large groups of data files. We've expanded the number of data sets that are available through APIs and expanded the scope of data provided at the request of our clients.

Pricing for Morningstar Data is based on the number of investment vehicles covered, the amount of information provided for each security, the frequency of updates, the method of delivery, the size of the licensing firm, and the level of distribution.

Our main competitors for Morningstar Data include Activ Financial, Bloomberg, FactSet, Financial Express, Interactive Data, S&P Global, Thomson Reuters, and Xignite.

Morningstar Data is our largest product based on revenue and accounted for 19.0%, 18.3%, and 18.4% of our consolidated revenue in 2016, 2015, and 2014, respectively.

Morningstar Direct

Morningstar Direct is an institutional investment research platform that includes data and advanced analytical tools on the complete range of securities in Morningstar's global database, as well as privately held investments and data from third-party providers. It helps portfolio managers, investment consultants, financial product managers, wealth managers, and other professionals develop, select, and monitor investments. Users can create advanced performance comparisons and in-depth analyses of an investment's underlying investment style, as well as custom-branded reports and presentations.

In 2016, we continued developing Morningstar Direct Cloud (the next-generation version of Morningstar Direct). These ongoing development efforts include rebuilding the platform to make it purely web-based and retooling existing capabilities to support users' daily workflow needs.

We also enhanced the data and research capabilities offered in Morningstar Direct during the year. For example, we added the Morningstar Sustainability Rating for funds, which helps investors evaluate mutual funds and ETFs based on how well the companies held in their portfolios are managing their environmental, social, and governance (ESG) risks and opportunities. We also introduced a new Global Risk Model, which helps investors understand and visualize the underlying factors that can drive the risk of a stock or portfolio.

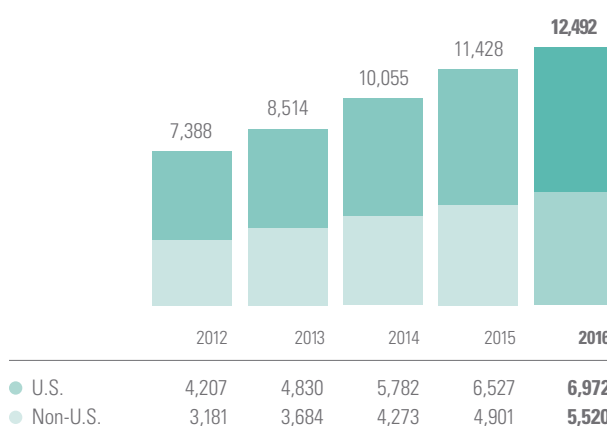
Morningstar Direct's primary competitors are Bloomberg, eVestment Alliance, FactSet Research Systems, Thomson Reuters, and Zephyr Associates.

Morningstar Direct had approximately 12,500 licensed users worldwide as of December 31, 2016.

Pricing for Morningstar Direct is based on the number of licenses purchased. For clients in the United States, we generally charge an annual fee of \$17,500 for the first user, \$11,000 for the second user, and \$9,500 for each additional user.

Morningstar Direct is our second-largest product based on revenue and accounted for 13.8%, 12.9%, and 12.1% of our consolidated revenue in 2016, 2015, and 2014, respectively.

Morningstar Direct Licenses



Morningstar Investment Management

This product line includes several different offerings, including Morningstar Managed Portfolios, as well as services for institutional asset management, asset allocation, and manager selection.

Morningstar Managed Portfolios is a fee-based discretionary asset management service that includes a series of mutual fund, ETF, and stock portfolios tailored to meet specific investment time horizons and risk levels. We offer this service through Morningstar Investment Services LLC, a registered investment advisor, registered broker-dealer, member of the Financial Industry Regulatory Authority, Inc. (FINRA), and wholly owned subsidiary of Morningstar, Inc. We offer Morningstar Managed Portfolios mainly to fee-based independent financial advisors. These advisors are often affiliated with the corporate registered investment arms of insurance companies and independent and registered broker-dealers.

We also provide other institutional asset management services for asset management firms, broker-dealers, and insurance providers, which we offer through a variety of registered entities in Australia, Dubai, France, Hong Kong, India, Japan, South Africa, South Korea, the United Kingdom, and the United States. All of these entities are wholly owned or majority-owned subsidiaries of Morningstar, Inc., and are authorized to provide investment advisory services by the appropriate regulatory agency in their applicable jurisdictions.

These services include institutional asset management, asset allocation, and manager selection services, which are investment recommendations delivered as select lists, based on a process that draws on our rated universe and manager selection methodology.

In 2016, we continued migrating functionality to the new Morningstar Managed Portfolios website from our legacy platform. In response to growing client interest in low-cost portfolios accessible to smaller investors, we introduced the Morningstar Wealth Builder Asset Allocation Series.

We charge asset-based fees for Morningstar Managed Portfolios, which are typically based on a tiered schedule that depends on the client's average daily portfolio balance. Fees for our mutual fund and ETF portfolios generally range from 30 to 40 basis points. We charge 45 to 55 basis points for Select Stock Baskets, which are customizable stock portfolios based on Morningstar's proprietary equity research and indexes. We use third-party custodians for Morningstar Managed Portfolios and do not hold the assets in custody.

We base pricing for our other investment management services on the scope of work, our degree of investment discretion, and the level of service required. In the majority of our contracts, we receive asset-based fees, reflecting our work as a portfolio construction manager or subadvisor for multimanager portfolios.

For Morningstar Managed Portfolios, our primary competitors are AssetMark, Brinker Capital, Envestnet PMC, Loring Ward, and SEI Investments. We also compete with in-house research teams at independent broker-dealers who build proprietary portfolios for use on brokerage firm platforms, as well other registered investment advisors that provide investment strategies or models on these platforms.

In our other investment management services, we compete with consulting firms such as Mercer, Callan, and Wilshire Associates, as well as various in-house providers of investment management services.

Morningstar Investment Management is our third-largest product based on revenue and made up 12.3% of revenue in 2016, compared with 12.5% in both 2015 and 2014.

Morningstar Advisor Workstation

Morningstar Advisor Workstation, a web-based investment planning system, provides financial advisors with a comprehensive set of tools for conducting their core business—including investment research, planning, and presentations. It allows advisors to build and maintain a client portfolio database that can be fully integrated with the firm's back-office technology and resources. Moreover, it helps advisors create customized reports for client portfolios that combine different types of investments.

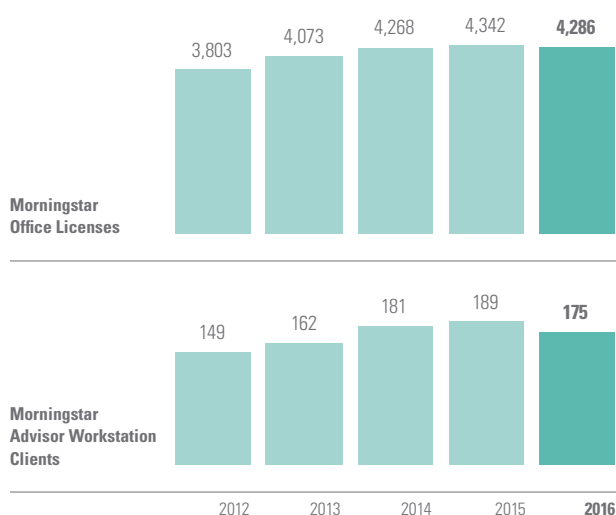
Morningstar Advisor Workstation is available in two versions: Morningstar Office for independent financial advisors and an enterprise version for financial advisors affiliated with larger firms. As of December 31, 2016, approximately 4,300 financial advisors in the United States were licensed to use Morningstar Office, and approximately 175 companies held licenses for the enterprise version of Morningstar Advisor Workstation.

In 2016, we continued to enhance integrations with several leading third-party platforms to help advisors with all aspects of their daily workflows. For example, we expanded our relationship with Redtail Technologies to fully integrate Redtail's customer relationship management (CRM) capabilities as part of Morningstar Office.

Pricing for Morningstar Advisor Workstation varies based on the number of users, as well as the number of databases licensed and level of functionality. We typically charge annual fees of about \$3,500 per licensed user for a base configuration of Morningstar Advisor Workstation, but pricing varies significantly based on the scope of the license. We generally charge \$6,000 per user for an annual license for Morningstar Office, as well as additional fees for portfolio accounting and record-keeping services.

Competitors for Morningstar Advisor Workstation and Morningstar Office include Black Diamond, Envestnet, Orion Advisor Services, S&P Global, and Thomson Reuters.

Morningstar Advisor Workstation is our fourth-largest product based on revenue and made up 10.3% of revenue in both 2016 and 2015, compared with 10.5% in 2014.

Morningstar Advisor Workstation Clients/Licenses (U.S.)**Workplace Solutions**

This product line includes several different offerings, including retirement advice and managed accounts, plan sponsor advice, custom models, and financial wellness services.

Our advice and managed accounts program, Morningstar Retirement Manager, helps retirement plan participants with their retirement goals. As part of this service, we deliver personalized recommendations for a target savings goal, a recommended contribution rate to help achieve that goal, a portfolio mix based on risk tolerance, and specific investment recommendations. Participants can build their own portfolios based on our recommendations or elect to have their accounts managed by us through our managed retirement account offering. We do not hold assets in custody for the managed retirement accounts we provide.

In our plan sponsor advice business, we work with retirement plan sponsors to help them meet their fiduciary obligations by selecting and monitoring a broad range of diversified plan options.

We serve as a non-discretionary subadvisor and index provider for the Morningstar Lifetime Allocation Funds, a series of target-date collective investment trust funds (CITs) offered by UBS Asset Management to retirement plan sponsors. Retirement plan sponsors can select a conservative, moderate, or growth version of the funds based on the needs of participants in the plan.

With our custom models, we work with retirement plan providers to design customized models for their investment lineups, including target maturity models and risk-based models.

Through HelloWallet, we offer personalized financial guidance to individuals and their families through their employer benefit plans. HelloWallet helps employees build a strong financial foundation by providing them with tools for emergency savings, debt management, and budgeting.

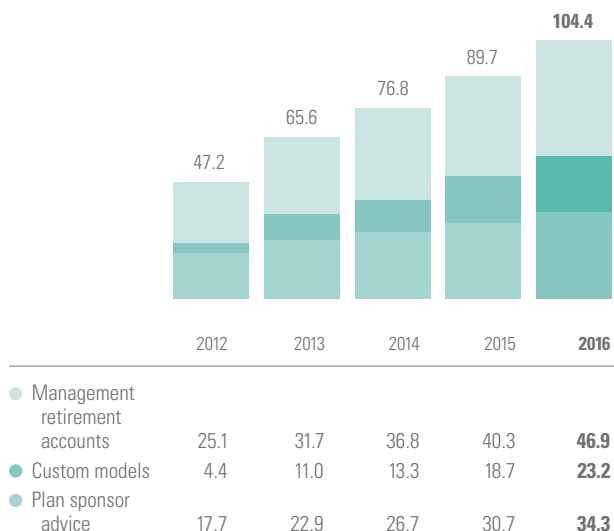
In 2016, we introduced Advisor Managed Accounts, a program that allows financial advisors to specify the portfolios that are used in an employer's managed account offering. Within our financial wellness solution, we launched new guidance methodology that helps users understand the trade-offs between multiple goals such as paying down debt versus saving for retirement.

Pricing for Workplace Solutions depends on several different factors, including the level of services offered (including whether the services involve acting as a fiduciary under the Employee Retirement Income Security Act, or ERISA), the number of participants, the level of systems integration required, and the availability of competing products. For HelloWallet, we charge employers for individual employee licenses at a rate of \$50 to \$100 per user per year.

Our main competitors for Workplace Solutions are Financial Engines, Guided Choice, Learnvest, and Personal Capital, as well as companies that provide automated investment advice, such as Betterment and Wealthfront. For the Lifetime Allocation Funds, we compete with other providers of target-date funds, such as Vanguard, Fidelity, and T. Rowe Price.

Workplace Solutions is our fifth-largest product based on revenue and made up 8.9% of revenue in 2016, compared with 8.4% in 2015 and 7.5% in 2014.

Workplace Solutions Assets under Management /Advisement (\$bil)



Morningstar.com

Our largest website for individual investors is Morningstar.com. Revenue for this product offering includes both Premium Memberships and Internet advertising sales, which each made up approximately half of Morningstar.com's total revenue in 2016. In addition to our U.S.-based site, we offer more than 30 regional investing websites customized to the needs of investors worldwide. Many of these sites feature coverage in local languages with tools and commentary tailored to specific markets.

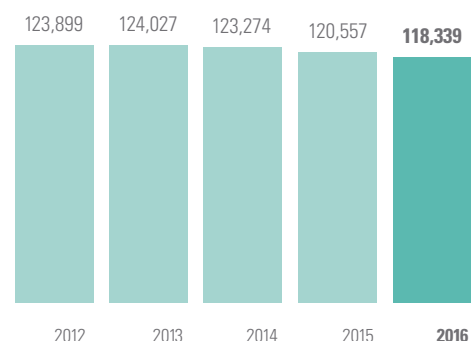
We also offer paid Premium Membership, which includes access to written analyst reports on stocks, mutual funds, ETFs, and closed-end funds, as well as our Portfolio X-Ray, asset allocation and portfolio management tools, proprietary stock data, Stewardship Grades and Ratings, and premium stock and fund screeners. We currently offer Premium Membership services in Australia, Canada, Italy, the United Kingdom, and the United States.

In 2016, we shifted a portion of the site's traffic to our newly redesigned beta site. The site features a new user interface focused on helping individual investors select and monitor investments. As part of this upgrade, we developed a new stock quote page that better surfaces Morningstar's proprietary research and ratings and a new picks center featuring curated lists of Morningstar's top-rated investments for specific needs, such as portfolio building, income, and retirement planning. We plan to complete the rollout of the new site during 2017.

Morningstar.com primarily competes with The Motley Fool, Seeking Alpha, TheStreet.com, and Yahoo! Finance, as well as other finance and brokerage sites.

As of December 31, 2016, the free membership services offered through Morningstar.com had 10.9 million registered users worldwide. We also had approximately 118,000 paid Premium subscribers for Morningstar.com in the United States plus an additional 15,000 paid Premium subscribers in other global markets. We currently charge \$23.95 for a monthly subscription, \$199 for an annual subscription, \$339 for a two-year subscription, and \$439 for a three-year subscription for Morningstar.com's Premium Membership service.

Morningstar.com Premium Memberships (U.S.)



Morningstar Enterprise Components

Morningstar Enterprise Components is a set of tools and capabilities that help institutional clients build customized websites or enhance their existing solutions. We offer a series of components, editorial content, and reports that investment firms can license to build or enhance their websites for financial advisors and individual investors. We also offer licenses for investment research, editorial content, and portfolio analysis and comparison tools that allow users to drill down into the underlying data when researching a potential investment.

In 2016, we introduced a beta version of the new Morningstar Developer platform, which provides clients with direct access to our tools, components, data, calculation engines, and APIs. The site empowers clients by giving them the flexibility to develop their own solutions using Morningstar components.

For Enterprise Components, our primary competitors include Financial Express, Interactive Data Corporation, Markit on Demand, and Thomson Reuters.

Pricing for Enterprise Components consists of both ongoing license fees and one-time development fees and depends on the solution being offered, the number of users and level of distribution, and the amount of client integration involved.

Morningstar Research

We offer Morningstar Research, including Equity Research and Manager Research, through Morningstar Research Services LLC and a variety of other subsidiaries outside the United States. We offer Equity Research to institutional investors who use it to supplement their own research, as well as to broker-dealers who provide our research to their affiliated financial advisors or individual investor clients. Our Manager Research services help institutional investors and manager research due diligence teams evaluate funds, investment strategies, and asset management firms.

During 2016, we expanded our analyst equity analyst coverage in the Asia/Pacific region in response to client demand, adding additional equity analysts in Singapore and Tokyo. We now have approximately 20 analysts in Asia (excluding Australia/New Zealand).

In manager research, we expanded our market efforts with wealth management firms to highlight how we can help meet the workflow needs of their due diligence groups. Our due diligence offering combines our analyst research content, analyst access, and qualitative ratings with screening, alerting, and scorecard capabilities in Morningstar Direct. Wealth management firms are increasingly facing regulatory pressures to document the research process behind their investment recommendations, and our manager research capabilities help these firms do this.

Our Equity Research services compete with CFRA Research (formerly S&P Capital IQ Equity Research) and Zack's Investment Research, as well as sell-side firms, internal providers, and smaller boutique firms. Our Manager Research services mainly compete with Mercer, Willis Towers Watson, and Wilshire Associates.

Pricing for Morningstar Research varies based on the level of distribution, the type of investors who are using our research, the number of securities or investment strategies covered, the amount of custom coverage and client support required, and the length of the contract term.

PitchBook Data

PitchBook Data, Inc., which Morningstar acquired in December 2016, provides data, research, and technology covering the private capital markets, including venture capital, private equity, and mergers and

acquisitions (M&A). PitchBook's main product is the PitchBook Platform, an all-in-one research and analysis workstation for sophisticated investment and research professionals. More than 8,000 professionals use this software to source deals, raise funds, build buyer lists, create benchmarks, network, and more. To accommodate their diverse needs, the Platform offers advanced search functionality, a fully customizable dashboard and email alerts that help users discover and monitor relevant information.

PitchBook also offers a mobile application, Excel plug-in, data feeds, and flexible, a la carte data solutions that allow clients to access a variety of data points on demand.

PitchBook's main competitors are CB Insights, Dow Jones VentureSource, Prequin, S&P Capital IQ, and Thomson Reuters.

Pricing for the PitchBook Platform is based on the number of seats, with the standard base license generally priced at \$27,500 for the first five seats, and pricing for additional seats generally priced at \$5,500 per user, with customized prices for large enterprises, boutiques, and startup firms.

Morningstar Credit Ratings

Morningstar Credit Ratings, LLC is an NRSRO that provides timely new issue and surveillance ratings and analysis for structured credits, as well as operational risk assessment services. We provide ratings on a broad range of structured finance securities, including commercial mortgage-backed securities, residential mortgage-backed securities, single-family rental securities, and asset-backed securities.

In 2016, Morningstar Credit Ratings received approval from the SEC to expand its NRSRO designation to include corporate credit issuers and financial institutions. We also expanded our research and ratings on a variety of additional asset-backed securities and collateralized loan obligations.

This business competes with several other firms, including DBRS, Fitch, Kroll Bond Ratings, Moody's, and S&P Global Ratings.

We charge annual fees for our subscription-based CMBS surveillance software and data services, which are paid for by the user. Pricing for these services varies depending on the solution and the level of access within a client organization. For new-issue ratings, we charge one-time fees to the issuer based on the type of security, the size of the transaction, and the complexity of the issue. In addition to the initial rating fee, clients pay annual surveillance fees that continue until the securities mature.

Morningstar Indexes

We offer an extensive set of investment indexes that can be used to benchmark the market and create investment products, including indexes that track the U.S. market by capitalization, sector, and investment style; dividend indexes; active equity indexes based on Morningstar's equity research; bond indexes; commodity indexes; hedge fund indexes; and asset allocation indexes.

In 2016, we launched a family of Global Sustainability Indexes that incorporate ESG factors into the investment process. The indexes serve as benchmarks for active managers and as portfolio building blocks for creating passively managed investment products.

We also introduced the Morningstar Open Indexes Project, offering asset managers and other firms the ability to benchmark their investments against more than 100 Morningstar global equity indexes for free. The goal of the project is to lower costs for the industry and improve outcomes for investors in response to the escalating cost of market-cap-weighted equity indexes. The indexes include equity benchmarks across sectors, styles, and regions. Participants will receive price return, total return, net return, and month-end constituent data for indexes included in the project.

We currently license Morningstar Indexes to numerous institutions that offer ETFs and exchange-traded notes based on the indexes. Firms can license Morningstar Indexes for both product creation (where we typically receive the greater of a minimum fee or basis points tied to assets under management) and data licensing (where we typically receive annual licensing fees). In both cases, our pricing varies based on the level of distribution, the type of user, and the specific indexes licensed.

Major competitors for Morningstar Indexes include FTSE Russell, MSCI, S&P Dow Jones Indices (offered through S&P Global), and Research Affiliates.

Other Products and Services

We offer a variety of other products and services, including:

- ▷ Morningstar Investment Profiles: pre-made or custom-generated investment fact sheets institutions can use for investor communications;
- ▷ Morningstar Commodity Data: high-quality market data and analytical products for energy data management systems, financial and agricultural data management, historical analysis, trading, risk management and forecasting;

- ▷ Print and online publications;
- ▷ ByAllAccounts, which provides innovative data aggregation technology for financial applications;
- ▷ Investment conferences;
- ▷ Morningstar Enterprise Data Management: customized data aggregation and performance reporting solutions that help clients integrate data more effectively;
- ▷ Market data and desktop software; and
- ▷ Other investment software for financial advisors and institutions.

International Operations

We conduct our business operations outside of the United States through wholly owned or majority-owned operating subsidiaries based in each of the following 26 countries: Australia, Brazil, Canada, Chile, Denmark, France, Germany, India, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, People's Republic of China (both Hong Kong and the mainland), Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, United Arab Emirates, and the United Kingdom. See Note 5 of the Notes to our Consolidated Financial Statements for additional information concerning revenue from customers and long-lived assets from our business operations outside the United States.

Intellectual Property and Other Proprietary Rights

We treat our brand, product names and logos, software, technology, databases, and other products as proprietary. We seek to protect this intellectual property by using trademark, copyright, patent and trade secrets laws; licensing and nondisclosure arrangements; and other security measures. For example, we generally provide our intellectual property to third parties through standard licensing agreements, which define the extent and duration of any third-party usage rights and provide for our continued ownership in any intellectual property furnished.

Because of the value of our brand name and logo, we generally seek to register one or both of them in all of the relevant international classes under the trademark laws that apply to jurisdictions where we operate. We have registered the Morningstar name and/or logo in numerous countries and the European Union and have applied for registrations in various other countries. In some jurisdictions, we also register certain product names.

"Morningstar" and the Morningstar logo are registered marks of Morningstar in the United States and in certain other jurisdictions. The table below includes some of the trademarks and service marks referenced in this report:

Trademarks and Service Marks

HelloWallet®

Morningstar® Advisor WorkstationSMMorningstar Analyst RatingTM

Morningstar® ByAllAccounts®

Morningstar® Data

Morningstar DirectSMMorningstar® Enterprise ComponentsSMMorningstar® Managed PortfoliosSMMorningstar Market BarometerSMMorningstar OfficeSMMorningstar® Ownership ZoneSM

Morningstar® Portfolio X-Ray®

Morningstar RatingTMMorningstar® Retirement ManagerSMMorningstar® Stewardship GradeSMMorningstar Style BoxTMMorningstar® Sustainability RatingTM

Morningstar.com®

PitchBook®

In addition to trademarks, we currently hold several patents in the United States, including patents held by Morningstar Investment Management LLC for lifetime asset allocation and asset allocation with annuities.

License Agreements

We license our products and/or other intellectual property to our customers, generally for a fee. As a rule, we use our standard agreements, whether in paper or electronic form, and we do not provide our products and services to customers or other users without having an agreement in place.

We maintain licensing agreements with most of our larger operating companies. We put these agreements in place so these companies can use our intellectual property, such as our products and trademarks, to market our products and develop and sell country-specific variants of products under the Morningstar name in their operating territories.

In the ordinary course of our business, we obtain and use intellectual property from a wide variety of sources, including licensing it from third-party sources, developing it internally, and recording it based on information found in public filings.

Seasonality

We believe our business has a minimal amount of seasonality. Some of our smaller products, such as our annual investment conference in Chicago, generate the majority of their revenue in the first or second quarter of the year. We sell most of our products with subscription or license terms of at least one year, though, and we recognize revenue ratably over the term of each subscription or license agreement. This tends to offset most of the seasonality in our business.

We believe market movements generally have more influence on our performance than seasonality. The revenue we earn from asset-based fees depends on the value of assets on which we provide advisory services, and the size of our asset base can increase or decrease along with trends in market performance.

Largest Customer

In 2016, our largest customer accounted for less than 2% of our consolidated revenue.

Competitive Landscape

The economic and financial information industry includes a few large firms as well as numerous smaller companies, including startup firms. Some of our main competitors include Bloomberg, S&P Global, and Thomson Reuters. These companies have financial resources that are significantly greater than ours. We also compete with a variety of other companies in specific areas of our business. We discuss some of the key competitors in each area in the Major Products and Services section of this report.

We believe the most important competitive factors in our industry are brand and reputation, data accuracy and quality, technology, breadth of data coverage, quality of investment research and analytics, design, product reliability, and value of the products and services provided.

Research and Development

A key aspect of our growth strategy is to expand our investment research capabilities and enhance our existing products and services. We strive to adopt new technology that can improve our products and services. As a general practice, we manage our own websites and build our own software rather than relying on outside vendors. This allows us to control our technology development and better manage costs, enabling us to respond quickly to market changes and to meet customer needs efficiently. As of December 31, 2016, our technology team consisted of approximately 1,280 programmers and technology and infrastructure professionals.

Government Regulation

United States

Investment advisory and broker-dealer businesses are subject to extensive regulation in the United States at both the federal and state level, as well as by self-regulatory organizations. Financial services companies are among the nation's most extensively regulated. The SEC is responsible for enforcing the federal securities laws and oversees federally registered investment advisors and broker-dealers.

Three of our subsidiaries, Morningstar Investment Management LLC, Morningstar Investment Services LLC, and Morningstar Research Services LLC, are registered as investment advisors with the SEC under the Investment Advisers Act of 1940 (Advisers Act). As registered investment advisors, these companies are subject to the requirements and regulations of the Advisers Act. These requirements relate to, among other things, record-keeping, reporting, and standards of care, as well as general anti-fraud prohibitions. As registered investment advisors, these subsidiaries are subject to on-site examination by the SEC.

In addition, in cases where these subsidiaries provide investment advisory services to retirement plans and their participants, they may be acting as fiduciaries under the Employee Retirement Income Security Act of 1974 (ERISA). As fiduciaries under ERISA, they have duties of loyalty and prudence, as well as duties to diversify investments and to follow plan documents to comply with the applicable portions of ERISA.

Morningstar Investment Services is a broker-dealer registered under the Securities Exchange Act of 1934 (Exchange Act) and a member of FINRA. The regulation of broker-dealers has, to a large extent, been delegated by the federal securities laws to self-regulatory organizations, including FINRA. Subject to approval by the SEC, FINRA adopts rules that govern its members. FINRA and the SEC conduct periodic examinations of the brokerage operations of Morningstar Investment Services.

Broker-dealers are subject to regulations that cover all aspects of the securities business, including sales, capital structure, record-keeping, and the conduct of directors, officers, and employees. Violation of applicable regulations can result in the revocation of a broker-dealer license, the imposition of censures or fines, and the suspension or expulsion of a firm or its officers or employees. As a registered broker-dealer, Morningstar Investment Services is subject to certain net capital requirements under the Exchange Act. These requirements are designed to regulate the financial soundness and liquidity of broker-dealers.

Morningstar Credit Ratings, LLC is registered with the SEC as a Nationally Recognized Statistical Rating Organization (NRSRO) specializing in rating structured finance investments, corporate credit issuers, and financial institutions. As an NRSRO, Morningstar Credit Ratings is subject to certain requirements and regulations under the Exchange Act. These requirements relate to, among other things, record-keeping, reporting, governance, and conflicts of interest. As part of its NRSRO registration, Morningstar Credit Ratings is subject to annual examination by the SEC.

Australia

Our subsidiaries that provide financial information services and advice in Australia, Morningstar Australasia Pty Limited and Morningstar Investment Management Australia Ltd., are registered under an Australian Financial Services license and are subject to oversight by the Australian Securities and Investments Commission (ASIC). This license requires them to, among other things, maintain positive net asset levels and sufficient cash resources to cover three months of expenses and to comply with the audit requirements of the ASIC.

United Kingdom

Morningstar Investment Management Europe Limited is authorized and regulated by the Financial Conduct Authority (FCA) to provide advisory services in the United Kingdom. As an authorized firm, Morningstar Investment Management Europe Limited is subject to the requirements and regulations of the FCA. Such requirements relate to, among other things, financial reporting and other reporting obligations, record-keeping, and cross-border requirements.

Other Regions

We have a variety of other entities (including in Canada, France, Hong Kong, India, Japan, Korea, South Africa, and Thailand) that are registered with their respective regulatory bodies; however, the amount of business conducted by these entities related to the registration is relatively small.

Additional legislation and regulations, including those relating to the activities of investment advisors and broker-dealers, changes in rules imposed by the SEC or other U.S. or non-U.S. regulatory authorities and self-regulatory organizations, or changes in the interpretation or enforcement of existing laws and rules may adversely affect our business and profitability.

Employees

We had 4,595 employees globally as of December 31, 2016, including approximately 800 data analysts, 90 designers, 500 investment analysts (including consulting and quantitative research analysts), 1,280 programmers and technology staff, and 750 sales and marketing professionals. Our U.S.-based employees are not represented by any unions, and we have never experienced a walkout or strike.

Executive Officers

As of February 28, 2017, we had nine executive officers. The table below summarizes information about each of these officers.

Name	Age	Position
Joe Mansueto	60	Executive Chairman
Kunal Kapoor	41	Chief Executive Officer
Stéphane Biehler*	49	Chief Financial Officer
Bevin Desmond	50	Head of Global Markets and Human Resources
Danny Dunn	41	Chief Revenue Officer
Haywood Kelly	48	Head of Global Research
Patrick Maloney	59	General Counsel
Daniel E. Needham	38	President and Chief Investment Officer, Investment Management
Tricia Rothschild	50	Chief Product Officer

* On February 21, 2017, Stéphane notified us that he is resigning from his position effective March 10, 2017. Kunal Kapoor will serve as interim chief financial officer until we name a replacement.

Joe Mansueto

Joe Mansueto founded Morningstar in 1984 and became executive chairman in 2017. He has served as chairman of the board since the company's inception. He served as our chief executive officer from 1984 to 1996 and again from 2000 to 2016.

Under Joe's leadership, Morningstar has been named twice to *Fortune* magazine's "100 Best Companies to Work For" list, in 2011 and 2012. The *Chicago Tribune* recognized Morningstar as one of the top 100 workplaces in the Chicago area in 2010, 2011, and 2012, and *Crain's Chicago Business* listed Morningstar in its Fast Fifty feature in 2007, 2008, 2009, and 2011. Morningstar won the 2010 AIGA Chicago Chapter Corporate Design Leadership Award, which recognizes forward-thinking organizations that have advanced design by promoting it as a meaningful business policy.

In December 2016, *InvestmentNews* named Joe to its list of 20 Icons & Innovators. *MutualFundWire.com* recognized Joe as one of the 10 most influential individuals in the mutual fund industry in 2015, and he was the recipient of PLANSPONSOR's Lifetime Achievement Award in 2013. In 2010, Joe received the Tiburon CEO

Summit award, MutualFundWire.com named him ninth on its list of the 100 Most Influential People of the year, and *Chicago* magazine listed Joe among its top 40 Chicago pioneers over the past four decades. In 2007, *SmartMoney* magazine recognized him in the "SmartMoney Power 30," its annual list of the 30 most powerful forces in business and finance. He received the Distinguished Entrepreneurial Alumnus Award from the University of Chicago Booth School of Business in 2000.

Joe holds a bachelor's degree in business administration from The University of Chicago and a master's degree in business administration from The University of Chicago Booth School of Business.

Kunal Kapoor

Kunal Kapoor is chief executive officer of Morningstar and a member of our board of directors. Before assuming his current role in 2017, he served as president, responsible for product development and innovation, sales and marketing, and driving strategic prioritization across the firm.

Before becoming president in 2015, Kunal was head of global products and client solutions. Kunal became head of our global client solutions group in 2013 and took on additional responsibility for the products group in February 2014. For part of 2013, he was president of our Data Division, and from 2010 until 2012, he was president of Equity and Market Data/Software. In 2009 and 2010, he was president of Individual Software. Kunal joined Morningstar in 1997.

He holds a bachelor's degree in economics and environmental policy from Monmouth College and a master's degree in business administration from The University of Chicago Booth School of Business. He also holds the Chartered Financial Analyst (CFA) designation.

Stéphane Biehler

As chief financial officer, Stéphane Biehler is responsible for corporate finance, accounting, tax, and investor relations. He joined us in 2013 and previously served as executive vice president, chief accounting officer, and corporate controller for NYSE Euronext, a global operator of financial markets, since 2007. Before the 2007 merger of NYSE Group with Euronext to form NYSE Euronext and the 2006 merger of Archipelago Holdings with the New York Stock Exchange to form NYSE Group, he was managing director and corporate controller for Archipelago Holdings, which he joined in 2004.

On February 21, 2017, Stéphane notified us that he is resigning from his position effective March 10, 2017. Kunal Kapoor will serve as interim chief financial officer until we name a replacement.

Stéphane holds a master's degree in international business from the University of Haute-Alsace in France.

Bevin Desmond

Bevin Desmond is head of global markets and human resources, a role she has held since 2010. She is responsible for identifying, developing, managing and directing international operations, and overseeing human resources functions for all of Morningstar's global operations. Previously, she was head of international operations from 2001 until 2010. She joined Morningstar in 1993.

Bevin holds a bachelor's degree in psychology from St. Mary's College.

Danny Dunn

Danny Dunn is chief revenue officer for Morningstar. He is responsible for sales philosophy, strategy, and execution in order to drive revenue growth.

Before joining Morningstar in 2016, Danny was vice president of the Midwest enterprise unit for IBM, a global information technology firm. He was responsible for marketing, strategy, sales, channels, and customer service for the complete IBM portfolio, including Cloud, Software, Services, Systems, and IBM Credit, LLC in the region. Prior to that, he was regional director for IBM's Chicago enterprise unit in 2013 and 2014, territory director for IBM's Wisconsin business unit from 2011 until June 2013, and territory sales leader for IBM Global Services from 2009 until July 2011. Before joining IBM in 2007, he led sales, account management, and client service at Neology, a software and technology consulting division of SmithBucklin Corporation.

Danny holds a bachelor's degree from the University of Vermont and a master's degree in business administration, with concentrations in marketing, strategy, and managerial economics, from the Kellogg School of Management at Northwestern University.

Haywood Kelly

Haywood Kelly is head of global research for Morningstar and oversees our global fund, equity, and credit research and data operations. Before taking on his current role in January 2014, he was head of equity and credit research since 2009 and took on additional responsibility for equity data in 2013. Haywood joined Morningstar in 1991.

He holds a bachelor's degree in economics from The University of Chicago, where he graduated as a member of Phi Beta Kappa. He also holds the CFA designation.

Patrick Maloney

Patrick Maloney is general counsel for Morningstar. He is responsible for directing Morningstar's legal department and managing its relationships with outside counsel. He also oversees Morningstar's compliance department.

Before joining Morningstar in June 2016, Patrick was a partner at Sheppard Mullin Richter & Hampton LLP from July 2012 through April 2016 in the firm's corporate and securities practice. Previously, he was a partner at K&L Gates LLP and its legacy predecessor firm, Bell, Boyd & Lloyd LLP. Early in his career, he was an associate with the New York law firm of Dewey Ballantine and an Assistant General Counsel with the Prudential Insurance Company of America.

Patrick holds a bachelor's degree with honors from the University of Chicago and a juris doctor degree with honors from the University of Chicago Law School. He is admitted to practice law in Illinois and New York.

Daniel Needham

Daniel Needham is president and chief investment officer (CIO) of Morningstar Investment Management and is responsible for building world-class investment management solutions based on our proprietary research. Before taking on his current role in February 2015, he served as CIO for Morningstar Investment Management, and was previously managing director and CIO for Morningstar Investment Management's Asia-Pacific Operations. He joined our company when Morningstar acquired Intech Pty Ltd (now Ibbotson Associates Australia) in 2009, where he served as chief investment officer. Before joining Intech in 2002, Daniel worked for Zurich Financial Services in Sydney.

He holds a bachelor's degree in commerce with a major in finance and economics from the University of Sydney. He also holds the CFA designation.

Tricia Rothschild

Tricia Rothschild is chief product officer for Morningstar. She is responsible for product strategy, innovation, development, and execution for the solutions delivered to clients.

Before taking on her current role in January 2017, Tricia was head of global advisor solutions for Morningstar, setting the strategic direction for our wealth management and online brokerage business and overseeing priorities for this customer group. From September 2012 until February 2013, Tricia was senior vice president of advisor software for Morningstar. Previously, she served as senior president for Morningstar's equity research business and held a variety of research and product management roles after joining Morningstar in 1993.

Tricia holds a bachelor's degree from Northwestern University and a master's degree in Russian and Central European economics from Indiana University. She also holds the CFA designation.

Company Information

We were incorporated in Illinois on May 16, 1984. Our corporate headquarters are located at 22 West Washington Street, Chicago, Illinois, 60602.

We maintain a website at <http://www.morningstar.com/company>. Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to any of these documents are available free of charge on this site as soon as reasonably practicable after the reports are filed with or furnished to the SEC. We also post quarterly press releases on our financial results and other documents containing additional information related to our company on this site. We provide this website and the information contained in or connected to it for informational purposes only. That information is not part of this Annual Report on Form 10-K.

Item 1A. Risk Factors

You should carefully consider the risks described below and all of the other information included in this Form 10-K when deciding whether to invest in our common stock or otherwise evaluating our business. If any of the following risks materialize, our business, financial condition, or operating results could suffer. In this case, the trading price of our common stock could decline, and you may lose all or part of your investment.

Our investment management operations may subject us to liability for any losses that result from a breach of our fiduciary duties.

Three of our subsidiaries, Morningstar Investment Management LLC, Morningstar Investment Services LLC, and Morningstar Research Services LLC, are registered as investment advisors with the SEC under the Investment Advisers Act of 1940, as amended. As registered investment advisors, these companies are subject to the requirements and regulations of the Advisers Act. These requirements relate to, among other things, record-keeping, reporting, and standards of care, as well as general anti-fraud prohibitions. As registered investment advisors, these subsidiaries are subject to on-site examination by the SEC.

In addition, in cases where these subsidiaries provide investment advisory services to retirement plans and their participants, they may be acting as fiduciaries under the Employee Retirement Income Security Act of 1974. As fiduciaries under ERISA, they have obligations to act in the best interest of their clients. They also have duties of loyalty and prudence, as well as duties to diversify investments and to follow plan documents to comply with the applicable portions of ERISA.

Our subsidiaries outside the United States that have investment advisory operations are subject to similar requirements.

We may face liabilities for actual or claimed breaches of our fiduciary duties, particularly in areas where we provide retirement advice and managed retirement accounts. In some of our retirement contracts, we act as an ERISA fiduciary by, for example, selecting and monitoring a broad range of diversified plan options. We also provide a managed account service for retirement plan participants who elect to have their accounts managed by our programs. As of December 31, 2016, we had \$46.9 billion in assets under management in our managed retirement accounts.

We rely on automated investment technology for our retirement advice and managed retirement accounts services. The Wealth Forecasting Engine is our core advice and managed accounts engine that determines appropriate asset allocations for retirement plan participants and assigns individuals to portfolios. We also rely on automated portfolio construction tools. Problems could arise if these programs assigned retirement plan participants to the wrong portfolios, particularly if we failed to detect program errors over an extended period. Clients may take legal action against us for an actual or claimed breach of a fiduciary duty. If we make an error, we may be subject to potentially large liabilities for make-whole payments and/or litigation. We cannot quantify the potential size of these liabilities with any level of precision.

In addition, we may face other legal liabilities based on the quality and outcome of our investment advisory recommendations, even in the absence of an actual or claimed breach of fiduciary duty, or based on our investment management fees and expenses. In total, we provided investment advisory and management services on approximately \$200 billion in assets as of December 31, 2016. We could face substantial liabilities related to our work on these assets.

Failing to maintain and protect our brand, independence, and reputation may harm our business. Our reputation and business may also be harmed by allegations made about possible conflicts of interest.

We believe independence is at the core of our business, and our reputation is our greatest corporate asset. We rely on our reputation for integrity and high-caliber products and services. Any failure to uphold our high ethical standards and ensure that our customers have a consistently positive experience with us could damage our reputation as an objective, honest, and credible source for investment research and information. Allegations of improper conduct, whether the ultimate outcome is favorable or unfavorable to us, as well as any negative publicity or media reports about Morningstar, whether valid or not, may harm our reputation and damage our business.

We provide ratings, analyst research, and investment recommendations on mutual funds and other investment products offered by our institutional clients. We also provide investment advisory and investment management services. In some cases, we make investment recommendations (such as Select Lists) within the framework of client constraints. While we don't charge asset management firms for their products to be rated, we do charge licensing fees for the use of our ratings. We also receive payments from issuers for our new-issue ratings on commercial mortgage-backed securities and corporate bond issues. These payments may create the perception that our ratings, research, and recommendations are not impartial. This perception may undermine the confidence of our customers and potential customers in our reputation as a provider of independent research. Any such loss of confidence or damage to our reputation could hurt our business.

Our reputation may also be harmed by factors outside of our control, such as news reports about our clients or adverse publicity about certain investment products. Our reputation could also suffer if we fail to produce competitive performance in our investment management offerings.

Failing to differentiate our products and continuously create innovative, proprietary research tools may harm our competitive position and business results.

We attribute much of our company's success over the past 32 years to our ability to develop innovative, proprietary research tools, such as the Morningstar Rating, Morningstar Style Box, Ownership Zone, and Portfolio X-Ray. More recently, we've developed unique concepts and tools such as the Wealth Forecasting Engine, Gamma, and Total Wealth Approach. We believe these innovations set us apart because most of our competitors focus on providing data or software rather than creating their own proprietary research frameworks. We also believe our ability to develop innovative, proprietary research tools is at the core of what drives Morningstar's value for all of our customer groups.

If we fail to continuously innovate and develop new tools to meet the needs of our customers, our competitive position and business results may suffer. In addition, our reputation could be harmed if we're perceived as not moving quickly enough to meet the changing needs of investors.

Our competitive position and business results may also suffer if other companies are able to successfully introduce innovative, proprietary research tools that gain attention from our clients. We believe lower technology costs and the growth of open software platforms have lowered the barriers to entry for new competitors, making it easier for new players to enter the market. Smaller companies, including startup firms funded by private equity and venture capital, may be able to move more quickly to develop research and tools that gain a wide following.

If we fail to introduce innovative, proprietary research tools and frameworks, we may not generate enough interest from potential clients to win new business. We cannot guarantee that we will successfully develop new product features and tools that differentiate our product offerings from those of our competitors.

Failing to respond to technological change, keep pace with new technology developments, or adopt a successful technology strategy may negatively affect our competitive position and business results.

We believe the technology landscape has been changing at an accelerating rate over the past several years. Changes in technology are fundamentally changing the ways investors access data and content. Examples include the shift from local network computing to cloud-based systems, the proliferation of wireless mobile devices, and rapid acceleration in the use of social media platforms.

Our software development process is based on frequently rolling out new features so that we can quickly incorporate user feedback. While some changes in technology may offer opportunities for Morningstar, we cannot guarantee that we will successfully adapt our product offerings to meet evolving customer needs. If we fail to develop and implement new technology rapidly enough, we may sacrifice new business opportunities or renewals from existing customers. We may also incur additional operating expense if major software projects take longer than anticipated. Our competitive position and business results may suffer if we fail to develop new technologies to meet client demands, if our execution speed is too slow, or if we adopt a technology strategy that doesn't align with changes in the market.

Our results could suffer if the mutual fund industry continues to experience slower growth, or if actively managed equity funds continue to attract less investor attention.

We generate a significant portion of our revenue from products and services related to mutual funds, and part of our growth since 1984 can be attributed to favorable industry trends. The mutual fund industry has experienced substantial growth over the past 30 to 40 years, but suffered during the market downturn of 2008 and 2009. Since then, fund assets have increased, but at a slower rate than in previous years.

A significant portion of our fund research has historically focused on equity-related funds. In addition, we are best-known for our data and analyst research on actively managed equity funds. Over the past 15 years, passively managed index funds have seen greater investor interest, and this trend has accelerated in recent years. In 2016, actively managed mutual funds suffered about \$340 billion in net outflows, compared with net inflows of more than \$500 billion for passively managed funds. Overall, we estimate that passively managed portfolios now account for more than one-third of combined mutual fund and ETF assets.

Prolonged downturns or volatility in the financial markets, increased investor interest in other investment vehicles, or a lack of investor confidence could continue to reduce investor interest and investment activity. In addition, a continued lessening of investor interest in actively managed equity funds could decrease demand for our products, including our software, data, and analyst research.

We could face liability related to our storage of personal information about individuals as well as portfolio and account-level information.

Customers routinely enter personal investment and financial information, including portfolio holdings, account numbers, and credit card information, on our websites. In addition, we handle increasing amounts of personally identifiable information in areas such as Morningstar Retirement Manager, Morningstar Managed Portfolios, ByAllAccounts, Morningstar Office, Enterprise Data Management, Morningstar.com, and HelloWallet. Through HelloWallet's website and mobile applications, employees enter their goals and priorities and add their financial information, including income, bank accounts, credit cards, retirement plans, insurance, and investments. ByAllAccounts uses technology to collect, consolidate, and transform financial account data and deliver it to any platform. Accordingly, both HelloWallet and ByAllAccounts handle a large volume of personally identifiable information as part of their normal business operations.

Any failure to safeguard this information could damage our reputation and business results. We must continuously invest in systems, processes, and controls to guard against the risk of improper access to this information, which could be disclosed through employee errors, other inadvertent release, failure to restrict access, or failure to properly purge and protect data. We may suffer malicious attacks by individuals or groups seeking to penetrate our network and databases to gain access to personal data. These attacks have become increasingly frequent, sophisticated, and difficult to detect.

Contractual commitments to customers as well as laws and industry regulations related to data protection, system availability, and privacy require us to safeguard critical data. We are also required to take appropriate steps to safeguard credit card numbers, Social Security numbers, and other information about individuals or their accounts. Given the growing concern over data privacy and identity theft, we have been and expect to continue to be subject to increased scrutiny by clients and regulators. We could be subject to liability if we were to inappropriately disclose any user's personal information or if third parties were able to penetrate our network security or otherwise gain access to any user's name, address, Social Security number, account numbers, portfolio holdings, credit card information, or other personal information.

Compliance failures, regulatory action, or changes in laws applicable to our investment advisory or credit rating operations could adversely affect our business.

Our investment management operations are a growing part of our overall business. The securities laws and other laws that govern our investment advisory activities are complex. The activities of our investment advisory operations are subject to provisions of the Advisers Act and ERISA. In addition, Morningstar Investment Services is a broker-dealer registered under the Exchange Act and is subject to the rules of FINRA. We also provide investment advisory services in other areas around the world, and our operations are subject to additional regulations in markets outside the United States. If we fail to comply with securities laws and other regulatory requirements, we may be subject to fines or other events that could have a negative effect on our business.

Over the past several years, we have also made significant investments in our credit rating business. Our Morningstar Credit Ratings, LLC subsidiary is an NRSRO that specializes in structured finance, corporate credit issuers, and financial institutions. Credit rating and research providers have been under increasing regulatory scrutiny in recent years. As an NRSRO, Morningstar Credit Ratings is subject to various requirements and regulations under the Exchange Act relating to, among other things, record-keeping, reporting, governance, and conflicts of interest. As part of its NRSRO registration, Morningstar Credit Ratings is subject to annual examination by the SEC, as well as periodic investigations by the SEC and other governmental authorities relating to matters of regulatory interest such as industry practices and personnel matters. The cost and management distraction resulting from such examinations and investigations may have a negative effect on our credit rating business.

The laws, rules, and regulations applicable to our business may change in the future, and we may not be able to comply with these changes. In addition, the broad scope of our business operations makes it more difficult to monitor areas that may be subject to regulatory and compliance risk. If we fail to comply with any applicable law, rule, or regulation, we could be fined, sanctioned, or barred from providing investment advisory or credit rating services in the future, which could adversely affect our business.

An outage of our database, technology-based products and services, or network facilities could result in reduced revenue and the loss of customers.

The success of our business depends upon our ability to deliver time-sensitive, up-to-date data and information. We rely on our computer equipment, database storage facilities, and other network equipment, which is located across multiple facilities in the United States. We also have extensive information systems outside the United States. Our mission-critical databases and networks are increasingly complex and interdependent, which increases the risk of failure. Problems in our network systems may lead to cascading effects involving product downtime, overloading of third-party data centers, and other issues that may affect our clients. Many of our client contracts contain service-level agreements that require us to meet certain obligations for delivering time-sensitive, up-to-date data and information. We may not be able to meet these obligations in the event of failure or downtime in our information systems.

Our operations and those of our suppliers and customers are vulnerable to interruption by fire, earthquake, power loss, telecommunications failure, terrorist attacks, wars, computer viruses, and other events beyond our control. Our database and network facilities may also be vulnerable to external attacks that misappropriate our data, corrupt our databases, or limit access to our information systems. To defend against these threats, we implement a series of controls focusing on both prevention and detection, including firewalls, intrusion detection systems, automated scanning and testing, server hardening, anti-virus software, and patch management. We make significant investments in servers, storage, and other network infrastructure to prevent incidents of network failure and downtime, but we cannot guarantee that these efforts will work as planned.

Most of our products and services depend heavily on our electronic delivery systems and the Internet. Our ability to deliver information using the Internet may be impaired because of infrastructure failures, service outages at third-party Internet providers, malicious attacks, or other factors. If disruptions, failures, or slowdowns of our electronic delivery systems or the Internet occur, our ability to distribute our products and services effectively and to serve our customers may be impaired.

We maintain off-site back-up facilities for our data, but we cannot guarantee that these facilities will operate as expected during an interruption that affects our headquarters. There may be single points of failure that affect our core databases, data transfer interfaces, or storage area networks. We may not be able to fully recover data or information lost during a database or network facility outage. Any losses, service disruption, or damages incurred by us could have a material adverse effect on our business, operating results, or financial condition.

The concentration of data and development work carried out at our offshore facilities may have a negative effect on our business operations, products, and services.

We now have approximately 900 employees working in our data and technology development center in Shenzhen, China. We rely on these employees to maintain and update our mutual fund database and work on other projects. Because China has a restrictive government under centralized control and the relationship between the United States and China is experiencing a period of increased political, military, and commercial tensions, our operations are subject to political and regulatory risk, which is inherently unpredictable. Several news reports have heightened concerns about problems related to data privacy, security, and protection of intellectual property rights in China, as well. The concentration of development and data work carried out at this facility also involves operational risks for our network infrastructure. While we have short-term backup plans in place, it would be difficult for us to maintain and update our mutual fund database if we were unable to access our Shenzhen operations for an extended period of time. Any difficulties that we face in continuing to operate our development center in China may harm our business and have a negative impact on the products and services we provide.

We have approximately 600 employees who work at our data collection facility in Mumbai, India, which may also be subject to regulatory and political risk (including potential terrorist acts). Like the Shenzhen operation, these facilities also involve operational risks for our network infrastructure.

PitchBook, which we acquired in December 2016, has approximately 180 contract employees based in Calcutta and Pune, India who support its data and research operations and approximately 75 contract employees based in Ukraine who work on software development. Ukraine has been subject to significant political unrest and military incursions. Any disruption to PitchBook's contract operations in these locations would make it difficult for PitchBook to meet its operating goals.

Our acquisitions and other investments may not produce the results we anticipate. We have also incurred debt in connection with acquisitions, which may limit our financial flexibility.

We've completed numerous acquisitions over the past 10 years. In 2016, we paid approximately \$188 million (subject to working capital adjustments) for the remaining ownership interest in PitchBook in a transaction that valued the company at \$225.0 million.

This acquisition presents several potential challenges and risks. We may not achieve the growth targets that we established for PitchBook at the time of the acquisition. The process of integration may require more resources than we anticipated. We may assume unintended liabilities or experience operating difficulties or costs that we did not anticipate. We may also fail to retain key personnel of the acquired business, including PitchBook founder and chief executive officer John Gabbert, which would make it difficult to follow through on our operating goals for the acquisition. If our acquisition of PitchBook does not generate the results we anticipate, it could have a material adverse effect on our business, financial condition, and results of operations. We may also fail to generate enough revenue or profits from this acquisition to earn a positive return on the associated purchase price.

To fund this acquisition, we increased the principal amount available for borrowing under our existing revolving credit facility to \$300 million and extended the term of this facility to three years. Under the terms of our agreement with the lender, we are now subject to certain restrictions and financial covenants, which may limit our financial flexibility.

We expect to continue making acquisitions and establishing investments and joint ventures as part of our long-term business strategy. Acquisitions, investments, and joint ventures involve a number of risks. They can be time-consuming and may divert management's attention from day-to-day operations, particularly if numerous acquisitions are in process at the same time. Financing an acquisition could result in dilution from issuing equity securities, reduce our financial flexibility because of reductions in our cash balance, or result in a weaker balance sheet from incurring debt.

Downturns in the financial sector, global financial markets, and global economy may hurt our results, resulting in lower revenue from asset-based fees, transaction-based revenue, or other parts of our business.

Our business results are partly driven by factors outside of our control, including general economic and financial market trends. Any unfavorable changes in the environment we operate in could cause a corresponding negative effect on our business results. As a result, we may experience lower revenue, operating income, and other financial results in the event of a market downturn.

Many of our customers are asset management firms and other financial services companies, which are also subject to external trends and changes. For example, the financial crisis of 2008 and 2009 led to spending cutbacks among many of the companies we sell to. Some institutional clients have implemented additional review processes for new contracts or started providing certain services, such as investment management, in-house rather than hiring outside service providers. Some institutional clients have also reduced the scope of their operations. For example, several large insurers withdrew from the variable annuity market in recent years, while others curtailed their new sales efforts. This has had a negative effect on the services we provide to institutional clients that offer variable annuities.

Many companies in the financial services industry have also been subject to increasing government regulation and pressure to reduce fees. In turn, many of these firms have sought to reduce their operating costs by working with fewer service providers and/or negotiating lower fees for services they purchase.

In addition, our revenue from asset-based fees may be adversely affected by market declines, cash outflows from portfolios that we help manage, and the industry-wide trend toward lower asset-based fees.

In 2016, revenue from asset-based fees made up approximately 17% of our consolidated revenue and a greater percentage of our operating income. The amount of revenue we earn from asset-based fees depends on the value of assets on which we provide advisory services, and the size of our asset base can increase or decrease along with trends in market performance. The value of assets under advisement may show substantial declines during periods of significant market volatility. Asset levels can also be affected if net inflows into the portfolios on which we provide investment advisory

services drop or if these portfolios experience redemptions. If the level of assets on which we provide investment advisory or investment management services goes down, we expect our fee-based revenue to show a corresponding decline.

Our business results may also be hurt by negative trends in Internet advertising sales, which made up about 3% of consolidated revenue in 2016. Many advertisers have been shifting to programmatic buying platforms that target users on other sites, which has had a negative effect on advertising revenue for our website for individual investors, Morningstar.com.

Our structured credit rating business, which made up about 3% of consolidated revenue in 2016, is subject to volatility from trends in new issuance of commercial mortgage-backed securities and other structured credits. If industry-wide issuance for commercial mortgage-backed securities declines, our revenue associated with this line of business may also go down. We recently expanded our coverage to include corporate credit issuers, financial institutions, and other types of asset-backed securities, which are also subject to volatility in issuance patterns.

Our PitchBook Data business may also be subject to cyclical trends. Many of PitchBook's clients are investment banks, which are subject to periodic business downturns driven by changes in the global capital markets. During these downturns, they often seek to reduce spending on third-party services as well as the number of employees, which would directly affect the number of prospective clients for PitchBook. As a data and research provider focusing on the private capital markets (including venture capital, private equity, and mergers and acquisitions), PitchBook may also be subject to volatility based on the amount of activity and market interest in these areas.

Our future success depends on our ability to recruit, develop, and retain qualified employees.

We experience competition for analysts, technology experts, and other employees from other companies and organizations. These organizations often have greater resources than we do and are often able to offer significantly more attractive compensation packages to potential employees. Competition for these employees is intense, and we may not be able to retain our existing employees or be able to recruit and retain other highly qualified personnel in the future.

Our future success also depends on the continued service of our executive officers, including Joe Mansueto, our executive chairman and controlling shareholder. Joe has recently changed his role to focus less on our day-to-day business operations, but remains heavily involved in our strategy and overall company direction. The loss of Joe or other executive officers could hurt our business, operating results, or financial condition. We do not have employment agreements, non-compete agreements, or life insurance policies in place with any of our executive officers. They may leave us and work for our competitors or start their own competing businesses.

Our operations outside of the United States involve additional challenges that we may not be able to meet.

Our operations outside of the United States generated \$208.1 million in revenue in 2016, or about 26% of our consolidated revenue. There are risks inherent in doing business outside the United States, including challenges in reaching new markets because of established competitors and limited brand recognition; difficulties in staffing, managing, and integrating non-U.S. operations; difficulties in coordinating and sharing information globally; differences in laws and policies from country to country; exposure to varying legal standards, including intellectual property protection laws; potential tax exposure related to transfer pricing and other issues; heightened risk of fraud and noncompliance; and currency exchange rates and exchange controls. These risks could hamper our ability to expand around the world, which may hurt our financial performance and ability to grow.

We don't engage in currency hedging or have any positions in derivative instruments to hedge our currency risk. Our reported revenue could suffer if certain foreign currencies decline relative to the U.S. dollar, although the impact on operating income may be offset by an opposing currency impact on locally based operating expense.

We could face liability for the information we publish, including information based on data we obtain from other parties.

We may be subject to claims for securities law violations, defamation (including libel and slander), negligence, or other claims relating to the information we publish, including our research and ratings on issuers of structured credits and corporate credits. For example, investors may take legal action against us if they rely on published information that contains an error, or a company may claim that we have made a defamatory statement about it or its employees. We could also be subject to claims based on the content that is accessible from our website through links to other websites.

We rely on a variety of outside parties as the original sources for the information we use in our published data. These sources include securities exchanges, fund companies, hedge funds, transfer agents, and other data providers. We also incorporate data from a variety of third-party sources for PitchBook Data. Accordingly, in addition to possible exposure for publishing incorrect information that results directly from our own errors, we could face liability based on inaccurate data provided to us by others.

We could be subject to claims by providers of publicly available data and information we compile from websites and other sources that we have improperly obtained that data in violation of the source's copyrights or terms of use. We could also be subject to claims from third parties from which we license data and information that we have used or re-distributed the data or information in ways not permitted by our license rights. Defending claims based on the information we publish could be expensive and time-consuming and could adversely impact our business, operating results, and financial condition.

Failure to protect our intellectual property rights could harm our brand and ability to compete effectively.

The steps we have taken to protect our intellectual property may not be adequate to safeguard our proprietary information. Further, effective trademark, copyright, and trade secret protection may not be available in every country in which we offer our services. Our continued ability to market one or more of our products under their current names could be adversely affected in those jurisdictions where another person registers or has a pre-existing registration on one or more of them. Failure to adequately protect our intellectual property could harm our brand, devalue our proprietary content, and affect our ability to compete in the marketplace.

From time to time, we encounter jurisdictions in which one or more third parties have a pre-existing trademark registration in certain relevant international classes that may prevent us from registering our own marks in those jurisdictions. Our continued ability to use the "Morningstar" name or logo, either on a stand-alone basis or in association with certain products or services, could be compromised in those jurisdictions because of these pre-existing registrations. Similarly, from time to time, we encounter situations in certain jurisdictions where one or more third parties are already using the Morningstar name, either as part of a registered corporate name, a registered domain name or otherwise. Our ability to effectively market certain products and/or services in those locations could be adversely affected by these pre-existing usages.

Control by a principal shareholder could adversely affect our other shareholders.

As of December 31, 2016, Joe Mansueto, our executive chairman, owned approximately 57% of our outstanding common stock. As a result, he has the ability to control substantially all matters submitted to our shareholders for approval, including the election and removal of directors and any merger, consolidation, or sale of our assets. He also has the ability to control our management and affairs. This concentration of ownership may delay or prevent a change in control; impede a merger, consolidation, takeover, or other business combination involving Morningstar; discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of the company; or result in actions that may be opposed by other shareholders.

Fluctuations in our operating results may negatively affect our stock price.

We believe our business has relatively large fixed costs and low variable costs, which magnify the impact of revenue fluctuations on our operating results. As a result, a decline in our revenue may lead to a larger decline in operating income. In addition, because we manage our business with a long-term perspective, we generally don't make significant adjustments to our strategy or cost structure in response to short-term factors. As a result, our operating results may suffer in the short term. In addition, we do not provide earnings guidance or hold one-on-one meetings with institutional investors and research analysts. Because of this policy and limited analyst coverage on our stock, our stock price may be volatile. If our operating results or other operating metrics fail to meet the expectations of outside research analysts and investors, the market price of our common stock may decline.

The future sale of shares of our common stock may negatively affect our stock price.

If our shareholders sell substantial amounts of our common stock, the market price of our common stock could fall. A reduction in ownership by Joe Mansueto or any other large shareholder could cause the market price of our common stock to fall. In addition, the average daily trading volume in our stock is relatively low. The lack of trading activity in our stock may lead to greater fluctuations in our stock price. Low trading volume may also make it difficult for shareholders to make transactions in a timely fashion.

Item 1B. Unresolved Staff Comments

We do not have any unresolved comments from the Staff of the Securities and Exchange Commission regarding our periodic or current reports under the Exchange Act.

Item 2. Properties

As of December 31, 2016, we leased approximately 400,000 square feet of office space for our U.S. operations, primarily for our corporate headquarters located in Chicago, Illinois. We also lease another 400,000 square feet of office space in 26 other countries around the world, including approximately 140,000 square feet in Shenzhen, China. We believe that our existing and planned office facilities are adequate for our needs and that additional or substitute space is available to accommodate growth and expansion.

Item 3. Legal Proceedings

We are involved in legal proceedings and litigation that have arisen in the normal course of our business. While it is difficult to predict the outcome of any particular proceeding, we do not believe the result of any of these matters will have a material adverse effect on our business, operating results, or financial position.

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

Our common stock is listed on the Nasdaq Global Select Market under the symbol MORN.

The following table shows the high and low price per share of our common stock for the periods indicated, as reported on the Nasdaq Global Select Market:

	2016		2015	
	High	Low	High	Low
First Quarter	\$ 88.66	\$ 74.78	\$ 78.51	\$ 62.14
Second Quarter	89.44	76.57	80.93	71.89
Third Quarter	85.49	73.84	86.88	76.60
Fourth Quarter	79.30	67.74	84.99	77.61

As of February 17, 2017, the last reported sale price on the Nasdaq Global Select Market for our common stock was \$79.93 per share, and there were 1,302 shareholders of record of our common stock.

See Note 11 of the Notes to our Consolidated Financial Statements for a description of our equity compensation plans.

The following table shows dividends declared and paid for the periods indicated:

	2016		2015	
	Dividends declared	Dividends paid	Dividends declared	Dividends paid
First Quarter	\$ 0.22	\$ 0.22	\$ 0.19	\$ 0.19
Second Quarter	0.22	0.22	0.19	0.19
Third Quarter	0.22	0.22	0.19	0.19
Fourth Quarter	0.23	0.22	0.22	0.19

We paid four dividends during 2016. While subsequent dividends will be subject to board approval, we expect to pay a regular quarterly dividend of 23 cents per share in 2017.

Any determination to pay dividends in the future will be at the discretion of our board of directors and will be dependent upon our results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law, and other factors deemed relevant by the board of directors. Future indebtedness and loan facilities could also prohibit or restrict our ability to pay dividends and make distributions to our shareholders.

Issuer Purchases of Equity Securities*

Subject to applicable law, we may repurchase shares at prevailing market prices directly on the open market or in privately negotiated transactions in amounts that we deem appropriate.

We have an ongoing authorization, originally approved by our board of directors in September 2010, and subsequently amended, to repurchase up to \$1.0 billion in shares of our outstanding common stock. The authorization expires on December 31, 2017.

The following table presents information related to repurchases of common stock we made through September 30, 2016 and during the three months ended December 31, 2016:

Period:	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced programs	Approximate dollar value of shares that may yet be purchased under the programs
Cumulative through September 30, 2016	9,880,917	\$ 67.00	9,880,917	\$ 337,736,737
October 1, 2016 - October 31, 2016	—	—	—	\$ 337,736,737
November 1, 2016 - November 30, 2016	137,951	72.49	137,951	\$ 327,734,047
December 1, 2016 - December 31, 2016	9,257	73.33	9,257	\$ 327,055,039
Total	10,028,125	\$ 67.09	10,028,125	

Rule 10b5-1 Sales Plans

Our directors and executive officers may exercise stock options or purchase or sell shares of our common stock in the market from time to time. We encourage them to make these transactions through plans that comply with Exchange Act Rule 10b5-1(c). Morningstar will not receive any proceeds, other than proceeds from the exercise of stock options, related to these transactions. The table below, which we are providing on a voluntary basis, shows the Rule 10b5-1 sales plans entered into by our directors and executive officers that were in effect as of February 15, 2016:

Item 6. Selected Financial Data

The selected historical financial data shown below should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and our Consolidated Financial Statements and related notes included elsewhere in this Annual Report on Form 10-K. We have derived our Consolidated Statements of Income Data and Consolidated Cash Flow Data for the years ended December 31, 2016, 2015, and 2014 and Consolidated Balance Sheet Data as of December 31, 2016 and 2015 from our audited Consolidated Financial Statements included in this Annual Report on Form 10-K. The Consolidated Statements of Income Data and Consolidated Cash Flow Data for the years ended December 31, 2013 and 2012 and Consolidated Balance Sheet Data as of December 31, 2014, 2013, and 2012 were derived from our audited Consolidated Financial Statements that are not included in this Annual Report on Form 10-K.

Name and Position	Date of Plan	Plan Termination Date	Number of Shares to be Sold under the Plan	Timing of Sales under the Plan	Number of Shares Sold under the Plan through February 15, 2017	Projected Beneficial Ownership (1)
Gail Landis Director	11/15/2016	2/28/2018	1,500	Shares to be sold under the plan if the stock reaches specified prices	—	3,018

During the fourth quarter of 2016, the previously disclosed Rule 10b5-1 sales plan for Steven Kaplan completed in accordance with its terms.

(1) This column reflects an estimate of the number of shares Gail Landis will beneficially own following the sale of all shares under the Rule 10b5-1 sales plan. This information reflects the beneficial ownership of our common stock on December 31, 2016, and includes shares of our common stock subject to options that were then exercisable or that will have become exercisable by March 1, 2017 and restricted stock units that will vest by March 1, 2017. The estimates do not reflect any changes to beneficial ownership that may have occurred since December 31, 2016. Gail may amend or terminate her Rule 10b5-1 sales plan and may adopt additional Rule 10b5-1 plans in the future.

Consolidated Statements of Income Data

(in millions except per share amounts)	2012	2013	2014	2015	2016
Revenue	\$ 658.3	\$ 698.3	\$ 760.1	\$ 788.8	\$ 788.6
Operating expense	507.6	527.6	654.5 (1)	598.2	617.8
Operating income	150.7	170.7	105.6 (1)	190.6	180.8
Non-operating income, net	3.0	7.3	8.4	3.1	44.1 (2)
Income before income taxes and equity in net income of unconsolidated entities	153.7	178.0	114.0	193.7	224.9
Equity in net income (loss) of unconsolidated entities	2.0	1.4	—	1.8	(0.2)
Income tax expense	52.9	56.0	35.7	62.7	63.7
Consolidated net income from continuing operations	102.8	123.4	78.3	132.8	161.0
Gain on sale of discontinued operations, net of tax	5.2	—	—	—	—
Consolidated net income	108.0	123.4	78.3	132.8	161.0
Net (income) loss attributable to noncontrolling interests	0.1	0.1	—	(0.2)	—
Net income attributable to Morningstar, Inc.	\$ 108.1	\$ 123.5	\$ 78.3	\$ 132.6	\$ 161.0
Net income per share attributable to Morningstar, Inc.:					
Basic:					
Continuing operations	\$ 2.12	\$ 2.68	\$ 1.75	\$ 3.00	\$ 3.74
Discontinued operations	0.11	—	—	—	—
Total	\$ 2.23	\$ 2.68	\$ 1.75	3.00	\$ 3.74
Diluted:					
Continuing operations	\$ 2.10	\$ 2.66	\$ 1.74	\$ 3.00	\$ 3.72
Discontinued operations	0.10	—	—	—	—
Total	\$ 2.20	\$ 2.66	\$ 1.74	\$ 3.00	\$ 3.72
Dividends per common share:					
Dividends declared per common share	\$ 0.425	\$ 0.545	\$ 0.700	\$ 0.790	\$ 0.890
Dividends paid per common share	\$ 0.525	\$ 0.375	\$ 0.680	\$ 0.760	\$ 0.880
Weighted average common shares outstanding:					
Basic	48.5	46.2	44.7	44.2	43.0
Diluted	49.1	46.5	44.9	44.3	43.3

Consolidated Cash Flow Data

(in millions)	2012	2013	2014	2015	2016
Cash provided by operating activities	\$ 153.2	\$ 192.6	\$ 136.6 (1)	\$ 241.5	\$ 213.7
Capital expenditures	(30.0)	(33.6)	(58.3)	(57.3)	(62.8)
Free cash flow (3)	\$ 123.2	\$ 159.0	\$ 78.3 (1)	\$ 184.2	\$ 150.9
Cash provided by (used for) investing activities (4)	\$ 80.2	\$ (14.9)	\$ (31.2)	\$ (79.5)	\$ (274.2)
Cash provided by (used for) financing activities (5)	\$ (272.4)	\$ (172.3)	\$ (76.1)	\$ (127.5)	\$ 123.7

Consolidated Balance Sheet Data

As of December 31 (in millions)	2012	2013	2014	2015	2016
Cash, cash equivalents, and investments	\$ 321.4	\$ 298.6	\$ 224.6	\$ 248.6	\$ 304.0
Working capital	213.5	173.5	97.0	105.5	177.1
Total assets	1,038.3	1,026.8	1,010.3	1,029.0	1,350.9
Deferred revenue (6)	146.0	149.2	146.0	152.0	179.5
Long-term liabilities	54.0	66.0	62.1	84.0	359.2 (7)
Total equity	726.9	691.3	654.4	640.6	696.8

(1) Operating income and free cash flow for 2014 included a \$61.0 million litigation settlement expense and corresponding cash outflow.

(2) Non-operating income in 2016 included a \$37.1 million holding gain related to the purchase of the remaining ownership interest in PitchBook, which was previously a minority investment.

(3) Free cash flow is considered a non-GAAP financial measure under SEC regulations. We present this measure as supplemental information to help investors better understand trends in our business results over time. Our management team uses free cash flow to evaluate our business. Free cash flow is not equivalent to any measure required to be reported under GAAP, nor should this data be considered an indicator of liquidity. Moreover, the free cash flow definition we use may not be comparable to similarly titled measures reported by other companies.

(4) Cash provided by (used for) investing activities consists primarily of cash used for acquisitions, purchases of investments, net of proceeds from the sale of investments, capital expenditures, purchases of equity and cost- method investments, and proceeds from the sale of businesses. The level of investing activities can vary from period to period depending on the level of activity in these categories. Refer to Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources for more information concerning cash used for investing activities.

(5) Cash provided by (used for) financing activities consists primarily of cash used to repurchase outstanding common stock through our share repurchase program and dividend payments. These cash outflows are partially offset by proceeds from our revolving credit facility, stock option exercises, and excess tax benefits. Refer to Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources for more information concerning cash used for financing activities.

(6) We frequently invoice or collect cash in advance of providing services or fulfilling subscriptions for our customers and record these balances as deferred revenue.

(7) Long-term liabilities in 2016 includes \$250.0 million of long-term debt.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The discussion included in this section, as well as other sections of this Annual Report on Form 10-K, contains forward-looking statements as that term is used in the Private Securities Litigation Reform Act of 1995. These statements are based on our current expectations about future events or future financial performance. Forward-looking statements by their nature address matters that are, to different degrees, uncertain, and often contain words such as "may," "could," "expect," "intend," "plan," "seek," "anticipate," "believe," "estimate," "predict," "potential," or "continue." These statements involve known and unknown risks and uncertainties that may cause the events we discuss not to occur or to differ significantly from what we expect. For us, these risks and uncertainties include, among others:

- ▶ liability for any losses that result from an actual or claimed breach of our fiduciary duties;
- ▶ failing to maintain and protect our brand, independence, and reputation;
- ▶ failing to differentiate our products and continuously create innovative, proprietary research tools;
- ▶ failing to respond to technological change, keep pace with new technology developments, or adopt a successful technology strategy;
- ▶ trends in the asset management industry, including the increasing popularity of passively managed investment vehicles.
- ▶ liability related to the storage of personal information related to individuals as well as portfolio and account-level information;
- ▶ liability relating to the acquisition or redistribution of data or information we acquire or errors included therein;
- ▶ compliance failures, regulatory action, or changes in laws applicable to our investment advisory or credit rating operations;
- ▶ the failure of acquisitions and other investments to produce the results we anticipate;
- ▶ downturns in the financial sector, global financial markets, and global economy;
- ▶ the effect of market volatility on revenue from asset-based fees;
- ▶ a prolonged outage of our database, technology-based products and services, or network facilities; and
- ▶ challenges faced by our non-U.S. operations, including the concentration of data and development work at our offshore facilities in China and India.

A more complete description of these risks and uncertainties can be found in Item 1A—Risk Factors of this Annual Report on Form 10-K. If any of these risks and uncertainties materialize, our actual future results may vary significantly from what we expected. We do not undertake to update our forward-looking statements as a result of new information or future events.

All dollar and percentage comparisons, which are often accompanied by words such as "increase," "decrease," "grew," "declined," "was up," "was down," "was flat," or "was similar" refer to a comparison with the same period in the prior year unless otherwise stated.

Understanding Our Company

Key Business Characteristics

Our mission is to create great products that help investors reach their financial goals. We offer an extensive line of products and services for financial advisors, asset managers, retirement plan providers and sponsors, and individual investors. Many of our products are sold through subscriptions or license agreements. As a result, we typically generate recurring revenue.

Revenue

We generate revenue by selling a variety of investment-related products and services. We sell many of our products and services, including Morningstar Data, Morningstar Advisor Workstation, Morningstar Direct, Morningstar Research, and PitchBook Data, through license agreements. Our license agreements typically range from one to three years. We sell some of our other products, such as Premium Membership service on Morningstar.com, via subscriptions. These subscriptions are mainly offered for a one-year term, although we offer terms ranging from one month to three years. We also sell advertising on our websites throughout the world. In our credit ratings business, we generate transaction-based revenue for our ratings on new issues of commercial mortgage-backed securities and other structured credits.

Our investment management business has multiple fee structures, which vary by client and region. In general, we seek to receive asset-based fees for any work we perform that involves managing investments or acting as a subadvisor to investment portfolios. For any individual contract, we may receive flat fees, variable asset-based fees, or a combination of the two. Some of our contracts include minimum fee levels that provide us with a flat payment up to a specified asset level, above which we also receive variable asset-based fees. In the majority of our contracts that include variable asset-based fees, we bill clients quarterly in arrears based on

average assets for the quarter. Other contracts may include provisions for monthly billing or billing based on assets as of the last day of the billing period rather than on average assets.

In our Workplace Solutions area, our contracts may include one-time setup fees, technology licensing fees, asset-based fees for managed retirement accounts, fixed and variable fees for advice and guidance, or a combination of these fee structures. We also offer plan sponsor advice and custom target-date consulting arrangements. Fees for these services may be based on the level of assets under advisement.

For Morningstar Managed Portfolios, we charge asset-based fees, which are based on a tiered schedule that depends on the client's account balance.

Deferred Revenue

We invoice some of our clients and collect cash in advance of providing services or fulfilling subscriptions for our customers. We use some of this cash to fund our operations and invest in new product development. Deferred revenue is the second largest liability on our Consolidated Balance Sheets and, at the end of 2016, totaled \$179.5 million (of which \$165.4 million was classified as a current liability with an additional \$14.1 million included in other long-term liabilities). At the end of 2015, the amount of deferred revenue was \$152.0 million (of which \$140.7 million was classified as a current liability with an additional \$11.3 million included in other long-term liabilities). We expect to recognize this deferred revenue in future periods as we fulfill the service obligations under our subscription, license, and service agreements.

In recent years, our deferred revenue balance has increased at a more moderate rate, partly because we've been issuing more quarterly and monthly invoices versus up-front, annual invoices. In addition, as we've discontinued some subscription-based products such as Principia, we have less subscription-based revenue contributing to the deferred revenue balance. Our acquisition of PitchBook in December 2016 also contributed approximately \$24.0 million of deferred revenue.

Significant Operating Leverage

Our business requires significant investments to create and maintain proprietary software, databases, and content. While the fixed costs of the investments we make in our business are relatively high, the variable cost of adding customers is relatively low. This reflects our business focus on Internet-based platforms and assets under management. At times, we may make investments in building our databases and content that cause weaker short-term operating results. During other periods, our profitability may improve because we're able to increase revenue without increasing our cost base at the same rate. When revenue decreases, however, we may not be able to adjust our cost base at a corresponding rate.

Operating Expense

We classify our operating expense into separate categories for cost of revenue, sales and marketing, general and administrative, and depreciation and amortization, as described below. We include stock-based compensation expense, as appropriate, in each of these categories.

- ▷ *Cost of revenue.* This category includes compensation expense for employees who produce the products and services we deliver to our customers. For example, this category covers production teams and analysts who write investment research reports. It also includes compensation expense for programmers, designers, and other employees who develop new products and enhance existing products. In some cases, we capitalize the compensation costs associated with certain software development projects. This reduces the expense that we would otherwise report in this category. Cost of revenue also includes other expense such as third-party data purchases and data lines.
- ▷ *Sales and marketing.* This category includes compensation expense for our sales teams, product managers, and other marketing professionals. We also include the cost of advertising, direct mail campaigns, and other marketing and promotion efforts in this category.
- ▷ *General and administrative.* This category includes compensation expense for our management team and other corporate functions, including employees in our compliance, finance, human resources, and legal departments. It also includes costs for corporate systems and facilities.

▷ *Depreciation and amortization.* Our capital expenditures are mainly for capitalized software development costs, information technology equipment, and leasehold improvements. We depreciate property and equipment primarily using the straight-line method based on the useful lives of the assets, which range from three to seven years. We amortize leasehold improvements over the lease term or their useful lives, whichever is shorter. We amortize capitalized software development costs over their estimated economic life, generally three years. We also include amortization related to identifiable intangible assets, which is mainly driven by acquisitions, in this category. We amortize intangible assets using the straight-line method over their estimated economic useful lives, which range from one to 25 years.

International Operations

As of December 31, 2016, we had majority-owned operations in 26 countries outside of the United States and included their results of operations and financial condition in our consolidated financial statements. We account for certain minority-owned investments, including Morningstar Japan K.K. (MJKK), using the equity method.

How We Evaluate Our Business

When our analysts evaluate a stock, they focus on assessing the company's estimated intrinsic value, which is based on estimated future cash flows, discounted to their value in today's dollars. Our approach to evaluating our own business works the same way.

Our goal is to increase the intrinsic value of our business over time, which we believe is the best way to create value for our shareholders. We do not make public financial forecasts for our business because we want to avoid creating any incentives for our management team to make speculative statements about our financial results that could influence our stock price or take actions that help us meet short-term forecasts but may not build long-term shareholder value.

We provide three specific measures that can help investors generate their own assessment of how our intrinsic value has changed over time:

- ▷ Revenue (including organic revenue);
- ▷ Operating income (loss); and
- ▷ Free cash flow, which we define as cash provided by or used for operating activities less capital expenditures.

Organic revenue and free cash flow are not measures of performance set forth under GAAP (generally accepted accounting principles).

Organic revenue and free cash flow are not measures of performance set forth under GAAP (generally accepted accounting principles).

We define organic revenue as consolidated revenue excluding acquisitions, divestitures, and foreign currency translations. We present organic revenue because we believe it helps investors better compare our period-to-period results, and our management team uses this measure to evaluate the performance of our business.

We present free cash flow as supplemental information to help investors better understand trends in our business results over time. Our management team uses free cash flow to evaluate our business. Free cash flow is not equivalent to any measure required under GAAP and should not be considered an indicator of liquidity. Moreover, the free cash flow definition we use may not be comparable to similarly titled measures reported by other companies.

To evaluate how successful we've been in maintaining existing business for products and services that have renewable revenue, we calculate retention and renewal rates using two different methods. For subscription-based products, we calculate a retention rate based on the number of subscriptions retained during the year as a percentage of the number of subscriptions up for renewal. For products sold through contracts and licenses, we use the contract value method, which is based on tracking the dollar value of renewals compared with the total dollar value of contracts up for renewal during the period. We include changes in the contract value in the renewal amount, unless the change specifically results from adding a new product that we can identify. We also include variable-fee contracts in this calculation and use the previous quarter's actual revenue as the base rate for calculating the renewal percentage. The renewal rate excludes setup and customization fees, migrations to other Morningstar products, and contract renewals that were pending as of January 31, 2017.

The Year 2016 in Review

We monitor developments in the economic and financial information industry on an ongoing basis. We use these insights to help inform our company strategy, product development plans, and marketing initiatives.

After posting relatively modest returns in 2015 and beginning 2016 with significant volatility, the U.S. stock market finished 2016 on a stronger note. Morningstar's U.S. Market Index, a broad market benchmark, ended the year with a 12.4% gain. Morningstar's Global Markets ex-U.S. Index finished the year up 6.4%.

Despite the more favorable market, the fund industry showed moderate growth in 2016. Total U.S. mutual fund assets edged up to \$16.3 trillion as of December 31, 2016, compared with \$15.6 trillion as of December 31, 2015, based on data from the Investment Company Institute (ICI). Based on Morningstar's analysis of fund flow trends, long-term mutual funds had aggregate net inflows of about \$160 billion in 2016, down from about \$200 billion in 2015.

Investors have also continued to favor passively managed index funds rather than actively managed portfolios—a trend that continued accelerating in 2016. In 2016, passively managed funds had net inflows of more than \$500 billion, while actively managed mutual funds suffered about \$340 billion in net outflows.

ETFs continued to increase in popularity relative to traditional mutual funds. The U.S. ETF industry closed out 2016 with \$2.5 trillion in assets under management based on ICI data, up from about \$2.1 trillion as of December 2015.

Trends in online advertising by financial services companies were mixed in 2016. A report published by eMarketer in September 2016 estimated that global online advertising spending would increase by about 20% across all industries in 2016. However, sales trends for some sites have been weaker because of the industry-wide shift toward programmatic buying, which allows advertisers to digitally place keyword advertisements on a broad range of sites instead of working directly with content providers to place advertisements on one site.

Finally, political and regulatory uncertainty has made some of our clients more cautious, resulting in longer-than-usual sales cycles for some products and lower revenue growth for some of our license-based products. In 2016, the referendum by voters in the United Kingdom to exit the European Union added to this uncertainty. During any period of heightened market volatility and uncertainty, we typically experience delays in completing new client contracts and renewals. As clients spend more time trying to evaluate the long-term effects of the United Kingdom leaving the European Union as well as other geopolitical changes and risks, they may be reluctant to commit to larger contracts. This creates some headwinds for us in terms of both new business and renewals.

Long-Term Trends and Regulatory Environment

In addition to industry developments in 2016, there are several longer-term trends we consider relevant to our business, as outlined below.

In the wake of the financial crisis of 2008 and 2009, regulators have continued to implement new frameworks for financial services companies globally. Many of these rules relate to financial advisor compensation, fees and expenses, investor disclosure, and the use of hedge funds and alternative investments.

In the United Kingdom, for example, the Retail Distribution Review (RDR), which emphasizes increased regulation of advisory fees, higher professional standards for financial advisors, and “whole of market” investment solutions, became effective in January 2013. The RDR also restricted the use of commission payments for products sold to individual investors, although UK regulators are reportedly considering changes to this restriction.

In the European Union, the new version of the Markets in Financial Instruments Directive, also known as MiFID II, is now scheduled to go into effect in January 2018. The main provisions include, among other things, limits on portfolio managers' use of third-party research, quality and organizational rules regarding the provision of advice, additional governance requirements for the manufacturing and distribution of financial instruments and structured deposits, requirements for firms to provide clients with details of all costs and charges related to their investments, and new rules for disclosing the cumulative effect of costs on investor returns.

In Australia, the government has continued to implement the series of Future of Financial Advice reforms that began in July 2013. Some of these reforms include requirements relating to annual fee disclosure and compensation structures for financial advisors. In response, we believe financial advisors have become more focused on client engagement to demonstrate the value of the services they provide.

In the United States, the U.S. Department of Labor (DOL) published a final version of a new fiduciary standard that would expand the definition of a fiduciary for certain financial advisors who provide advice related to retirement planning. The new rule was previously scheduled to go into effect in April 2017. However, President Trump recently signed an executive order directing the Department of Labor to review the rule. It's unclear if implementation of the rule will be delayed or rolled back from what was previously anticipated.

Despite this uncertainty, we believe recent shifts, such as a greater emphasis on serving investors' interests and lowering fees, are fundamental changes, that will continue. We've introduced several new product offerings and bundled solutions to help financial advisors determine, demonstrate, and document that their advice is in the best interest of the investor. We believe Morningstar is well-positioned to help our clients adapt to this new landscape and have had many positive discussions with financial advisors and asset managers about the solutions we can provide. In particular, we've increased our manager research coverage in response to growing demand for information that helps financial advisors show investors the thought process behind their investment recommendations.

Supplemental Operating Metrics (Unaudited)

The tables below summarize our key product metrics and other supplemental data.

Our business	As of December 31,				
	2016	2015	2014	2016 change	2015 change
Morningstar.com Premium Membership subscriptions (U.S.)	118,339	120,557	123,274	(1.8)%	(2.2)%
Morningstar.com registered users (U.S.)	8,892,203	8,529,792	8,189,569	4.2%	4.2%
Advisor Workstation clients (U.S.)	175	189	181	(7.4)%	4.4%
Morningstar Office licenses (U.S.)	4,286	4,342	4,268	(1.3)%	1.7%
Morningstar Direct licenses	12,492	11,428	10,055	9.3%	13.7%
Assets under management and advisement (approximate) (\$bil) (1)					
Workplace Solutions (Retirement)					
Managed Accounts (2)	\$ 46.9	\$ 40.3	\$ 36.8	16.4%	9.5%
Plan sponsor advice	34.3	30.7	26.7	11.7%	15.0%
Custom models	23.2	18.7	13.3	24.1%	40.6%
Workplace Solutions (total)	\$ 104.4	\$ 89.7	\$ 76.8	16.4%	16.8%
Morningstar Investment Managed					
Morningstar Managed Portfolios (3)	\$ 29.8	\$ 25.8	\$ 23.9	15.5%	7.9%
Institutional Asset Management	58.0	59.4 (4)	64.2 (4)	(2.4)%	(7.5)%
Asset Allocation Services	7.2	7.6 (4)	4.9 (4)	(5.3)%	55.1%
Manager Selection Services	1.2	2.1 (4)	2.2 (4)	(42.9)%	(4.5)%
Morningstar Investment Management (total)	\$ 96.2	\$ 94.9	\$ 95.2	1.4%	(0.3)%
Average assets under management and advisement (\$bil)	\$ 192.6	\$ 179.7	\$ 167.3	7.2%	7.4%
Number of commercial mortgage-backed securities (CMBS) new-issue ratings completed	27	56	52	(51.8)%	7.7%
Asset value of CMBS new-issue ratings (\$bil)	\$ 17.9	\$ 46.4	\$ 33.7	(61.4)%	37.7%
Our employees (approximate)					
Worldwide headcount	4,595 (5)	3,930	3,760	16.9%	4.5%

Key product revenue (6) (in millions)	Year ended December 31,				
	2016	2015	2014	2016 change	2015 change
Morningstar Data	\$ 152.1	\$ 144.5	\$ 139.5	5.3%	3.6%
Morningstar Direct	110.5	101.7	91.8	8.7%	10.8%
Morningstar Investment Management	98.4	98.8	95.3	(0.4)%	3.6%
Morningstar Advisor Workstation	82.4	81.4 (7)	79.8 (7)	1.2%	1.9%
Workplace Solutions	71.3	66.6	57.3	7.0%	16.3%
Revenue by Type (6)	2016	2015	2014	2016 change	2015 change
License-based (8)	\$ 573.4	\$ 552.3	\$ 540.2	3.8%	2.2%
Asset-based (9)	169.8	163.6	154.9	3.8%	5.6%
Transaction-based (10)	55.4	72.9	65.0	(24.1)%	12.3%

(1) The asset totals shown above (including assets we either manage directly or for which we provide consulting or subadvisory work) only include assets for which we receive basis-point fees. Some of our client contracts include services for which we receive a flat fee, but we do not include those assets in the total reported above.

Excluding changes related to new contracts and cancellations, changes in the value of assets under advisement can come from two primary sources: gains or losses related to overall trends in market performance, and net inflows or outflows caused when investors add to or redeem shares from these portfolios.

In the majority of our Investment Management business (except for Morningstar Managed Portfolios) it's difficult for us to quantify these cash inflows and outflows. The information we receive from most of our clients does not separately identify the effect of cash inflows and outflows on asset balances for each period. We also cannot specify the effect of market appreciation or depreciation because the majority of our clients have discretionary authority to implement their own portfolio allocations.

(2) Many factors can cause changes in assets under management and advisement for our managed retirement accounts, including employer and employee contributions, plan administrative fees, market movements, and participant loans and hardship withdrawals. The information we receive from the plan providers does not separately identify these transactions or the changes in balances caused by market movement.

(3) We revised the asset totals for Morningstar Managed Portfolios to include third-party platform assets, which were previously not included in the total.

(4) Revised to include assets from Ibbotson Associates Japan K.K.

(5) Includes approximately 330 employees who joined Morningstar as a result of the PitchBook acquisition in December 2016.

(6) Key product revenue and revenue by type includes the effect of foreign currency translations.

(7) Revised to exclude Morningstar Office.

(8) License-based revenue includes Morningstar Data, Morningstar Direct, Morningstar Advisor Workstation, Morningstar Enterprise Components, Morningstar Research, and other similar products.

(9) Asset-based revenue includes Morningstar Investment Management, Workplace Solutions, and Morningstar Indexes.

(10) Transaction-based revenue includes Morningstar Credit Ratings, Internet advertising sales, and Conferences.

Consolidated Results

Key Metrics (in millions)	2016	2015	2014	2016 Change	2015 Change
Revenue	\$ 798.6	\$ 788.8	\$ 760.1	1.2%	3.8%
Operating income	\$ 180.8	\$ 190.6	\$ 105.6 (1)	(5.2)%	80.5%
Operating margin	22.6%	24.2%	13.9%	(1.6) pp	10.3 pp
Cash used for investing activities	\$ (274.2)	\$ (79.5)	\$ (31.2)	244.9%	154.8%
Cash provided by (used for) financing activities	\$ 123.7	\$ (127.5)	\$ (76.1)	(197.0)%	67.5%
Cash provided by operating activities	\$ 213.7	\$ 241.5	\$ 136.6 (1)	(11.5)%	76.8%
Capital expenditures	(62.8)	(57.3)	(58.3)	9.6%	(1.7)%
Free cash flow	\$ 150.9	\$ 184.2	\$ 78.3 (1)	(18.1)%	135.2%

pp—percentage points

(1) Operating income and free cash flow for 2014 include a \$61.0 million litigation settlement expense and corresponding cash outflow.

We define free cash flow as cash provided by or used for operating activities less capital expenditures. Please refer to the discussion in How We Evaluate our Business for more detail.

Consolidated Revenue

(in millions)	2016	2015	2014	2016 Change	2015 Change
Consolidated revenue	\$ 798.6	\$ 788.8	\$ 760.1	1.2%	3.8%

In 2016 and 2015, our consolidated revenue rose 1.2% and 3.8%, respectively. Foreign currency movements were a factor in our 2016 results, although to a lesser extent than in 2015, as continued strength in the U.S. dollar reduced revenue from our international operations when translated into U.S. dollars. This has been an ongoing trend for several years and reduced revenue by \$9.5 million in 2016 and \$26.9 million in 2015.

We experienced modest revenue growth during 2016, as well as significant differences in trends between products, especially revenue from transaction-based fees.

Some of the main contributors to the 2016 revenue increase were Morningstar Direct, Morningstar Data, and Workplace Solutions. Positive results for these products were partially offset by decreases in Morningstar Credit Ratings (our structured credit ratings business) and Internet advertising sales on Morningstar.com.

During 2016, we experienced more moderate growth rates for license-based products such as Morningstar Direct and Morningstar Data. Revenue from Morningstar Direct was the biggest contributor to growth in both 2016 and 2015, with revenue increasing by \$8.8 million in 2016 and \$9.9 million in 2015. The number of licenses for Morningstar Direct increased to about 12,500 worldwide at the end of 2016, compared with about 11,400 at the end of 2015 and 10,000 at the end of 2014, with modest growth in both the United States and internationally. Growth in Morningstar Direct reflects additional licenses for both new and existing clients.

Morningstar Data revenue also increased \$7.6 million in 2016, mainly reflecting new contracts and renewals for managed products data and real-time data.

In December 2016, we acquired the remaining interest in PitchBook Data, Inc. (PitchBook), which contributed \$4.1 million of revenue during the one-month period that PitchBook was included in our consolidated results for 2016.

Products and services that mainly generate revenue from asset-based fees increased \$6.2 million during 2016, mainly driven by strong growth in Workplace Solutions and Morningstar Managed Portfolios.

Revenue from Morningstar Credit Ratings decreased \$11.3 million. Negative trends in industry-wide issuance volume for commercial mortgage-backed securities (CMBS) continued to weigh down revenue for our credit ratings business. Industry-wide issuance volume for CMBS during 2016 was down about 25% compared with 2015, based on data from SIFMA, but showed some signs of improvement during the second half of 2016. In addition to negative trends in issuance volume, competitive conditions have also created some revenue pressure for us in this area.

Revenue from Internet advertising sales on Morningstar.com also declined \$5.7 million in 2016 as advertisers have continued shifting to programmatic buying platforms that target users on other sites. This has been an ongoing trend for several quarters.

The asset-based fees we earn are generally based on average asset levels during each quarter. Average assets under management and advisement (calculated based on available average quarterly or monthly data) were approximately \$192.6 billion in 2016, compared with \$179.7 billion in 2015 and \$167.3 billion in 2014. We had \$138.7 million in revenue from asset-based fees in 2016, a 18.6% increase over 2015. In 2014, revenue from asset-based fees was \$94.1 million. Revenue from asset-based fees made up approximately 17% of consolidated revenue in 2016, an increase of 2.0 percentage points compared with 15% in 2015.

In 2015, some of the main contributors to the 3.8% increase in consolidated revenue were Morningstar Direct, Workplace Solutions, Morningstar Credit Ratings, Morningstar Data, and Morningstar Advisor Workstation. Positive results for these products were partially offset by decreases in Morningstar Enterprise Components and Principia, a product we discontinued.

Organic revenue

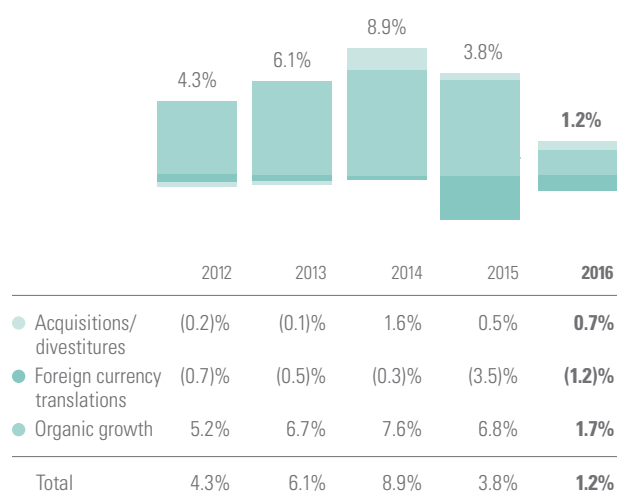
To make it easier to compare our results in different periods, we provide information about organic revenue, which reflects our underlying business excluding acquisitions, divestitures, and the effect of foreign currency translations. During 2016, we acquired Requisight, LLC (RightPond), InvestSoft Technology, Inc. (InvestSoft), and PitchBook Data, Inc. (PitchBook). In November 2015, we acquired Total Rebalance Expert (tRx).

We exclude revenue from businesses acquired or divested from organic revenue for a period of 12 months after we complete the acquisition or divestiture.

In 2016, we had \$5.5 million in incremental revenue from acquisitions, primarily from PitchBook. In addition, foreign currency translations reduced revenue by about \$9.5 million in 2016, mainly because of the weaker British pound and Canadian dollar. Excluding acquisitions, divestitures, and foreign currency translations, organic revenue was up 1.7% in 2016.

In 2015, we had \$4.1 million in incremental revenue from acquisitions, primarily from ByAllAccounts and HelloWallet. In addition, foreign currency translations reduced revenue by about \$26.9 million in 2015, mainly because of the weaker Euro, Australian dollar, British pound, and Canadian dollar. Excluding acquisitions, divestitures, and foreign currency translations, organic revenue was up 6.8% in 2015.

Contributors to Revenue Growth



The tables below reconcile consolidated revenue with organic revenue (revenue excluding acquisitions, divestitures, and the effect of foreign currency translations):

2016 vs. 2015 (in millions)	2016	2015	Change
Consolidated revenue	\$ 798.6	\$ 788.8	1.2%
Less: acquisitions	(5.5)	—	NMF
Less: divestitures	—	—	—
Unfavorable effect of foreign currency translations	9.5	—	NMF
Organic revenue	\$ 802.6	\$ 788.8	1.7%

2015 vs. 2014 (in millions)	2015	2014	Change
Consolidated revenue	\$ 788.8	\$ 760.1	3.8%
Less: acquisitions	(4.1)	—	NMF
Less: divestitures	—	—	—
Unfavorable effect of foreign currency translations	26.9	—	NMF
Organic revenue	\$ 811.6	\$ 760.1	6.8%

NMF—Not meaningful

Organic revenue (revenue excluding acquisitions, divestitures, and the effect of foreign currency translations) is considered a non-GAAP financial measure. The definition of organic revenue we use may not be the same as similarly titled measures used by other companies. Organic revenue should not be considered an alternative to any measure of performance as promulgated under GAAP.

Revenue by region

(in millions)	Year ended December 31				
	2016	2015	2014	2016 Change	2015 Change
United States	\$ 590.5	\$ 585.1	\$ 550.8	0.9%	6.2%
United Kingdom	61.1	64.2	61.8	(4.8)%	3.9%
Continental Europe	62.6	58.8	62.7	6.5%	(6.2)%
Australia	32.2	30.5	35.0	5.6%	(12.9)%
Canada	28.2	27.9	30.8	1.1%	(9.4)%
Asia	20.0	18.5	15.8	8.1%	17.1%
Other	4.0	3.8	3.2	5.3%	18.8%
Total International	208.1	203.7	209.3	2.2%	(2.7)%
Consolidated revenue	\$ 798.6	\$ 788.8	\$ 760.1	1.2%	3.8%

International revenue made up about 26% of our consolidated revenue in both 2016 and 2015, compared with 28% in 2014. About 60% of our international revenue is from Continental Europe and the United Kingdom. We also have a fairly large revenue base in Australia and Canada.

Revenue from international operations increased \$4.4 million, or 2.2%, in 2016 and international organic revenue increased 6.8%.

In 2015, revenue from international operations decreased 2.7% and international organic revenue increased 10.2%.

The tables below present a reconciliation from international revenue to international organic revenue (international revenue excluding acquisitions, divestitures, and the effect of foreign currency translations):

(in millions)	2016	2015	Change
International revenue	\$ 208.1	\$ 203.7	2.2%
Less: acquisitions	—	—	—
Less: divestitures	—	—	—
Unfavorable effect of foreign currency translations	9.5	—	NMF
International organic revenue	\$ 217.6	\$ 203.7	6.8%

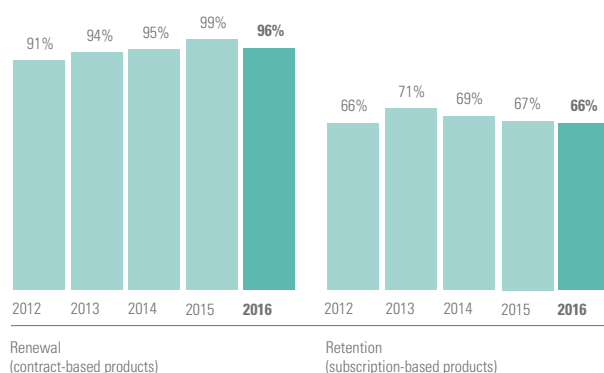
(in millions)	2015	2014	Change
International revenue	\$ 203.7	\$ 209.3	(2.7)%
Less: acquisitions	—	—	—
Less: divestitures	—	—	—
Unfavorable effect of foreign currency translations	26.9	—	NMF
International organic revenue	\$ 230.6	\$ 209.3	10.2%

International revenue as a percentage of consolidated revenue has been relatively flat the past few years, partly reflecting negative effects of foreign currency translations.

International organic revenue (international revenue excluding acquisitions, divestitures, and the effect of foreign currency translations) is considered a non-GAAP financial measure. The definition of international organic revenue we use may not be the same as similarly titled measures used by other companies. International organic revenue should not be considered an alternative to any measure of performance as promulgated under GAAP.

Retention and Renewal Rates

As discussed in How We Evaluate Our Business, we calculate retention and renewal rates to help measure how successful we've been in maintaining existing business for products and services that have renewable revenue. The graph below illustrates these two metrics over the past five years:



For contract-based products and services (such as Morningstar Data, Investment Advisory services, Morningstar Direct, and Morningstar Advisor Workstation), we estimate that our weighted average annual renewal rate was approximately 96% in 2016, compared with 99% in 2015. The decrease mainly reflects lower renewal rates for some larger products, including Morningstar Direct, Morningstar Investment Management, Workplace Solutions, and Morningstar Research. The figure for contract-based products includes the effect of price changes and changes to the contract value upon renewal, as well as changes in the value of variable-fee contracts.

In 2016, we estimate that our annual retention rate for subscription-based products, including Morningstar.com's Premium Membership service, Morningstar Office, and newsletter products, was approximately 66%, compared with 67% in 2015. The decline was mainly driven by slightly lower retention rates for Morningstar.com Premium Memberships and Morningstar Office.

Consolidated Operating Expense

(in millions)	2016	2015	2014	2016 Change	2015 Change
Cost of revenue	\$ 344.3	\$ 330.1	\$ 318.6	4.3%	3.6%
<i>% of revenue</i>	43.1%	41.9%	41.9%	1.2 pp	— pp
Sales and marketing	97.6	96.6	111.1	1.0%	(13.1)%
<i>% of revenue</i>	12.2%	12.2%	14.6%	— pp	(2.4) pp
General and administrative	105.2	107.1	108.9	(1.7)%	(1.7)%
<i>% of revenue</i>	13.2%	13.6%	14.3%	(0.4) pp	(0.7) pp
Depreciation and amortization	70.7	64.4	54.9	9.9%	17.3%
<i>% of revenue</i>	8.9%	8.2%	7.2%	0.7 pp	1.0 pp
Litigation settlement	—	—	61.0	—%	NMF
<i>% of revenue</i>	—%	—%	8.0%	—	NMF
Total operating expense	\$ 617.8	\$ 598.2	\$ 654.5	3.3%	(8.6)%
<i>% of revenue</i>	77.4%	75.8%	86.1%	1.6 pp	(10.3) pp

In 2016, our operating expense was up \$19.6 million, or 3.3%. Because of the continued strength of the U.S. dollar, foreign currency translations reduced our operating expense by \$11.5 million in 2016.

Compensation expense (including salaries and other company-sponsored benefits) increased \$26.2 million in 2016. We had approximately 4,595 employees worldwide at the end of 2016, compared with 3,930 in 2015. This increase reflects continued investment in our key growth initiatives and mainly includes technology, sales, and analyst roles in the United States, India, and China. The growth in compensation expense was partially offset by a \$13.1 million reduction in bonus expense during 2016 compared to 2015. Bonus expense was lower mainly because we did not meet our internal targets for revenue growth during 2016.

Depreciation expense, professional fees, and production expense also increased during 2016 as we continued to invest in our business. We have also accelerated development of our major software platforms and therefore had an increase in capitalized software development, which reduced operating expense.

In 2016, we capitalized \$28.2 million of software development expense for ongoing enhancements of key platforms and new development of upgraded software platforms. In comparison, we capitalized \$21.8 million of software development expense in 2015.

Sales commission expense decreased \$2.8 million in 2016, reflecting declines in new sales closed.

Our acquisition of PitchBook contributed \$7.5 million of operating expense, primarily for salaries, professional fees, and amortization expense during the one-month period that PitchBook was included in our consolidated results for 2016.

In 2015, our operating expense was down \$56.3 million, or 8.6%. We settled a legal dispute for \$61.0 million in 2014, which did not recur in 2015. In addition, foreign currency translations reduced operating expense by \$23.9 million during 2015.

Commission expense decreased \$14.7 million in 2015, mainly because we changed to a new sales commission structure that requires a different accounting treatment. In the first quarter of 2014, we started expensing sales commissions as incurred instead of amortizing them over the term of the underlying contracts. However, we continued to amortize the prepaid commission balance from the previous commission plan. This amortization triggered an additional \$3.5 million and \$9.8 million of sales commission cost in 2015 and 2014, respectively.

Legal and other professional fees were down \$4.2 million in 2015, mainly reflecting litigation-related fees in 2014 that did not recur in 2015.

Also reducing operating expense was an increase in capitalized software development. In 2015, we capitalized \$21.8 million of software development expense for ongoing enhancements of key platforms and new development of upgraded software platforms. In comparison, we capitalized a total of \$18.8 million of software development expense in 2014.

Compensation expense (including salaries, bonus, and other company-sponsored benefits) increased \$6.3 million in 2015. While headcount remained relatively flat during the first nine months of the year, net headcount increased by about 100 employees during the fourth quarter as we continued to invest in our key growth initiatives.

Cost of revenue

Cost of revenue is our largest category of operating expense, representing about one-half of our total operating expense. Our business relies heavily on human capital, and cost of revenue includes the compensation expense for employees who produce our products and services. We include compensation expense for approximately 80% of our employees in this category.

Cost of revenue increased \$14.2 million in 2016. Higher salary expense of \$19.9 million was the largest contributor to the increase and was mainly driven by additional headcount. Higher company-sponsored benefits and software subscriptions also contributed to the growth in this category.

Partially offsetting these increases was a \$9.1 million decrease in bonus expense, as well as an increase in capitalized software development. As mentioned above, we capitalized \$28.2 million associated with software development activities in 2016, compared with \$21.8 million included in 2015.

Our acquisition of PitchBook contributed \$1.3 million of operating expense in this cost category, primarily for salary expense during the one-month period that PitchBook was included in our consolidated results for 2016.

In 2015, cost of revenue was up \$11.5 million. Higher salary expense of \$7.9 million was the main reason for the increase, reflecting new hires we made to support the growth of our business as well as annual merit increases. Higher expense for bonus, professional fees, and production expense also contributed to the change in this category.

Partially offsetting these increases was a higher level of capitalized software development, which reduced cost of revenue during 2015. We capitalized \$21.8 million associated with software development activities in 2015 versus \$18.8 million in 2014.

As a percentage of revenue, cost of revenue increased 1.2 percentage points in 2016 and was unchanged in 2015.

Sales and marketing

Sales and marketing expense increased \$1.0 million in 2016, reflecting a \$2.7 million increase in compensation expense (including salaries and other company-sponsored benefits) and a \$1.0 million increase in advertising and marketing spend. Partly offsetting these increases were decreases in sales commission expense of \$1.9 million and bonus expense of \$1.0 million.

Our acquisition of PitchBook contributed \$2.7 million of operating expense in this cost category, primarily for salary and sales commission expense during the one-month period that PitchBook was included in our consolidated results for 2016.

Sales and marketing expense decreased \$14.5 million in 2015. Lower sales commission expense of \$13.9 million (mainly reflecting the change in sales commission structure discussed above) as well as lower salary expense of \$2.1 million were the primary contributors to the decrease. Partly offsetting these decreases was a \$3.0 increase in advertising and marketing expense.

As a percentage of revenue, sales and marketing expense was unchanged in 2016 and down 2.4 percentage points in 2015 compared with 2014.

General and administrative

General and administrative expense decreased \$1.9 million in 2016, mainly because of a \$3.0 million decline in bonus expense and a \$2.0 million decline in stock-based compensation expense. Partially offsetting these decreases was an increase of \$3.8 million in professional fees in connection with legal and compliance and other company initiatives. Compensation expense (including salaries and other company-sponsored benefits) also increased \$0.9 million.

Our acquisition of PitchBook contributed \$2.5 million of operating expense in this cost category, primarily for salary expense, professional fees, and stock-based compensation expense during the one-month period that PitchBook was included in our consolidated results for 2016.

General and administrative expense decreased \$1.8 million in 2015. Legal fees decreased \$3.5 million as a result of litigation-related legal fees in 2014 that did not recur in 2015. Salary expense also decreased \$0.9 million in 2015. These decreases were partially offset by an increase of \$3.1 million in rent and utilities expense, mainly because of new and expanded office space in New York and London.

General and administrative expense as a percentage of revenue was down 0.4 percentage points in 2016 and 0.7 percentage points in 2015.

Depreciation and amortization

Overall, depreciation and amortization increased \$6.3 million in 2016 and \$9.5 million in 2015.

Depreciation expense rose \$8.9 million in 2016, mainly driven by higher capital expenditures for computer equipment and additional depreciation expense for capitalized software development. Intangible amortization expense decreased \$2.6 million in 2016 as certain intangible assets from some previous acquisitions are now fully amortized.

Our acquisition of PitchBook contributed \$0.9 million of operating expense in this cost category, primarily for amortization expense during the one-month period that PitchBook was included in our consolidated results for 2016.

Depreciation expense rose \$9.8 million in 2015, mainly because of higher capital expenditures for computer software and additional depreciation expense for capitalized software development. Intangible amortization expense increased \$0.3 million in 2015, as certain intangible assets from some previous acquisitions were fully amortized.

We expect that amortization of intangible assets will be an ongoing cost. We estimate that this expense will total approximately \$24.4 million in 2017, an increase from 2016, primarily because of the PitchBook acquisition. Our estimates of future amortization expense for intangible assets may be affected by additional acquisitions, dispositions, changes in the estimated average useful lives, and foreign currency translation.

Litigation settlement

We recorded a \$61.0 million litigation settlement expense in the second quarter of 2014 that did not recur in 2015 or 2016. This expense is included in our results of operations for the year ended December 31, 2014 and contributed nearly half of the increase in operating expense in 2014.

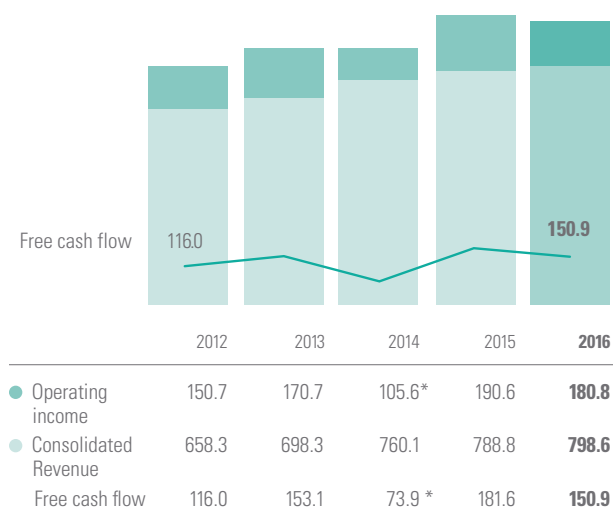
Consolidated Operating Income

(in millions)	2016	2015	2014
Operating income	\$ 180.8	\$ 190.6	\$ 105.6
% change	(5.2)%	80.5%	(38.1)%
Operating margin	22.6%	24.2%	13.9%
Change	(1.6) pp	(10.3) pp	(10.5) pp

Consolidated operating income decreased \$9.8 million in 2016 as revenue increased \$9.8 million and operating expense increased \$19.6 million. Operating margin was 22.6%, down 1.6 percentage points compared with 2015.

Consolidated operating income increased \$85.0 million in 2015 as our revenue increased \$28.7 million and operating expense decreased by \$56.3 million. Operating margin was 24.2%, an increase of 10.3 percentage points compared with 2014. The decrease in operating expense in 2015 mainly reflects the \$61.0 million litigation settlement expense incurred in 2014 that did not recur in 2015.

Key Metrics (\$mil)



*Operating income and free cash flow for 2014 include a \$61.0 million litigation settlement expense and corresponding cash outflow.

Non-Operating Income, Equity in Net Income (Loss) of Unconsolidated Entities, and Effective Tax Rate and Income Tax Expense

Non-Operating Income

The following table presents the components of non-operating income, net:

(in millions)	2016	2015	2014
Interest income	\$ 1.8	\$ 1.8	\$ 2.6
Interest expense	(1.5)	(0.5)	(0.5)
Gain on sale of investments, net	0.6	0.6	1.0
Holding gain upon acquisition of additional ownership of equity-method investments	37.1	—	5.2
Other income, net	6.1	1.2	0.1
Non-operating income, net	\$ 44.1	\$ 3.1	\$ 8.4

Interest income mainly reflects interest from our investment portfolio. Interest expense mainly relates to the outstanding principal balance of the credit facility we established in 2014.

Non-operating income in 2016 includes the \$37.1 million gain we recorded with the purchase of the remaining ownership interest in PitchBook, which was previously a minority investment. Non-operating income in 2014 included the \$5.2 million gain we recorded with our purchase of the remaining ownership interest in HelloWallet, which was also previously a minority investment.

Other income, net primarily includes foreign currency exchange gains and losses arising from the ordinary course of our business operations.

Equity in Net Income of Unconsolidated Entities

(in millions)	2016	2015	2014
Equity in net income of unconsolidated entities	\$ (0.2)	\$ 1.8	\$ —

Equity in net income (loss) of unconsolidated entities primarily reflects income from Morningstar Japan K.K. (MJKK) offset by losses in our other equity method investments.

We describe our investments in unconsolidated entities in more detail in Note 8 of the Notes to our Consolidated Financial Statements.

Effective Tax Rate and Income Tax Expense

The following table summarizes the components of our effective tax rate:

(in millions)	2016	2015	2014
Income before income taxes and equity in net income (loss) of unconsolidated entities	\$ 224.9	\$ 193.7	\$ 114.0
Equity in net income (loss) of unconsolidated entities	(0.2)	1.8	—
Net loss attributable to the noncontrolling interest	—	(0.2)	—
Total	\$ 224.7	\$ 195.3	\$ 114.0
Income tax expense	\$ 63.7	\$ 62.7	\$ 35.7
Effective tax rate	28.3%	32.1%	31.3%

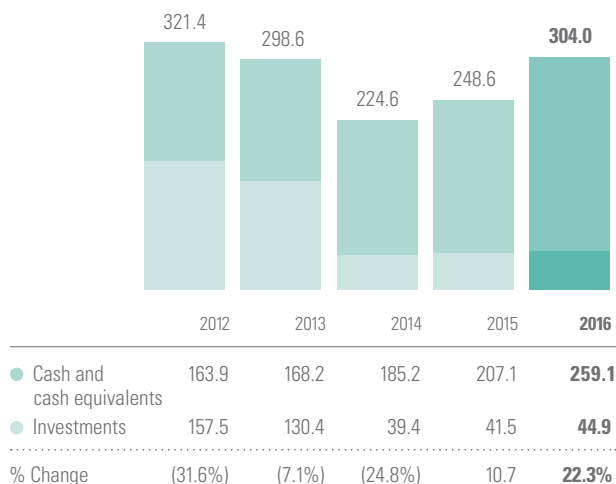
For a reconciliation of the U.S. federal tax rate to our effective income tax rate, refer to Note 13 of the Notes to our Consolidated Financial Statements.

Our effective tax rate in 2016 was 28.3%, a decrease of 3.8 percentage points compared with 32.1% in 2015, mainly because the \$37.1 million holding gain recorded in connection with the December 2016 purchase of the remaining ownership interest in PitchBook was not taxable.

Our effective tax rate in 2015 was 32.1%, an increase of 0.8 percentage points compared with 31.3% in 2014, primarily reflecting higher state taxes.

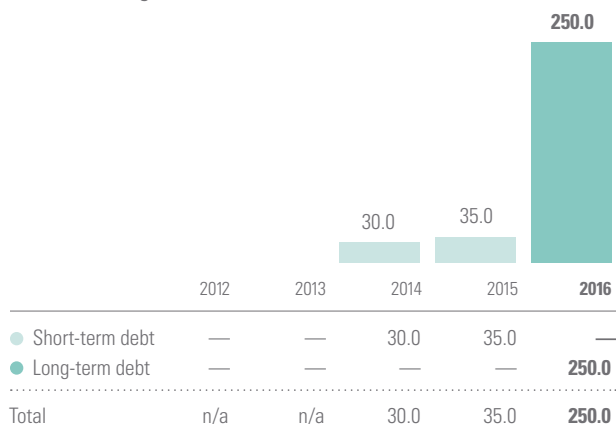
Liquidity and Capital Resources

As of December 31, 2016, we had cash, cash equivalents, and investments of \$304.0 million, up \$55.4 million from the end of 2015. The increase reflects cash provided by operating activities and \$215.0 million of net borrowings under our credit facility primarily in connection with our December 2016 acquisition of PitchBook. These items were partially offset by \$208.1 million used for acquisitions and purchases of minority investments, \$62.8 million of capital expenditures, \$48.8 million used to repurchase common stock under our share repurchase program, and \$37.9 million of dividends paid.

Cash, Cash Equivalents, and Investments (\$mil)

Cash provided by operating activities is our main source of cash. In 2016, cash provided by operating activities was \$213.7 million, reflecting \$208.5 million of net income, adjusted for non-cash items and \$5.2 million in positive changes from our net operating assets and liabilities.

In November 2016, we expanded our single-bank revolving credit facility in the United States, which we intend to use for general corporate purposes, from \$100.0 million to \$300.0 million. We had an outstanding principal balance of \$250.0 million as of December 31, 2016, leaving borrowing availability of \$50.0 million. The credit agreement also contains financial covenants under which we: (i) may not exceed a maximum consolidated leverage ratio of 3.00 to 1.00 and (ii) are required to maintain a minimum consolidated interest coverage ratio of not less than 3.00 to 1.00. We were in compliance with the financial covenants at December 31, 2016.

Short- and Long-Term Debt (\$mil)

We believe our available cash balances and investments, along with cash generated from operations and our line of credit, will be sufficient to meet our operating and cash needs for at least the next 12 months. We invest our cash reserves in cash equivalents and investments. We maintain a conservative investment policy for our investments. We invest a portion of our investment balance (approximately \$29.2 million, or 65% of our total investments balance as of December 31, 2016) in stocks, bonds, options, mutual funds, money market funds, or exchange-traded products that replicate the model portfolios and strategies created by Morningstar. These investment accounts may also include exchange-traded products where Morningstar is an index provider.

Approximately 29% of our cash, cash equivalents, and investments as of December 31, 2016 was held by our operations in the United States, up from about 26% as of December 31, 2015. We do not expect to repatriate earnings from our international subsidiaries in the foreseeable future. We have not recognized deferred tax liabilities for the portion of the outside basis differences (including unremitted earnings) relating to international subsidiaries because the investment in these subsidiaries is considered to be permanent in duration. It is not practical to quantify the deferred tax liability associated with these outside basis differences.

We intend to use our cash, cash equivalents, and investments for general corporate purposes, including working capital and funding future growth.

In December 2015, our board of directors approved a \$300.0 million increase to our share repurchase program, bringing the total amount authorized under the program to \$1.0 billion. In 2016, we repurchased a total of approximately 0.6 million shares for \$49.5 million. As of December 31, 2016, we had repurchased a total of 10.0 million shares for \$672.9 million since we announced the share repurchase program in September 2010.

In 2016, we also paid dividends of \$37.9 million. In February 2017, our board of directors declared a quarterly dividend of 23 cents per share. The dividend is payable on April 28, 2017 to shareholders of record as of April 7, 2017. We expect to make regular quarterly dividend payments of 23 cents per share in 2017.

We expect to continue making capital expenditures in 2017, primarily for computer hardware and software, internally developed software, and leasehold improvements for new and existing office locations.

We also expect to use a portion of our cash and investments balances in the first quarter of 2017 to make annual bonus payments of approximately \$38.0 million related to the 2016 bonus.

Consolidated Free Cash Flow

As described in more detail above, we define free cash flow as cash provided by or used for operating activities less capital expenditures. We present free cash flow solely as supplemental disclosure to help investors better understand how much cash is available after we spend money to operate our business. Our management team uses free cash flow to evaluate our business. Free cash flow is not a measure of performance set forth under GAAP. Also, the free cash flow definition we use may not be comparable to similarly titled measures used by other companies.

(in millions)	2016	2015	2014	2016 Change	2015 Change
Cash provided by operating activities	\$ 213.7	\$ 241.5	\$ 136.6	(11.5)%	76.8%
Capital expenditures	(62.8)	(57.3)	(58.3)	9.6%	(1.7)%
Free cash flow	\$ 150.9	\$ 184.2	\$ 78.3	(18.1)%	135.2%

We generated free cash flow of \$150.9 million in 2016, a decrease of \$33.3 million versus 2015. The change reflects a \$27.8 million decrease in cash provided by operating activities as well as a \$5.5 million increase in capital expenditures.

We generated free cash flow of \$184.2 million in 2015, an increase of \$105.9 million versus 2014. The change reflects a \$104.9 million increase in cash provided by operating activities as well as a \$1.0 million decrease in capital expenditures. Free cash flow for 2014 included a \$61.0 million cash outflow in connection with a litigation settlement.

Acquisitions

We paid a total of \$267.1 million, less cash acquired, related to acquisitions over the past three years. We describe these acquisitions, including purchase price and product offerings, in Note 7 of the Notes to our Consolidated Financial Statements.

Application of Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our Consolidated Financial Statements, which have been prepared in accordance with GAAP. We discuss our significant accounting policies in Note 2 of the Notes to our Consolidated Financial Statements. The preparation of financial statements in accordance with GAAP requires our management team to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expense, and related disclosures included in our Consolidated Financial Statements.

We evaluate our estimates on an ongoing basis. We base our estimates on historical experience and various other assumptions that we believe are reasonable. Based on these assumptions and estimates, we make judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Our actual results could vary from these estimates and assumptions. If actual amounts are different from previous estimates, we include revisions in our results of operations for the period in which the actual amounts become known.

We believe the following critical accounting policies reflect the significant judgments and estimates used in the preparation of our Consolidated Financial Statements:

Revenue Recognition

Much of our revenue comes from the sale of subscriptions or licenses for data, software, and Internet-based products and services. We recognize this revenue in equal amounts over the term of the subscription or license, which generally ranges from one to three years. We also provide research, investment management, retirement advice, and other services. We recognize this revenue when the service is provided or during the service obligation period defined in the contract.

We make significant judgments related to revenue recognition, including whether fees are fixed or determinable and whether the collection of payment is probable. For contracts that combine multiple products and services, we make judgments regarding the value of each element in the arrangement based on selling prices of the items when sold separately. Delivery of our products and services is a prerequisite to the recognition of revenue. If arrangements include an acceptance provision, we begin recognizing revenue upon the receipt of customer acceptance.

We make judgments at the beginning of an arrangement regarding whether or not collection is probable. We typically sell to institutional customers with whom we have a history of successful collections and assess the probability of collection on a case-by-case basis.

Deferred revenue is the amount invoiced or collected in advance for subscriptions, licenses, or services that has not yet been recognized as revenue. Deferred revenue is the second largest liability on our Consolidated Balance Sheets and, at the end of 2016, totaled \$179.5 million (of which \$165.4 million was classified as a current liability with an additional \$14.1 million included in other long-term liabilities). We expect to recognize this deferred revenue in future periods as we fulfill our service obligations.

The amount of deferred revenue may increase or decrease based on the mix of contracted products and services and the volume of new and renewal subscriptions. The timing of future revenue recognition may change depending on the terms of the license agreements and the timing of fulfilling our service obligations. We believe that the estimate related to revenue recognition is a critical accounting estimate, and to the extent that there are material differences between our determination of deferred revenue and actual results, our financial condition or results of operations may be affected.

Acquisitions, Goodwill, and Other Intangible Assets

Our financial statements reflect the operations of an acquired business starting from the completion of the transaction. We record the estimated fair value of assets acquired and liabilities assumed as of the date of acquisition.

Allocating the purchase price to the acquired assets and liabilities involves management judgment. On occasion we may obtain the assistance of third-party valuation experts for significant assets. We base the fair value estimates on available historical information and on future expectations and assumptions that we believe are reasonable, but these estimates are inherently uncertain.

Determining the fair value of intangible assets requires significant management judgment in each of the following areas:

- Identify the acquired intangible assets: For each acquisition, we identify the intangible assets acquired. These intangible assets generally consist of customer relationships, trademarks and trade names, technology-related intangibles (including internally developed software and databases), and non-compete agreements.

- Estimate the fair value of these intangible assets: We consider various approaches to value the intangible assets. These include the cost approach, which measures the value of an asset based on the cost to reproduce it or replace it with another asset of like utility; the market approach, which values the asset through an analysis of sales and offerings of comparable assets; and the income approach, which measures the value of an asset based on the present value of the economic benefits it is expected to produce.
- Estimate the remaining useful life of the assets: For each intangible asset, we use judgment and assumptions to establish the remaining useful life of the asset. For example, for customer relationships, we determine the estimated useful life with reference to observed customer attrition rates. For technology-related assets such as databases, we make judgments about the demand for current data and historical metrics in establishing the remaining useful life. For internally developed software, we estimate an obsolescence factor associated with the software.

We record any excess of the purchase price over the estimated fair values of the net assets acquired as goodwill, which is not amortized. Instead, it is subject to an impairment test annually, or whenever indicators of impairment exist, based on a discounted cash-flow model. We review the carrying value of goodwill for impairment at least annually based on the estimated fair value of our reporting unit. If we determine that goodwill is impaired, we reduce the goodwill balance to reflect the revised fair value.

For purposes of performing the impairment test, we determine fair values based on a discounted cash-flow methodology. This requires significant judgments including estimation of future cash flows, which, among other factors, is dependent on internal forecasts, long-term growth estimates, and determination of weighted average cost of capital.

We believe the accounting estimates related to purchase price allocations and subsequent goodwill impairment testing are critical accounting estimates because changes in these assumptions could materially affect the amounts and classifications of assets and liabilities presented in our Consolidated Balance Sheets, as well as the amount of amortization and depreciation expense, if any, recorded in our Consolidated Statements of Income.

Stock-Based Compensation

We include stock-based compensation expense in each of our operating expense categories. Our stock-based compensation expense primarily reflects grants of restricted stock units, restricted stock, and performance share awards.

We measure stock-based compensation expense at the grant date based on the fair value of the award and recognize the expense ratably over the award's vesting period. We measure the fair value of our restricted stock units on the date of grant based on the market price of the underlying common stock as of the close of trading on the day before the grant. We estimate expected forfeitures of stock-based awards at the grant date and recognize compensation cost only for those awards expected to vest. We later adjust this forfeiture assumption to the actual forfeiture rate. Therefore, changes in the forfeiture assumptions do not change the total amount of expense ultimately recognized over the vesting period. Instead, different forfeiture assumptions would only affect the timing of expense recognition over the vesting period.

We adjust the stock-based compensation expense to reflect those awards that ultimately vested and update our estimate of the forfeiture rate that will be applied to awards not yet vested.

We believe the estimates related to stock-based compensation expense are critical accounting estimates because the assumptions used could significantly impact the timing and amount of stock-based compensation expense recorded in our Consolidated Financial Statements.

Income Taxes

Our effective tax rate is based on the mix of income and losses in our U.S. and non-U.S. operations, statutory tax rates, and tax-planning opportunities available to us in the various jurisdictions in which we operate. Significant judgment is required to evaluate our tax positions.

Because of timing differences required by tax law, the effective tax rate reflected in our Consolidated Financial Statements is different from the tax rate reported on our tax return (our cash tax rate). Some of these differences, such as expenses that are not deductible in our tax return, are permanent. Other differences, such as depreciation expense, reverse over time. These timing differences create deferred tax assets and liabilities. We determine our deferred tax assets and liabilities based on temporary differences between the financial reporting and the tax basis of assets and liabilities.

As of December 31, 2016, we had gross deferred tax assets of \$55.0 million and gross deferred tax liabilities of \$91.6 million. The deferred tax assets include \$3.0 million of deferred tax assets related to \$14.6 million of net operating losses (NOLs) of our non-U.S. operations. In assessing the realizability of our deferred tax assets, we consider whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. We have recorded a valuation allowance against all but approximately \$6.8 million of the non-U.S. NOLs, reflecting the likelihood that the benefit of the NOLs will not be realized. We have not recorded a valuation allowance against the U.S. federal NOLs of \$36.9 million because we expect the benefit of the U.S. federal NOLs to be fully utilized before expiration.

In assessing the need for a valuation allowance, we consider both positive and negative evidence, including tax-planning strategies, projected future taxable income, and recent financial performance. If we determine a lower allowance is required at some point in the future, we would record a reduction to our tax expense and valuation allowance. These adjustments would be made in the same period we determined the change in the valuation allowance was needed. This would cause our income tax expense, effective tax rate, and net income to fluctuate.

We use judgment to identify, recognize, and measure the amounts of uncertain tax positions to be recorded in the financial statements related to tax positions taken or expected to be taken in a tax return. We recognize liabilities to represent our potential future obligations to taxing authorities for the benefits taken in our tax returns. We adjust these liabilities, including any impact of the related interest and penalties, in light of changing facts and circumstances such as the progress of a tax audit. A number of years may elapse before a particular matter for which we have established a reserve is audited and finally resolved. The number of years with open tax audits varies depending on the tax jurisdiction.

We use judgment to classify unrecognized tax benefits as either current or noncurrent liabilities in our Consolidated Balance Sheets. Settlement of any particular issue would usually require the use of cash. We generally classify liabilities associated with unrecognized tax benefits as noncurrent liabilities. It typically takes several years between our initial tax return filing and the final resolution of any uncertain tax positions with the tax authority. We recognize favorable resolutions of tax matters for which we have previously established reserves as a reduction to our income tax expense when the amounts involved become known.

Assessing the future tax consequences of events that have been recognized in our Consolidated Financial Statements or tax returns requires judgment. Variations in the actual outcome of these future tax consequences could materially impact our financial position, results of operations, or cash flows.

Contingencies

We are subject to various claims and contingencies related to legal proceedings and investigations. These legal proceedings involve inherent uncertainties including, but not limited to, court rulings, negotiations between affected parties, and government actions. Assessing the probability of loss for such contingencies and determining how to accrue the appropriate liabilities requires judgment. If actual results differ from our assessments, our financial position, results of operations, or cash flows would be affected.

Recently Issued Accounting Pronouncements

On May 28, 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers*, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The ASU will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. The original effective date for ASU 2014-09 would have required us to adopt it beginning on January 1, 2017. In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers—Deferral of the Effective Date*, which defers the effective date of ASU 2014-09 for one year and permits early adoption as early as the original effective date of ASU 2014-09. We elected the deferral, and the new standard is effective for us on January 1, 2018. The company has obtained an understanding of ASU No. 2014-09 and has begun to analyze the impact of the new standard on its financial results. We have completed a high-level assessment of the attributes within the company's contracts for its major products and

services, and we have started assessing potential impacts to our internal processes, control environment, and disclosures. While the company does not currently anticipate that the adoption of ASU 2014-09 will result in a material change to the timing of when revenue is recognized and believes that it will retain similar accounting treatment used to recognize revenue under current standards, we are continuing to evaluate the impact of the new standard on our financial results and other possible impacts. The standard allows for both retrospective and modified retrospective methods of adoption. The company is in the process of determining the method of adoption it will elect and the impact on our consolidated financial statements and footnote disclosures. We will continue to provide enhanced disclosures as we continue our assessment.

On March 17, 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*, which provides guidance on assessing whether an entity is a principal or an agent in a revenue transaction and whether an entity reports revenue on a gross or net basis. On April 14, 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing*, which provides guidance on identifying performance obligations and accounting for licenses of intellectual property. On May 6, 2016, the FASB issued ASU No. 2016-11, *Revenue Recognition and Derivatives and Hedging: Rescission of SEC guidance because of ASU No. 2014-09 and ASU No. 2014-16 pursuant to staff announcements at the March 3, 2016 EITF Meeting*, which rescinds the following SEC Staff Observer comments from ASC 605, *Revenue Recognition*, upon an entity's early adoption of ASC 606, *Revenue from Contracts with Customers*: Revenue and expense recognition for freight services in process, accounting for shipping and handling fees and costs, and accounting for consideration given by a vendor to a customer (including reseller of the vendor's products). On May 9, 2016, the FASB issued ASU No. 2016-12, *Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients*, which makes narrow-scope amendments to ASU No. 2014-09 and provides practical expedients to simplify the transition to the new standard and clarify certain aspects of the standard. On December 21, 2016, the FASB issued ASU No. 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, which makes narrow-scope amendments to ASU No. 2014-09.

The effective date and transition requirements for ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-11, ASU No. 2016-12, and ASU No. 2016-20 are the same as the effective date and transition requirements of ASU No. 2014-09. We are evaluating the effect that ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-11, ASU No. 2016-12, and ASU No. 2016-20 will have on our consolidated financial statements and related disclosures.

On February 25, 2016, the FASB issued ASU No. 2016-02, *Leases*, which will require lessees to recognize almost all leases on their balance sheet as a right-of-use asset and a lease liability. The new standard is effective for us on January 1, 2019. The new standard must be adopted using a modified retrospective transition, and provides for certain practical expedients. Transition will require application of the new guidance at the beginning of the earliest comparative period presented. We are evaluating the effect that ASU No. 2016-02 will have on our consolidated financial statements and related disclosures.

On March 15, 2016, the FASB issued ASU No. 2016-07, *Investments—Equity Method and Joint Ventures: Simplifying the Transition to the Equity Method of Accounting*, which eliminates the requirement to apply the equity method of accounting retrospectively when a reporting entity obtains significant influence over a previously held investment. The new standard is effective for us on January 1, 2017. Early adoption is permitted. The new standard should be applied prospectively for investments that qualify for the equity method of accounting after the effective date. We elected to early adopt ASU No. 2016-07 in the quarter ended March 31, 2016. The adoption of ASU No. 2016-07 did not have a material effect on our consolidated financial statements.

On March 30, 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation: Improvements to Employee Share-Based Payment Accounting*, which includes amendments to accounting for income taxes at settlement, forfeitures, and net settlements to cover withholding taxes. The new standard is effective for us on January 1, 2017. Early adoption is permitted but requires all elements of the amendments to be adopted at once rather than individually.

We elected to early adopt ASU No. 2016-09 in the quarter ended June 30, 2016, which requires us to reflect any adjustments as of January 1, 2016, the beginning of the annual period that includes the interim period of adoption. The primary impact of adoption was the recognition of excess tax benefits in our provision for income taxes rather than paid-in capital for all periods in 2016. Additional amendments to the accounting for income taxes and minimum

statutory withholding tax requirements had no impact to retained earnings as of January 1, 2016, where the cumulative effective of these changes are required to be recorded. We have elected to continue to estimate forfeitures expected to occur to determine the amount of compensation cost to be recognized in each period.

We elected to apply the presentation requirements for cash flows related to excess tax benefits retrospectively to all periods presented, which resulted in an increase to both net cash provided by operating activities and net cash used for financing activities of \$2.6 million and \$4.4 million for the years ended December 31, 2015 and December 31, 2014, respectively. The presentation requirements for cash flows related to employee taxes paid for withheld shares had no impact to any of the periods presented in our consolidated cash flow statements because such cash flows have historically been presented as a financing activity.

Adoption of the new standard resulted in the recognition of excess tax benefits in our provision for income taxes rather than paid-in capital of \$0.8 million for the year ended December 31, 2016.

On August 26, 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments*, which reduces diversity in practice of how certain transactions are classified in the statement of cash flows. The new guidance clarifies the classification of cash activities related to debt prepayment or debt extinguishment costs, settlement of zero-coupon debt instruments, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims, proceeds from the settlement of corporate and bank-owned life insurance policies, distributions received from equity-method investments, and beneficial interests in securitization transactions. The guidance also describes a predominance principle in which cash flows with aspects of more than one class that cannot be separated should be classified based on the activity that is likely to be the predominant source or use of cash flow.

The new standard is effective for us on January 1, 2018. Early adoption is permitted, including adoption in an interim period, but requires all elements of the amendments to be adopted at once rather than individually. The new standard must be adopted using a retrospective transition method. We are evaluating the effect that ASU No. 2016-15 will have on our consolidated financial statements and related disclosures.

On January 5, 2017, the FASB issued ASU No. 2017-01, *Business Combinations: Clarifying the Definition of a Business*, which revises the definition of a business. When substantially all of the fair value of gross assets acquired is concentrated in a single asset (or a group of similar assets), the assets acquired would not represent a business. To be considered a business, an acquisition would have to include an input and a substantive process that together significantly contribute to the ability to create outputs. The new guidance provides a framework to evaluate when an input and substantive process are present (including for early-stage companies that have not generated outputs). To be a business without outputs, there will now need to be an organized workforce. The new guidance also narrows the definition of the term outputs to be consistent with how it is described in *Topic 606, Revenue from Contracts with Customers*. The new standard is effective for us on January 1, 2018. Early adoption is permitted. We are evaluating the effect that ASU No. 2017-01 will have on our consolidated financial statements and related disclosures.

On January 26, 2017, the FASB issued ASU No. 2017-04, *Intangibles—Goodwill and Other*, which simplifies the accounting for goodwill impairment. The guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance will remain largely unchanged. Entities will continue to have the option to perform a qualitative assessment to determine if a quantitative impairment test is necessary. The same one-step impairment test will be applied to goodwill at all reporting units, even those with zero or negative carrying amounts. Entities will be required to disclose the amount of goodwill at reporting units with zero or negative carrying amounts. The new standard is effective for us on January 1, 2020. The new standard should be applied prospectively. Early adoption is permitted for any impairment tests performed after January 1, 2017. We are evaluating the effect that ASU No. 2017-05 will have on our consolidated financial statements and related disclosures.

Contractual Obligations

The table below shows our known contractual obligations as of December 31, 2016 and the expected timing of cash payments related to these contractual obligations:

(in millions)	2017	2018	2019	2020	2021	Thereafter	Total
Minimum commitments on non-cancelable operating lease obligations (1)	\$ 23.9	\$ 22.0	\$ 17.9	\$ 17.5	\$ 16.0	\$ 27.4	\$ 124.7
Minimum payments related to long-term financing agreements	9.0	7.2	0.4	—	—	—	16.6
Minimum payments on credit facility (2)	4.8	4.8	254.0	—	—	—	263.6
Unrecognized tax benefits (3)	8.9	—	—	—	—	—	8.9
Total	\$ 46.6	\$ 34.0	\$ 272.3	\$ 17.5	\$ 16.0	\$ 27.4	\$ 413.8

(1) The non-cancelable operating lease obligations are mainly for office space.

(2) The minimum payments on the credit facility reflect the current outstanding principal balance of \$250.0 million and an estimate for interest and commitment fees.

(3) Represents unrecognized tax benefits (including penalties and interest, less the impact of any associated tax benefits). The amount included in the table represents items that may be resolved through settlement of tax audits or for which the statutes of limitations are expected to lapse during 2017. The table excludes \$5.4 million of unrecognized tax benefits, included as a long-term liability in our Consolidated Balance Sheet as of December 31, 2016, for which we cannot make a reasonably reliable estimate of the period of payment.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Our investment portfolio is actively managed and may suffer losses from fluctuating interest rates, market prices, or adverse security selection. These accounts may consist of stocks, bonds, options, mutual funds, money market funds, or exchange-traded products that replicate the model portfolios and strategies created by Morningstar. These investment accounts may also include exchange-traded products where Morningstar is an index provider. As of December 31, 2016, our cash, cash equivalents, and investments balance was \$304.0 million. Based on our estimates, a 100 basis-point change in interest rates would not have a material effect on the fair value of our investment portfolio.

We are subject to risk from fluctuations in the interest rates related to our long-term debt. The interest rates are based upon the applicable LIBOR rate plus an applicable margin for such loans or the lender's base rate plus an applicable margin for such loans. On an annualized basis, based on December 31, 2016 estimated LIBOR rates, we estimate a 100 basis-point change in the LIBOR rate would have a \$2.5 million impact.

We are subject to risk from fluctuations in foreign currencies from our operations outside of the United States. To date, we have not engaged in currency hedging, and we do not currently have any positions in derivative instruments to hedge our currency risk.

The table below shows our exposure to foreign currency denominated revenue and operating income for the year ended December 31, 2016:

(in millions, except foreign currency rates)	Euro	British Pound	Australian Dollar	Other Foreign Currencies
Foreign currency rate in U.S. dollars as of December 31, 2016	1.0525	1.2346	0.7207	—
Foreign denominated percentage of revenue	5.2%	7.7%	3.9%	9.3%
Foreign denominated percentage of operating income	7.9%	0.2%	2.1%	(10.2)%
Estimated effect of a 10% adverse currency fluctuation on revenue	\$ (5.9)	\$ (10.9)	\$ (4.1)	\$ (9.0)
Estimated effect of a 10% adverse currency fluctuation on operating income	\$ (2.1)	\$ (0.1)	\$ (0.5)	\$ 2.7

The table below shows our net investment exposure in foreign currencies as of December 31, 2016:

(in millions, except foreign currency rates)	Euro	British Pound	Australian Dollar	Other Foreign Currencies
Assets, net of unconsolidated entities	\$ 72.8	\$ 128.7	\$ 71.1	\$ 153.4
Liabilities	30.6	36.9	50.4	63.8
Net currency position	\$ 42.2	\$ 91.8	\$ 20.7	\$ 89.6
Estimated effect of a 10% adverse currency fluctuation on equity	\$ (4.2)	\$ (9.2)	\$ (2.1)	\$ (9.0)

Item 8. Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
Morningstar, Inc.:

We have audited the accompanying consolidated balance sheets of Morningstar, Inc. and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, equity, and cash flows for each of the years in the three year period ended December 31, 2016. In connection with our audits of the consolidated financial statements, we also have audited the financial statement Schedule II—Valuation and Qualifying Accounts. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule 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, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Morningstar, Inc. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the years in the three year period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Morningstar, Inc.'s internal control over financial reporting 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 (COSO), and our report dated February 28, 2017, expressed an unqualified opinion on the effectiveness of Morningstar Inc.'s internal control over financial reporting.

/s/ KPMG LLP
Chicago, Illinois
February 28, 2017

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
Morningstar, Inc.:

We have audited Morningstar, Inc.'s (the Company) internal control over financial reporting 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 (COSO). Morningstar, Inc.'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, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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 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 its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Morningstar, Inc. maintained, in all material respects, effective internal control over financial reporting 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 (COSO).

Morningstar, Inc. acquired PitchBook Data, Inc. (PitchBook) during 2016, and management excluded from its assessment of internal control over financial reporting as of December 31, 2016, PitchBook's internal control over financial reporting associated with total assets of \$283,346,000 and total revenue of \$4,109,000, included in the consolidated financial statements of Morningstar, Inc. and subsidiaries as of and for the year ended December 31, 2016. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of PitchBook.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Morningstar, Inc. and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, equity, and cash flows for each of the years in the three-year period ended December 31, 2016, and the financial statement schedule, and our report dated February 28, 2017, expressed an unqualified opinion on those consolidated financial statements and accompanying schedule.

/s/ KPMG LLP

Chicago, Illinois
February 28, 2017

Morningstar, Inc. and Subsidiaries

Consolidated Statements of Income

Year ended December 31 (in millions except per share amounts)	2016	2015	2014
Revenue	\$ 798.6	\$ 788.8	\$ 760.1
Operating expense:			
Cost of revenue	344.3	330.1	318.6
Sales and marketing	97.6	96.6	111.1
General and administrative	105.2	107.1	108.9
Depreciation and amortization	70.7	64.4	54.9
Litigation settlement	—	—	61.0
Total operating expense	617.8	598.2	654.5
Operating income	180.8	190.6	105.6
Non-operating income:			
Interest income, net	0.3	1.3	2.1
Gain on sale of investments, reclassified from other comprehensive income	0.6	0.6	1.0
Holding gain upon acquisition of additional ownership of equity method investments	37.1	—	5.2
Other income, net	6.1	1.2	0.1
Non-operating income, net	44.1	3.1	8.4
Income before income taxes and equity in net income (loss) of unconsolidated entities	224.9	193.7	114.0
Equity in net income (loss) of unconsolidated entities	(0.2)	1.8	—
Income tax expense	63.7	62.7	35.7
Consolidated net income	161.0	132.8	78.3
Net income attributable to noncontrolling interest	—	(0.2)	—
Net income attributable to Morningstar, Inc.	\$ 161.0	\$ 132.6	\$ 78.3
Net income attributable to Morningstar, Inc.:			
Basic	\$ 3.74	\$ 3.00	\$ 1.75
Diluted	\$ 3.72	\$ 3.00	\$ 1.74
Dividends per common share:			
Dividends declared per common share	\$ 0.89	\$ 0.79	\$ 0.70
Dividends paid per common share	\$ 0.88	\$ 0.76	\$ 0.68
Weighted average shares outstanding:			
Basic	43.0	44.2	44.7
Diluted	43.3	44.3	44.9

See notes to consolidated financial statements.

Morningstar, Inc. and Subsidiaries

Consolidated Statements of Comprehensive Income

Year ended December 31 (in millions)	2016	2015	2014
Consolidated net income	\$ 161.0	\$ 132.8	\$ 78.3
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment	(27.8)	(28.2)	(29.8)
Unrealized gains (losses) on securities:			
Unrealized holding gains (losses) arising during period	3.3	(1.0)	0.4
Reclassification of gains included in net income	(2.4)	(0.4)	(0.6)
Other comprehensive loss	(26.9)	(29.6)	(30.0)
Comprehensive income	134.1	103.2	48.3
Comprehensive (income) loss attributable to noncontrolling interest	—	(0.4)	0.1
Comprehensive income attributable to Morningstar, Inc.	\$ 134.1	\$ 102.8	\$ 48.4

See notes to consolidated financial statements.

Morningstar, Inc. and Subsidiaries

Consolidated Balance Sheets

As of December 31 (in millions except share amounts)

	2016	2015
Assets		
Current assets:		
Cash and cash equivalents	\$ 259.1	\$ 207.1
Investments	44.9	41.5
Accounts receivable, less allowance of \$2.1 and \$1.8, respectively	145.8	139.3
Other	22.2	22.0
Total current assets	472.0	409.9
Property, equipment, and capitalized software, net	152.1	134.5
Investments in unconsolidated entities	40.3	35.6
Goodwill	556.8	364.2
Intangible assets, net	120.9	74.2
Other assets	8.8	10.6
Total assets	\$ 1,350.9	\$ 1,029.0
Liabilities and equity		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 44.6	\$ 39.2
Accrued compensation	71.7	80.9
Deferred revenue	165.4	140.7
Short-term debt	—	35.0
Other current liabilities	13.2	8.6
Total current liabilities	294.9	304.4
Accrued compensation	10.3	8.9
Deferred tax liability, net	38.2	19.8
Long-term debt	250.0	—
Deferred rent	24.8	25.4
Other long-term liabilities	35.9	29.9
Total liabilities	654.1	388.4
Equity:		
Morningstar, Inc. shareholders' equity:		
Common stock, no par value, 200,000,000 shares authorized, of which 42,932,994 and 43,403,076 shares were outstanding as of December 31, 2016 and December 31, 2015, respectively	—	—
Treasury stock at cost, 10,106,249 and 9,478,449 shares as of December 31, 2016 and December 31, 2015, respectively	(667.9)	(619.8)
Additional paid-in capital	584.0	575.5
Retained earnings	861.9	739.2
Accumulated other comprehensive loss:		
Currency translation adjustment	(81.3)	(53.5)
Unrealized loss on available-for-sale investments	(0.2)	(1.1)
Total accumulated other comprehensive loss	(81.5)	(54.6)
Total Morningstar, Inc. shareholders' equity	696.5	640.3
Noncontrolling interest	0.3	0.3
Total equity	696.8	640.6
Total liabilities and equity	\$ 1,350.9	\$ 1,029.0

See notes to consolidated financial statements.

Morningstar, Inc. and Subsidiaries

Consolidated Statements of Equity

(in millions except share amounts)	Morningstar, Inc. Shareholders' Equity							Total Equity
	Common Stock Shares Outstanding	Common Stock Par Value	Treasury Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Non Controlling Interests	
Balance as of December 31, 2013	44,967,423	\$ —	\$ (449.0)	\$ 539.6	\$ 594.6	\$ 5.1	\$ 1.0	\$ 691.3
Net income (loss)		—	—	—	78.3	—	—	78.3
Other comprehensive income (loss):								
Unrealized gain on available-for-sale investments, net of tax of \$0.2		—	—	—	—	0.4	—	0.4
Reclassification of adjustments for gains included in net income, net of income tax of \$0.4		—	—	—	—	(0.6)	—	(0.6)
Foreign currency translation adjustment, net		—	—	—	—	(29.7)	(0.1)	(29.8)
Other comprehensive loss, net		—	—	—	—	(29.9)	(0.1)	(30.0)
Issuance of common stock related to stock-option exercises and vesting of restricted stock units, net	452,344	—	1.4	(0.6)	—	—	—	0.8
Stock-based compensation—restricted stock units		—	—	16.3	—	—	—	16.3
Stock-based compensation—restricted stock		—	—	0.4	—	—	—	0.4
Stock-based compensation—performance share awards		—	—	0.5	—	—	—	0.5
Stock-based compensation—stock options		—	—	0.4	—	—	—	0.4
Excess tax benefit derived from stock-option exercises and vesting of restricted stock units		—	—	4.4	—	—	—	4.4
Common shares repurchased	(1,074,004)	—	(76.7)	—	—	—	—	(76.7)
Dividends declared—common shares outstanding		—	—	—	(31.2)	—	—	(31.2)
Dividends declared—restricted stock units		—	—	0.1	(0.2)	—	—	(0.1)
Balance as of December 31, 2014	44,345,763	—	(524.3)	561.1	641.5	(24.8)	0.9	654.4
Net income		—	—	—	132.6	—	0.2	132.8
Other comprehensive income (loss):								
Unrealized loss on available-for-sale investments, net of tax of \$0.4		—	—	—	—	(1.0)	—	(1.0)
Reclassification of adjustments for gains included in net income, net of income tax of \$0.1		—	—	—	—	(0.4)	—	(0.4)
Foreign currency translation adjustment, net		—	—	—	—	(28.4)	0.2	(28.2)
Other comprehensive loss, net		—	—	—	—	(29.8)	0.2	(29.6)

Morningstar, Inc. and Subsidiaries

Consolidated Statements of Equity

(in millions except share amounts)	Morningstar, Inc. Shareholders' Equity							Total Equity
	Common Stock Shares Outstanding	Common Stock Par Value	Treasury Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Non Controlling Interests	
Issuance of common stock related to stock-option exercises and vesting of restricted stock units, net	298,435	—	1.5	(3.2)	—	—	—	(1.7)
Stock-based compensation—restricted stock units		—	—	16.1	—	—	—	16.1
Stock-based compensation—restricted stock		—	—	0.1	—	—	—	0.1
Stock-based compensation—performance share awards		—	—	1.0	—	—	—	1.0
Stock-based compensation—stock-options		—	—	0.2	—	—	—	0.2
Excess tax benefit derived from stock-option exercises and vesting of restricted stock units		—	—	2.6	—	—	—	2.6
Common shares repurchased	(1,241,122)	—	(97.0)	—	—	—	—	(97.0)
Dividends declared—common shares outstanding		—	—	—	(34.8)	—	—	(34.8)
Dividends declared—restricted stock units		—	—	—	(0.1)	—	—	(0.1)
Purchase of remaining interest in majority-owned investments		—	—	(2.4)	—	—	(1.0)	(3.4)
Balance as of December 31, 2015	43,403,076	—	(619.8)	575.5	739.2	(54.6)	0.3	640.6
Net income		—	—	—	161.0	—	—	161.0
Other comprehensive income (loss):								
Unrealized gain on available-for-sale investments, net of income tax of \$1.3		—	—	—	—	3.3	—	3.3
Reclassification of adjustments for gains included in net income, net of income tax of \$1.8		—	—	—	—	(2.4)	—	(2.4)
Foreign currency translation adjustment, net		—	—	—	—	(27.8)	—	(27.8)
Other comprehensive income (loss), net		—	—	—	—	(26.9)	—	(26.9)

Morningstar, Inc. and Subsidiaries

Consolidated Statements of Equity

(in millions except share amounts)	Morningstar, Inc. Shareholders' Equity							Total Equity
	Common Stock Shares Outstanding	Common Stock Par Value	Treasury Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Non Controlling Interests	
Issuance of common stock related to stock-option exercises and vesting of restricted stock units, net	174,911	—	1.4	(6.0)	—	—	—	(4.6)
Stock-based compensation—restricted stock units		—	—	14.6	—	—	—	14.6
Stock-based compensation—performance share awards		—	—	(0.1)	—	—	—	(0.1)
Common shares repurchased	(644,993)	—	(49.5)	—	—	—	—	(49.5)
Dividends declared—common shares outstanding		—	—	—	(38.3)	—	—	(38.3)
Balance as of December 31, 2016	42,932,994	\$ —	\$ (667.9)	\$ 584.0	\$ 861.9	\$ (81.5)	\$ 0.3	\$ 696.8

See notes to consolidated financial statements.

Morningstar, Inc. and Subsidiaries

Consolidated Statements of Cash Flows

Year ended December 31 (in millions)	2016	2015	2014
Operating activities			
Consolidated net income	\$ 161.0	\$ 132.8	\$ 78.3
Adjustments to reconcile consolidated net income to net cash flows from operating activities:			
Depreciation and amortization	70.7	64.4	54.9
Deferred income taxes	4.7	2.9	3.0
Stock-based compensation expense	14.5	17.4	17.6
Provision for bad debt	1.3	0.5	0.5
Equity in net (income) loss of unconsolidated entities	0.2	(1.8)	—
Gain on sale of cost-method investment	—	—	(0.4)
Holding gain upon acquisition of additional ownership of equity-method investments	(37.1)	—	(5.2)
Other, net	(6.8)	(1.1)	(0.7)
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(0.1)	(6.9)	(25.9)
Other assets	1.1	0.7	(5.3)
Accounts payable and accrued liabilities	3.4	4.7	(2.0)
Accrued compensation	(8.8)	7.0	19.5
Income taxes—current	1.0	10.1	2.3
Deferred revenue	6.7	10.6	(1.7)
Deferred rent	2.9	(0.3)	3.0
Other liabilities	4.8	0.5	(1.3)
Cash provided by operating activities	213.7	241.5	136.6
Investing activities			
Purchases of investments	(32.0)	(34.7)	(20.4)
Proceeds from maturities and sales of investments	28.6	30.0	111.6
Capital expenditures	(62.8)	(57.3)	(58.3)
Acquisitions, net of cash acquired	(191.6)	(11.1)	(64.4)
Purchases of equity- and cost-method investments	(16.5)	(6.2)	—
Other, net	0.1	(0.2)	0.3
Cash used for investing activities	(274.2)	(79.5)	(31.2)
Financing activities			
Common shares repurchased	(48.8)	(97.0)	(76.7)
Dividends paid	(37.9)	(33.7)	(30.5)
Proceeds from short-term debt	40.0	50.0	30.0
Repayment of short-term debt	(15.0)	(45.0)	—
Proceeds from long-term debt	190.0	—	—
Proceeds from stock-option exercises	0.4	3.9	6.6
Employee taxes withheld for restricted stock units	(5.0)	(5.6)	(5.8)
Other, net	—	(0.1)	0.3
Cash provided by (used for) investing activities	123.7	(127.5)	(76.1)
Effect of exchange rate changes on cash and cash equivalents	(11.2)	(12.6)	(12.3)
Net increase in cash and cash equivalents	52.0	21.9	17.0
Cash and cash equivalents—beginning of period	207.1	185.2	168.2
Cash and cash equivalents—end of period	259.1	207.1	185.2

Morningstar, Inc. and Subsidiaries

Consolidated Statements of Cash Flows

Year ended December 31 (in millions)

	2016	2015	2014
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	\$ 58.0	\$ 50.1	\$ 30.4
Cash paid for interest	\$ 1.2	\$ 0.4	\$ 0.3
Supplemental information of non-cash investing and financing activities:			
Unrealized gain (loss) on available-for-sale investments	\$ 1.2	\$ (2.0)	\$ (0.4)
Software obtained under long-term financing arrangement	\$ 9.0	\$ 5.3	\$ —

See notes to consolidated financial statements.

Morningstar, Inc. and Subsidiaries

Notes to Consolidated Financial Statements

1. Description of Business

Morningstar, Inc. and its subsidiaries (Morningstar, we, our, the company), provides independent investment research for investors around the world. We offer an extensive line of products and services for financial advisors, asset managers, retirement plan providers and sponsors, and individual investors. We have operations in 27 countries.

2. Summary of Significant Accounting Policies

The acronyms that appear in these Notes to our Consolidated Financial Statements refer to the following:

ASC	Accounting Standards Codification
ASU	Accounting Standards Update
EITF	Emerging Issues Task Force
FASB	Financial Accounting Standards Board
SEC	Securities and Exchange Commission

Principles of Consolidation. We conduct our business operations through wholly owned or majority-owned operating subsidiaries. The accompanying consolidated financial statements include the accounts of Morningstar, Inc. and our subsidiaries. We consolidate assets, liabilities, and results of operations of subsidiaries in which we have a controlling interest and eliminate all significant inter-company accounts and transactions.

We account and report the noncontrolling (minority) interest in our Consolidated Financial Statements in accordance with FASB ASC 810, Consolidation. A noncontrolling interest is the portion of equity (net assets) in a subsidiary not attributable, directly or indirectly, to the parent company. We report the noncontrolling interest in our Consolidated Balance Sheet within equity separate from the shareholders' equity attributable to Morningstar, Inc. In addition, we present the net income (loss) and comprehensive income (loss) attributable to Morningstar, Inc.'s shareholders and the noncontrolling interest in our Consolidated Statements of Income, Consolidated Statements of Comprehensive Income, and Consolidated Statements of Equity.

We account for investments in entities in which we exercise significant influence, but do not control, using the equity method.

As part of our investment management operations, we manage certain funds outside of the United States that are considered variable interest entities. For the majority of these variable interest entities, we do not have a variable interest in them. In cases where we do have a variable interest, we are not the primary beneficiary. Accordingly, we do not consolidate any of these variable interest entities.

Use of Estimates. The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses during the reporting period. Actual results may differ from these estimates.

Reclassifications. Certain amounts reported in prior years have been reclassified to conform to the current year presentation.

Cash and Cash Equivalents. Cash and cash equivalents consists of cash and investments with original maturities of three months or less. We state them at cost, which approximates fair value. We state the portion of our cash equivalents that are invested in money market funds at fair value, as these funds are actively traded and have quoted market prices.

Investments. We account for our investments in accordance with FASB ASC 320, *Investments—Debt and Equity Securities*. We classify our investments into three categories: held-to-maturity, trading, and available-for-sale.

- ▶ Held-to-maturity: We classify certain investments, primarily certificates of deposit, as held-to-maturity securities, based on our intent and ability to hold these securities to maturity. We record held-to-maturity investments at amortized cost in our Consolidated Balance Sheets.
- ▶ Trading: We classify certain other investments, primarily equity securities, as trading securities as these relate mainly to investments tracking the strategies of our newsletter portfolios. We include realized and unrealized gains and losses associated with these investments as a component of our operating income in our Consolidated Statements of Income. We record these securities at their fair value in our Consolidated Balance Sheets.
- ▶ Available-for-sale: Investments not considered held-to-maturity or trading securities are classified as available-for-sale securities. Available-for-sale securities primarily consist of equity securities, exchange-traded funds, and mutual funds. We report unrealized gains and losses for available-for-sale securities as other comprehensive income (loss), net of related income taxes. We record these securities at their fair value in our Consolidated Balance Sheets.

Fair Value Measurements. We follow FASB ASC 820, *Fair Value Measurements*. FASB ASC 820 defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. Under FASB ASC 820, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants as of the measurement date. The standard applies whenever other standards require (or permit) assets or liabilities to be measured at fair value. The standard does not expand the use of fair value in any new circumstances and does not require any new fair value measurements.

FASB ASC 820 uses a fair value hierarchy based on three broad levels of valuation inputs:

- ▶ Level 1: Valuations based on quoted prices in active markets for identical assets or liabilities that the company has the ability to access.
- ▶ Level 2: Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.
- ▶ Level 3: Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

We provide additional information about our cash equivalents and investments that are subject to valuation under FASB ASC 820 in Note 6.

Concentration of Credit Risk. No single customer is large enough to pose a significant credit risk to our operations or financial condition. For the years ended December 31, 2016, 2015, and 2014, no single customer represented 5% or more of our consolidated revenue. If receivables from our customers become delinquent, we begin a collections process. We maintain an allowance for doubtful accounts based on our estimate of the probable losses of accounts receivable.

Property, Equipment, and Depreciation. We state property and equipment at historical cost, net of accumulated depreciation. We depreciate property and equipment primarily using the straight-line method based on the useful life of the asset, which generally is three years. We amortize leasehold improvements over the lease term or their useful lives, whichever is shorter.

Computer Software and Internal Product Development Costs. We capitalize certain costs in accordance with FASB ASC 350-40, *Internal-Use Software*, FASB ASC 350-50, *Website Development Costs*, and FASB ASC 985, *Software*. Internal product development costs mainly consist of employee costs for developing new web-based products and certain major enhancements of existing products. We amortize these costs on a straight-line basis over the estimated economic life, which is generally three to five years. We include capitalized software development costs related to projects that have not been placed into service in our construction in progress balance.

The table below summarizes our depreciation expense related to internally developed software for the past three years:

(in millions)	2016	2015	2014
Internally developed software depreciation expense	\$ 20.0	\$ 13.0	\$ 5.9

The table below summarizes our capitalized software development costs for the past three years:

(in millions)	2016	2015	2014
Capitalized software development costs	\$ 28.2	\$ 21.8	\$ 18.8

Business Combinations. When we make acquisitions, we allocate the purchase price to the assets acquired, liabilities assumed, and goodwill. We follow FASB ASC 805, *Business Combinations*. We recognize and measure the fair value of the acquired operation as a whole, as well as the assets acquired and liabilities assumed, at their full fair values as of the date we obtain control, regardless of the percentage ownership in the acquired operation or how the acquisition was achieved. We expense direct costs related to the business combination, such as advisory, accounting, legal, valuation, and other professional fees, as incurred. We recognize restructuring costs, including severance and relocation for employees of the acquired entity, as post-combination expenses unless the target entity meets the criteria of FASB ASC 420, *Exit or Disposal Cost Obligations*, on the acquisition date.

As part of the purchase price allocation, we follow the requirements of FASB ASC 740, *Income Taxes*. This includes establishing deferred tax assets or liabilities reflecting the difference between the values assigned for financial statement purposes and income tax purposes. In certain acquisitions, the goodwill resulting from the purchase price allocation may not be deductible for income tax purposes. FASB ASC 740 prohibits recognition of a deferred tax asset or liability for temporary differences in goodwill if goodwill is not amortizable and deductible for tax purposes.

Goodwill. Changes in the carrying amount of our recorded goodwill are mainly the result of business acquisitions, divestitures, and the effect of foreign currency translations. In accordance with FASB ASC 350, *Intangibles—Goodwill and Other*, we do not amortize goodwill; instead, goodwill is subject to an impairment test annually, or whenever indicators of impairment exist. An impairment would occur if the carrying amount of a reporting unit exceeded the fair value of that reporting unit. We performed annual impairment reviews in the fourth quarter of 2016, 2015, and 2014. We did not record any impairment losses in 2016, 2015, or 2014.

Intangible Assets. We amortize intangible assets using the straight-line method over their estimated useful lives, which range from one to 25 years. We have no intangible assets with indefinite useful lives. In accordance with FASB ASC 360-10-35, *Subsequent Measurement—Impairment or Disposal of Long-Lived Assets*, we review intangible assets for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. If the value of future undiscounted cash flows is less than the carrying amount of an asset group, we record an impairment loss based on the excess of the carrying amount over the fair value of the asset group. We did not record any impairment losses in 2016, 2015, or 2014.

Revenue Recognition. We recognize revenue in accordance with SEC SAB Topic 13, *Revenue Recognition*, ASC 605-25, *Revenue Recognition: Multiple Element Arrangements*, and ASC 985-605, *Software: Revenue Recognition*.

We recognize revenue when all of the following conditions are met:

- There is persuasive evidence of an arrangement, as evidenced by a signed contract;
- Delivery of our products and services has taken place. If arrangements include an acceptance provision, we generally begin recognizing revenue when we receive customer acceptance;
- The amount of fees to be paid by the customer is fixed or determinable; and
- The collectibility of the fees is reasonably assured.

We generate revenue through sales of Morningstar Data, Morningstar Advisor Workstation (including Morningstar Office), Morningstar Direct, Morningstar Research, Premium Membership subscriptions for Morningstar.com, our structured credit ratings offerings, and a variety of other investment-related products and services. We generally structure the revenue agreements for these offerings as licenses or subscriptions. We recognize revenue from licenses and subscription sales ratably as we deliver the product or service and over the service obligation period defined by the terms of the customer contract. For new-issue ratings and analysis for commercial mortgage-backed securities (CMBS), we charge asset-based fees that are paid by the issuer on the rated balance of the transaction and recognize the revenue immediately upon issuance.

We also generate revenue from Internet advertising, primarily from “impression-based” contracts. For advertisers who use our cost-per-impression pricing, we charge fees each time we display their ads on our site.

Our Investment Management business includes a broad range of services. Pricing for consulting services is based on the scope of work and the level of service provided, and includes asset-based fees for work we perform that involves investment management or acting as a subadvisor to investment portfolios. In arrangements that involve asset-based fees, we generally invoice clients quarterly in arrears based on average assets for the quarter. We recognize asset-based fees once the fees are fixed and determinable assuming all other revenue recognition criteria are met.

Our Workplace Solutions offerings help retirement plan participants plan and invest for retirement. We offer these services both through retirement plan providers (typically third-party asset management companies that provide administrative and record-keeping services) and directly to plan sponsors (employers that offer retirement plans to their employees). For our Workplace Solutions offerings, we provide both a hosted solution as well as proprietary installed software advice solution. Clients can integrate the installed customized software into their existing systems to help investors accumulate wealth, transition into retirement, and manage income during retirement.

The revenue arrangements for Workplace Solutions generally extend over multiple years. Our contracts may include one-time setup fees, implementation fees, technology licensing and maintenance fees, asset-based fees for managed retirement accounts, fixed and variable fees for advice and guidance, or a combination of these fee structures. Upon customer acceptance, we recognize revenue ratably over the term of the agreement. We recognize asset-based fees and variable fees in excess of any minimum once the value is fixed and determinable.

Some of our revenue arrangements combine multiple products and services. These products and services may be provided at different points in time or over different time periods within the same arrangement. We allocate fees to the separate deliverables based on the deliverables’ relative selling price, which is generally based on the price we charge when the same deliverable is sold separately.

We record taxes imposed on revenue-producing transactions (such as sales, use, value-added, and some excise taxes) on a net basis; therefore, we exclude such taxes from revenue in our Consolidated Statements of Income.

Deferred revenue represents the portion of licenses or subscriptions billed or collected in advance of the service being provided which we expect to recognize as revenue in future periods. Certain arrangements may have cancellation or refund provisions. If we make a refund, it typically reflects the amount collected from a customer for which we have not yet provided services. The refund therefore results in a reduction of deferred revenue.

Sales Commissions. Through December 31, 2013, we paid sales commissions based on a formula driven by the total contract value of sales opportunities closed, with any subsequent adjustments (such as clawbacks for contract cancellations) reflected in future commission payouts. We considered the corresponding commission expense an incremental direct acquisition cost and treated it as a deferred charge, which we expensed over the term of the underlying sales contracts.

In the first quarter of 2014, we modified our sales incentive plan. The revised plan is based on a combination of net new sales and specific business objectives not solely tied to revenue growth. Because of this new structure and the discretion involved in determining the related incentives, we started expensing sales commissions as incurred instead of amortizing them over the contract terms.

However, we continued to amortize the deferred charge capitalized in connection with sales commissions paid in 2013 and previous periods as part of the previous incentive plan. This amortization added \$0.6 million, \$3.5 million, and \$9.8 million of sales commission cost in 2016, 2015, and 2014, respectively.

Advertising Costs. Advertising costs include expenses incurred for various print and Internet ads, search engine fees, and direct mail campaigns. We expense advertising costs as incurred. The table below summarizes our advertising expense for the past three years:

(in millions)	2016	2015	2014
Advertising expense	\$ 7.6	\$ 8.3	\$ 7.5

Stock-Based Compensation Expense. We account for our stock-based compensation expense in accordance with FASB ASC 718, *Compensation—Stock Compensation*. Our stock-based compensation expense reflects grants of restricted stock units, restricted stock, performance share awards, and stock options. We measure the fair value of our restricted stock units, restricted stock, and performance share awards on the date of grant based on the closing market price of Morningstar's common stock on the day prior to grant. For stock options, we estimate the fair value of our stock options on the date of grant using a Black-Scholes option-pricing model. We amortize the fair values to stock-based compensation expense, net of estimated forfeitures, ratably over the vesting period.

We estimate expected forfeitures of all employee stock-based awards and recognize compensation cost only for those awards expected to vest. We determine forfeiture rates based on historical experience and adjust the estimated forfeitures to actual forfeiture experience as needed.

Liability for Sabbatical Leave. In some of our operations, we offer employees a sabbatical leave. Although the sabbatical policy varies by region, Morningstar's full-time employees are generally eligible for six weeks of paid time off after four years of continuous service. We account for our sabbatical liability in accordance with FASB ASC 710-10-25, *Compensated Absences*. We record a liability for employees' sabbatical benefits over the period employees earn the right for sabbatical leave and include this liability in Accrued Compensation in our Consolidated Balance Sheet.

Income Taxes. We record deferred income taxes for the temporary differences between the carrying amount of assets and liabilities for financial statement purposes and tax purposes in accordance with FASB ASC 740, *Income Taxes*. FASB ASC 740 prescribes the minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. It also provides guidance on derecognition, measurement, classification, interest and penalties, accounting in interim periods, and disclosure for uncertain tax positions.

We recognize interest and penalties related to unrecognized tax benefits as part of income tax expense in our Consolidated Statements of Income. We classify liabilities related to unrecognized tax benefits as either current or long-term liabilities in our Consolidated Balance Sheet, depending on when we expect to make payment.

3. Credit Arrangements

In November 2016, we amended and restated our credit agreement, which now provides us with a three-year credit facility with a borrowing capacity of up to \$300.0 million. The credit agreement also provides for issuance of up to \$25.0 million of letters of credit under the revolving credit facility.

The interest rate applicable to any loan under the credit agreement is, at our option, either: (i) the applicable London interbank offered rate (LIBOR) plus an applicable margin for such loans, which ranges between 1.00% and 1.75%, based on our consolidated leverage ratio or (ii) the lender's base rate plus the applicable margin for such loans, which ranges between 2.00% and 2.75%, based on our consolidated leverage ratio.

The credit agreement also contains financial covenants under which we: (i) may not exceed a maximum consolidated leverage ratio of 3.00 to 1.00 and (ii) are required to maintain a minimum consolidated interest coverage ratio of not less than 3.00 to 1.00. We were in compliance with the financial covenants as of December 31, 2016.

We had an outstanding principal balance of \$250.0 million at a one-month LIBOR interest rate plus 100 basis points as of December 31, 2016, leaving borrowing availability of \$50.0 million.

4. Income Per Share

The following table shows how we reconcile our net income and the number of shares used in computing basic and diluted income per share:

(in millions, except per share amounts)	2016	2015	2014
Basic net income per share attributable to Morningstar, Inc.:			
Net income attributable to Morningstar, Inc.:	\$ 161.0	\$ 132.6	\$ 78.3
Weighted average common shares outstanding	43.0	44.2	44.7
Basic net income per share attributable to Morningstar, Inc.:	\$ 3.74	\$ 3.00	\$ 1.75
Diluted net income per share attributable to Morningstar, Inc.:			
Net income attributable to Morningstar, Inc.:	\$ 161.0	\$ 132.6	\$ 78.3
Weighted average common shares outstanding	43.0	44.2	44.7
Net effect of dilutive stock options and restricted stock units	0.3	0.1	0.2
Weighted average common shares outstanding for computing diluted income per share	\$ 43.3	\$ 44.3	\$ 44.9
Diluted net income per share attributable to Morningstar, Inc.	\$ 3.72	\$ 3.00	\$ 1.74

The following table shows the number of weighted average restricted stock units and performance share awards excluded from our calculation of diluted earnings per share because their inclusion would have been anti-dilutive:

(in thousands)	2016	2015	2014
Weighted average stock units	13	38	47
Weighted average performance share awards	—	4	6
Total	13	42	53

5. Segment and Geographical Area Information

Segment Information

We report our results in a single reportable segment, which reflects how our chief operating decision maker allocates resources and evaluates our financial results.

Because we have a single reportable segment, all required financial segment information can be found directly in the Consolidated Financial Statements.

The accounting policies for our reportable segment are the same as those described in Note 2. We evaluate the performance of our reporting segment based on revenue and operating income.

Geographical Area Information

The tables below summarize our revenue and long-lived assets by geographical area:

External revenue by geographical area

	Year ended December 31		
(in millions)	2016	2015	2014
United States	\$ 590.5	\$ 585.1	\$ 550.8
United Kingdom	61.1	64.2	61.8
Continental Europe	62.6	58.8	62.7
Australia	32.2	30.5	35.0
Canada	28.2	27.9	30.8
Asia	20.0	18.5	15.8
Other	4.0	3.8	3.2
Total International	208.1	203.7	209.3
Consolidated revenue	\$ 798.6	\$ 788.8	\$ 760.1

Long-lived assets by geographical area

(in millions)	As of December 31	
	2016	2015
United States	\$ 139.1	\$ 116.9
United Kingdom	6.6	8.6
Continental Europe	1.9	2.2
Australia	0.6	0.9
Canada	0.4	0.7
Asia	3.4	5.2
Other	0.1	—
Total International	13.0	17.6
Consolidated property, equipment, and capitalized software, net	\$ 152.1	\$ 134.5

6. Investments and Fair Value Measurements

We classify our investments into three categories: available-for-sale, held-to-maturity, and trading. Our investment portfolio consists of stocks, bonds, options, mutual funds, money market funds, or exchange-traded products that replicate the model portfolios and strategies created by Morningstar. These investment accounts may also include exchange-traded products where Morningstar is an index provider. We classify our investment portfolio as shown below:

(in millions)	As of December 31	
	2016	2015
Available-for-sale	\$ 27.7	\$ 17.3
Held-to-maturity	15.7	15.3
Trading securities	1.5	8.9
Total	\$ 44.9	\$ 41.5

The following table shows the cost, unrealized gains (losses), and fair values related to investments classified as available-for-sale and held-to-maturity:

(in millions)	Cost	Unrealized Gain	Unrealized Loss	Fair Value
As of December 31, 2016				
Available-for-sale:				
Equity securities and exchange-traded funds	\$ 25.6	\$ 1.3	\$ (1.5)	\$ 25.4
Mutual funds	2.2	0.1	—	2.3
Total	\$ 27.8	\$ 1.4	\$ (1.5)	\$ 27.7
Held-to-maturity:				
Certificates of deposit	\$ 13.8	\$ —	\$ —	\$ 13.8
Convertible note	1.9	—	—	1.9
Total	\$ 15.7	\$ —	\$ —	\$ 15.7

As of December 31, 2015

Available-for-sale:				
Equity securities and exchange-traded funds	\$ 17.4	\$ 0.3	\$ (1.6)	\$ 16.1
Mutual funds	1.3	—	(0.1)	1.2
Total	\$ 18.7	\$ 0.3	\$ (1.7)	\$ 17.3
Held-to-maturity:				
Certificates of deposit	\$ 15.3	\$ —	\$ —	\$ 15.3
Convertible note	—	—	—	—
Total	\$ 15.3	\$ —	\$ —	\$ 15.3

As of December 31, 2016 and December 31, 2015, investments with unrealized losses for greater than a 12-month period were not material to the Consolidated Balance Sheets and were not deemed to have other than temporary declines in value.

The table below shows the cost and fair value of investments classified as available-for-sale and held-to-maturity based on their contractual maturities as of December 31, 2016 and December 31, 2015.

(in millions)	Cost	Fair Value
As of December 31, 2016		
Available-for-sale:		
Equity securities, exchange-traded funds, and mutual funds	\$ 27.8	\$ 27.7
Total	\$ 27.8	\$ 27.7
Held-to-maturity:		
Due in one year or less	\$ 13.8	\$ 13.8
Due in one to three years or less	1.9	1.9
Total	\$ 15.7	\$ 15.7

As of December 31, 2015

Available-for-sale:		
Equity securities, exchange-traded funds, and mutual funds	\$ 18.7	\$ 17.3
Total	\$ 18.7	\$ 17.3
Held-to-maturity:		
Due in one year or less	\$ 15.3	\$ 15.3
Due in one to three years or less	—	—
Total	\$ 15.3	\$ 15.3

The following table shows the realized gains and losses arising from sales of our investments classified as available-for-sale recorded in our Consolidated Statements of Income:

(in millions)	2016	2015	2014
Realized gains	\$ 1.6	\$ 1.3	\$ 1.5
Realized losses	(1.0)	(0.7)	(0.5)
Realized gains, net	\$ 0.6	\$ 0.6	\$ 1.0

We determine realized gains and losses using the specific identification method.

The following table shows the net unrealized losses on trading securities as recorded in our Consolidated Statements of Income:

(in millions)	2016	2015	2014
Unrealized losses, net	\$ —	\$ (0.8)	\$ (0.2)

The table below shows the fair value of our assets subject to fair value measurements that are measured at fair value on a recurring basis using a fair value hierarchy:

- Level 1: Valuations based on quoted prices in active markets for identical assets or liabilities that we have the ability to access.
- Level 2: Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.
- Level 3: Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

(in millions)	Fair Value	Fair Value Measurements Using Fair Value Hierarchy		
		Level 1	Level 2	Level 3
December 31, 2016				
Available-for-sale investments				
Equity securities and exchange-traded funds	\$ 25.4	\$ 25.4	\$ —	\$ —
Mutual funds	2.3	2.3	—	—
Trading securities	1.5	1.5	—	—
Cash equivalents	0.2	0.2	—	—
Total	\$ 29.4	\$ 29.4	\$ —	\$ —

(in millions)	Fair Value	Fair Value Measurements Using Fair Value Hierarchy		
		Level 1	Level 2	Level 3
December 31, 2015				
Available-for-sale investments				
Equity securities and exchange-traded funds	\$ 16.1	\$ 16.1	\$ —	\$ —
Mutual funds	1.2	1.2	—	—
Trading securities	8.9	8.9	—	—
Cash equivalents	0.2	0.2	—	—
Total	\$ 26.4	\$ 26.4	\$ —	\$ —

Based on our analysis of the nature and risks of our investments in equity securities and mutual funds, we have determined that presenting each of these investment categories in the aggregate is appropriate.

We measure the fair value of money market funds, mutual funds, equity securities, and exchange-traded funds based on quoted prices in active markets for identical assets or liabilities. We did not hold any securities categorized as Level 2 or Level 3 as of December 31, 2016 and December 31, 2015.

7. Acquisitions, Goodwill, and Other Intangible Assets

2016 Acquisitions

Increased Ownership Interest in PitchBook Data, Inc. (PitchBook)

In December 2016, we acquired an additional 78% interest in PitchBook Data, Inc. (PitchBook), increasing our ownership to 100% from 22%. PitchBook delivers data, research, and technology covering the private capital markets, including venture capital, private equity, and mergers and acquisitions. We began consolidating the financial results of this acquisition in our Consolidated Financial Statements on December 1, 2016. PitchBook contributed \$4.1 million of revenue and \$7.5 million of operating expense during the one-month period that PitchBook was included in our consolidated results for 2016.

PitchBook's total preliminary estimated fair value of \$235.1 million includes \$188.2 million in cash paid to acquire the remaining 78% interest in PitchBook as well as a \$46.9 million fair value related to our previous 22% ownership interest. The book value of this ownership immediately prior to the acquisition date was \$9.8 million, and we recorded a preliminary non-cash holding gain of \$37.1 million for the difference between the fair value and the book value of our previously held investment. We used the income approach and a discounted cash flow analysis of PitchBook's projected revenue, operating expense, and other amounts to arrive at the estimated fair value. The gain is classified as "Holding gain upon acquisition of additional ownership of equity-method investments" in our Consolidated Statement of Income for the year ended December 31, 2016.

The transaction has been accounted for using the acquisition method of accounting, which requires that assets acquired and liabilities assumed be recognized at their fair values as of the acquisition date. The values assigned to the assets acquired and liabilities assumed are based on preliminary estimates of fair value available as of the date of this Annual Report on Form 10-K, and may be adjusted during the measurement period of up to 12 months from the date of acquisition as further information becomes available. Any changes in the fair values of the assets acquired and liabilities assumed during the measurement period may result in adjustments to goodwill. As of December 31, 2016, the primary areas that are not yet finalized due to information that may become available subsequently and may result in changes in the values assigned to various assets and liabilities, include the fair values of acquired intangible assets and related deferred tax liabilities, assumed deferred revenue, as well as assumed tax assets and liabilities.

The following table summarizes our preliminary allocation of the estimated fair values of the assets acquired and liabilities assumed at the date of acquisition, all of which are preliminary pending completion of the final valuation:

	(in millions)
Cash and cash equivalents	\$ 12.4
Accounts receivable	10.8
Other current and non-current assets	3.5
Intangible assets	60.7
Goodwill	193.6
Deferred revenue	(22.4)
Deferred tax liability, net	(12.8)
Other current and non-current liabilities	(10.7)
Total fair value of PitchBook	\$ 235.1

Accounts receivable acquired were recorded at gross contractual amounts receivable, which approximates fair value. We expect to collect substantially all of the gross contractual amounts receivable within a reasonable period of time after the acquisition date.

The allocation includes \$60.7 million of acquired intangible assets, as follows:

	(in millions)	Weighted Average Useful Life (years)
Customer-related assets	\$ 17.1	10
Technology-based assets	40.8	5
Intellectual property (trademarks and trade names)	2.8	4
Total intangible assets	\$ 60.7	6

We recognized a preliminary net deferred tax liability of \$12.8 million mainly because the amortization expense related to certain intangible assets is not deductible for income tax purposes.

Preliminary goodwill of \$193.6 million represents the excess over the fair value of the net tangible and intangible assets acquired with this acquisition. We paid this premium for a number of reasons, including the opportunity to offer comprehensive data coverage across the full life cycle of private market transactions. The preliminary goodwill is not deductible for income tax purposes.

Unaudited Pro Forma Information for PitchBook Acquisition

The following unaudited pro forma information presents a summary of our Consolidated Statements of Income for the years ended December 31, 2016 and 2015 as if we had completed the PitchBook acquisition as of January 1, 2015.

This unaudited pro forma information is presented for illustrative purposes and is not intended to represent or be indicative of the actual results of operations of the combined company that would have been achieved had the acquisition occurred at the beginning of the earliest period presented, nor is it intended to represent or be indicative of future results of operations.

In calculating the pro forma information below, we included an estimate of amortization expense related to the intangible assets acquired, stock-based compensation expense related to the PitchBook bonus plan (see Note 11 for additional information), and interest expense incurred on the long-term debt. The 2016 pro forma net income excludes the \$37.1 million non-cash holding gain generated in connection with the transaction.

Unaudited Pro Forma Financial Information (in millions)

	2016	2015
Revenue	\$ 834.1	\$ 813.3
Operating income	\$ 157.7	\$ 170.0
Net Income	\$ 105.5	\$ 117.1
Basic net income per share attributable to Morningstar, Inc.	\$ 2.45	\$ 2.65
Diluted net income per share attributable to Morningstar, Inc.	\$ 2.44	\$ 2.65

RequiSight, LLC (RightPond)

On March 31, 2016, we acquired RequiSight, LLC, which does business as RightPond, a provider of business intelligence data and analytics on defined contribution and defined benefit plans for financial services firms. We began consolidating the financial results of RightPond in our Consolidated Financial Statements on March 31, 2016.

InvestSoft Technology, Inc. (InvestSoft)

On May 31, 2016, we acquired InvestSoft Technology, Inc. (InvestSoft), a provider of fixed-income analytics. We began consolidating the financial results of InvestSoft in our Consolidated Financial Statements on May 31, 2016.

2015 Acquisitions

Increased Ownership Interest in Ibbotson Associates Japan K.K. (IAJ)

In July 2015, we acquired an additional 28.9% interest in Ibbotson Associates Japan K.K. (IAJ), increasing our ownership to 100% from 71.1%. Because we previously owned more than 50% of the company, IAJ's financial results were consolidated in our Consolidated Financial Statements prior to acquiring the remaining interest.

Total Rebalance Expert (tRx)

In November 2015, we acquired Total Rebalance Expert (tRx), an automated, tax-efficient investment portfolio rebalancing platform for financial advisors. tRx streamlines the rebalancing process for advisors and automates the complexities involved in rebalancing and managing portfolios. We began consolidating the financial results of tRx in our Consolidated Financial Statements on November 2, 2015.

2014 Acquisitions

Increased Ownership Interest in HelloWallet Holdings, Inc.

In June 2014, we acquired an additional 81.3% interest in HelloWallet Holdings, Inc. (HelloWallet), increasing our ownership to 100% from 18.7%. HelloWallet combines behavioral economics and the psychology of decision-making with sophisticated technology to provide

personalized, unbiased financial guidance to U.S. workers and their families through their employer benefit plans. We began consolidating the financial results of this acquisition in our Consolidated Financial Statements on June 3, 2014.

HelloWallet's total estimated fair value of \$54.0 million includes \$40.5 million in cash paid to acquire the remaining 81.3% interest in HelloWallet and pay off HelloWallet's indebtedness as well as \$13.5 million related to the 18.7% of HelloWallet we previously held. We recorded a non-cash holding gain of \$5.2 million for the difference between the fair value and the book value of our previously held investment. The gain is classified as "Holding gain upon acquisition of additional ownership of equity-method investments" in our Consolidated Statement of Income for the year ended December 31, 2014.

The following table summarizes our allocation of the estimated fair values of the assets acquired and liabilities assumed at the date of acquisition:

	(in millions)
Cash and cash equivalents	\$ 3.7
Accounts receivable and other current assets	0.2
Other current and non-current assets	0.3
Deferred tax asset	8.6
Intangible assets	9.5
Goodwill	39.2
Deferred revenue	(2.9)
Deferred tax liability	(3.6)
Other current and non-current liabilities	(1.0)
Total fair value of HelloWallet	\$ 54.0

The allocation includes \$9.5 million of acquired intangible assets, as follows:

	(in millions)	Weighted Average Useful Life (years)
Technology based assets	\$ 6.7	5
Intellectual property (trademarks and trade names)	0.2	3
Non-competition agreement	2.6	5
Total intangible assets	\$ 9.5	5

We recognized a deferred tax liability of \$3.6 million mainly because the amortization expense related to certain intangible assets is not deductible for income tax purposes.

We recognized a deferred tax asset of \$8.6 million mainly because of net operating losses of HelloWallet which will become available to Morningstar.

Goodwill of \$39.2 million represents the premium over the fair value of the net tangible and intangible assets acquired. We paid this premium for a number of reasons, including the opportunity to bring together HelloWallet's comprehensive financial wellness expertise with Morningstar's independent, research-based retirement advice to create a holistic retirement savings and advice offering.

ByAllAccounts, Inc.

In April 2014, we acquired ByAllAccounts, Inc. (ByAllAccounts), a provider of innovative data aggregation technology for financial applications for \$27.9 million in cash. ByAllAccounts uses a knowledge-based process, including patented artificial intelligence technology, to collect, consolidate, and enrich financial account data and deliver it to virtually any platform. We began including the financial results of this acquisition in our Consolidated Financial Statements on April 1, 2014.

The following table summarizes our allocation of the purchase price to the estimated fair values of the assets acquired and liabilities assumed at the date of the acquisition:

	(in millions)
Cash and cash equivalents	\$ 0.3
Accounts receivable and other current assets	0.1
Deferred tax asset	4.0
Other current and non-current assets	0.3
Intangible assets	8.7
Goodwill	18.5
Deferred revenue	(0.1)
Deferred tax liability	(3.3)
Other current and non-current liabilities	(0.6)
Total purchase price	\$ 27.9

The allocation includes \$8.7 million of acquired intangible assets, as follows:

	(in millions)	Weighted Average Useful Life (years)
Customer-related assets	\$ 5.5	24
Technology-based assets	3.0	4.5
Intellectual property (trademarks and trade names)	0.1	1
Non-competition agreement	0.1	3
Total intangible assets	\$ 8.7	19

We recognized a deferred tax liability of \$3.3 million mainly because the amortization expense related to certain intangible assets is not deductible for income tax purposes.

We recognized a deferred tax asset of \$4.0 million mainly because of net operating losses of ByAllAccounts which will become available to Morningstar.

Goodwill of \$18.5 million represents the premium we paid over the fair value of the acquired net tangible and intangible assets. We paid this premium for a number of reasons, including the opportunity to integrate the service into our offerings as well as expand and develop ByAllAccounts' third-party distribution relationships.

Goodwill

The following table shows the changes in our goodwill balances from January 1, 2015 to December 31, 2016:

	(in millions)
Balance as of January 1, 2015	\$ 370.1
Other, primarily foreign currency translation	(5.9)
Balance as of December 31, 2015	\$ 364.2
Acquisition of PitchBook	193.6
Other acquisitions and foreign currency translation	(1.0)
Balance as of December 31, 2016	\$ 556.8

We did not record any impairment losses in 2016, 2015, or 2014, as the estimated fair values of our reporting unit exceeded its carrying value. We perform our annual impairment testing during the fourth quarter of each year.

Intangible Assets

The following table summarizes our intangible assets:

(in millions)	Gross	Accumulated Amortization	Net	Weighted Average Useful Life (years)
As of December 31, 2016				
Intellectual property	\$ 30.9	\$ (27.4)	\$ 3.5	9
Customer-related assets	152.0	(97.7)	54.3	12
Supplier relationships	0.2	(0.1)	0.1	20
Technology-based assets	133.2	(72.1)	61.1	7
Non-competition agreement	5.0	(3.1)	1.9	5
Total intangible assets	\$ 321.3	\$ (200.4)	\$ 120.9	10

As of December 31, 2015

Intellectual property	\$ 28.3	\$ (26.7)	\$ 1.6	9
Customer-related assets	137.5	(92.3)	45.2	12
Supplier relationships	0.2	(0.1)	0.1	20
Technology-based assets	89.5	(64.4)	25.1	8
Non-competition agreement	4.6	(2.4)	2.2	5
Total intangible assets	\$ 260.1	\$ (185.9)	\$ 74.2	10

The following table summarizes our amortization expense related to intangible assets:

(in millions)	2016	2015	2014
Amortization expense	\$ 19.4	\$ 22.0	\$ 22.3

We did not record any impairment losses involving intangible assets in 2016, 2015, or 2014.

We amortize intangible assets using the straight-line method over their expected economic useful lives.

Based on acquisitions and divestitures completed through December 31, 2015, we expect intangible amortization expense for 2016 and subsequent years to be as follows:

	(in millions)
2017	\$ 24.4
2018	22.3
2019	19.8
2020	16.1
2021	12.8
Thereafter	25.5

Our estimates of future amortization expense for intangible assets may be affected by additional acquisitions, divestitures, changes in the estimated average useful life, and foreign currency translation.

8. Investments in Unconsolidated Entities

Our investments in unconsolidated entities consist primarily of the following:

(in millions)	As of December 31	
	2016	2015
Investment in MJKK	\$ 25.1	\$ 24.3
Other equity method investments	13.5	3.7
Investments accounted for using the cost method	1.7	7.6
Total investments in unconsolidated entities	\$ 40.3	\$ 35.6

Morningstar Japan K.K. Morningstar Japan K.K. (MJKK) develops and markets products and services customized for the Japanese market. MJKK's shares are traded on the Tokyo Stock Exchange under the ticker 47650. We account for our investment in MJKK using the equity method. The following table summarizes our ownership percentage in MJKK and the market value of this investment based on MJKK's publicly quoted share price:

	As of December 31	
	2016	2015
Morningstar's approximate ownership of MJKK	34%	34%
Approximate market value of Morningstar's ownership in MJKK:		
Japanese yen (¥ in millions)	¥ 8,558.2	¥ 8,200.5
Equivalent U.S. dollars (\$ in millions)	\$ 73.2	\$ 68.1

Other Equity Method Investments. As of December 31, 2016 and 2015, other equity method investments consist of our investment in Inquiry Financial Europe AB (Inquiry Financial) and YCharts, Inc. (YCharts). Inquiry Financial is a provider of sell-side consensus estimate data. Our ownership interest in Inquiry Financial was approximately 34% as of December 31, 2016 and 2015. YCharts is a technology company that provides stock research and analysis. Our ownership interest in YCharts was approximately 22% as of December 31, 2016 and 2015.

As of December 31, 2016, other equity method investments also includes our investment in Ellevest Financial, Inc. (Ellevest) and United Income, Inc. (United Income). In March 2016, we acquired a minority equity stake in Ellevest. Previously, Ellevest was accounted for as a cost-method investment. Ellevest provides an engaging investing experience to help women meet their financial goals. Our ownership interest in Ellevest was approximately 22% as of December 31, 2016. In June 2016, we acquired a minority equity stake in United Income, which helps investors transition to retirement and manage their retirement income. Our ownership interest in United Income was approximately 38% as of December 31, 2016.

As of December 31, 2015, our cost-method investments also included a minority investment in PitchBook Data, Inc. (PitchBook). In December 2016, we purchased the remaining ownership interest in PitchBook. See Note 7 for additional information concerning our acquisition of PitchBook.

During 2014, we recorded an impairment loss of \$1.7 million on our investment in an unconsolidated entity. We did not record any impairment losses on these investments in 2016 or 2015.

9. Property, Equipment, and Capitalized Software

The following table shows our property, equipment, and capitalized software summarized by major category:

(in millions)	As of December 31	
	2016	2015
Computer equipment	\$ 70.1	\$ 60.3
Capitalized software	189.8	144.0
Furniture and fixtures	26.0	24.3
Leasehold improvements	69.0	61.9
Telephone equipment	2.1	2.1
Construction in progress	9.9	11.7
Property, equipment, and capitalized software, at cost	366.9	304.3
Less accumulated depreciation	(214.8)	(169.8)
Property, equipment, and capitalized software, net	\$ 152.1	\$ 134.5

The following table summarizes our depreciation expense:

(in millions)	2016	2015	2014
Depreciation expense	\$ 51.3	\$ 42.4	\$ 32.6

10. Operating Leases

The following table shows our minimum future rental commitments due in each of the next five years and thereafter for all non-cancelable operating leases, consisting primarily of commitments for office space:

Minimum Future Rental Commitments	(in millions)
2017	\$ 23.9
2018	22.0
2019	17.9
2020	17.5
2021	16.0
Thereafter	27.4
Total	\$ 124.7

The following table summarizes our rent expense, including taxes, insurance, and related operating costs:

(in millions)	2016	2015	2014
Rent expense	\$ 26.3	\$ 27.1	\$ 24.5

Deferred rent includes build-out and rent abatement allowances received, which are amortized over the remaining portion of the original term of the lease as a reduction in office lease expense. We include deferred rent, as appropriate, in "Accounts payable and accrued liabilities" and "Deferred rent, noncurrent" on our Consolidated Balance Sheets.

(in millions)	As of December 31	
	2016	2015
Deferred rent	\$ 28.4	\$ 28.5

11. Stock-Based Compensation

Stock-Based Compensation Plans

Our shareholders approved the Morningstar 2011 Stock Incentive Plan (the 2011 Plan) on May 17, 2011. As of that date, we stopped granting awards under the Morningstar 2004 Stock Incentive Plan (the 2004 Plan). The 2004 Plan amended and restated the Morningstar 1993 Stock Option Plan, the Morningstar 2000 Stock Option Plan, and the Morningstar 2001 Stock Option Plan.

The 2011 Plan provides for a variety of stock-based awards, including, among other things, restricted stock units, restricted stock, performance share awards, and stock options. We granted restricted stock units, restricted stock, and stock options under the 2004 Plan.

All of our employees and our non-employee directors are eligible for awards under the 2011 Plan.

Grants awarded under the 2011 Plan or the 2004 Plan that are forfeited, canceled, settled, or otherwise terminated without a distribution of shares, or shares withheld by us in connection with the exercise of options, will be available for awards under the 2011 Plan. Any shares subject to awards under the 2011 Plan, but not under the 2004 Plan, that are withheld by us in connection with the payment of any required income tax withholding will be available for awards under the 2011 Plan.

The following table summarizes the number of shares available for future grants under our 2011 Plan:

(in millions)	As of December 31 2016
Shares available for future grants	3.7

Accounting for Stock-Based Compensation Awards

The following table summarizes our stock-based compensation expense and the related income tax benefit we recorded in the past three years:

(in millions)	Year ended December 31		
	2016	2015	2014
Restricted stock units	\$ 14.6	\$ 16.1	\$ 16.3
Restricted stock	—	0.1	0.4
Performance share awards	(0.1)	1.0	0.5
Stock options	—	0.2	0.4
Total stock-based compensation expense	\$ 14.5	\$ 17.4	\$ 17.6
Income tax benefit related to the stock-based compensation expense	\$ 4.3	\$ 5.0	\$ 5.1

The following table summarizes the stock-based compensation expense included in each of our operating expense categories for the past three years:

(in millions)	Year ended December 31		
	2016	2015	2014
Cost of revenue	\$ 7.5	\$ 8.1	\$ 7.8
Sales and marketing	1.9	2.2	2.1
General and administrative	5.1	7.1	7.7
Total stock-based compensation expense	\$ 14.5	\$ 17.4	\$ 17.6

The following table summarizes the amount of unrecognized stock-based compensation expense as of December 31, 2016 and the expected number of months over which the expense will be recognized:

	Unrecognized stock-based compensation expense (in millions)	Weighted average Expected amortization period (months)
Restricted stock units	\$ 31.4	33
Performance share awards	6.2	12
Total unrecognized stock-based compensation expense	\$ 37.6	29

In accordance with FASB ASC 718, *Compensation—Stock Compensation*, we estimate forfeitures of employee stock-based awards and recognize compensation cost only for those awards expected to vest. Most of our larger annual equity grants typically have vesting dates in the second quarter. We adjust the stock-based compensation expense annually in the third quarter to reflect those awards that ultimately vested and update our estimate of the forfeiture rate that will be applied to awards not yet vested.

Restricted Stock Units

Restricted stock units represent the right to receive a share of Morningstar common stock when that unit vests. Restricted stock units granted to employees vest ratably over a four-year period. Restricted stock units granted to non-employee directors vest ratably over a three-year period.

We measure the fair value of our restricted stock units on the date of grant based on the closing market price of the underlying common stock on the day prior to grant. We amortize that value to stock-based compensation expense, net of estimated forfeitures, ratably over the vesting period.

The following table summarizes restricted stock unit activity during the past three years:

Restricted Stock Units (RSUs)	Unvested	Vested but Deferred	Total	Weighted Average Grant Date Value per RSU
RSUs Outstanding—December 31, 2013	680,002	16,682	696,684	\$ 62.02
Granted	279,524	—	279,524	72.68
Dividend equivalents	2,621	150	2,771	55.70
Vested	(268,115)	—	(268,115)	58.91
Issued	—	(2,054)	(2,054)	53.54
Forfeited	(38,098)	—	(38,098)	65.21
RSUs Outstanding—December 31, 2014	655,934	14,778	670,712	\$ 67.51
Granted	235,213	—	235,213	77.17
Dividend equivalents	1,409	146	1,555	56.42
Vested	(253,038)	—	(253,038)	64.65
Forfeited	(66,992)	—	(66,992)	53.61
RSUs Outstanding—December 31, 2015	572,526	14,924	587,450	\$ 72.14
Granted	241,609	—	241,609	77.82
Dividend equivalents	370	136	506	56.52
Vested	(225,590)	—	(225,590)	69.39
Issued	—	(5,312)	(5,312)	44.47
Forfeited	(47,670)	—	(47,670)	74.45
RSUs Outstanding—December 31, 2016	541,245	9,748	550,993	\$ 75.77

Performance Share Awards

In 2014, we introduced a long-term incentive award program consisting of performance shares. In March 2015 and 2016, executive officers, other than Joe Mansueto, and certain other employees, were granted performance share awards. These awards entitle the holder to a number of shares of Morningstar common stock equal to the number of notional performance shares that become vested. Each award specifies a number of performance shares that will vest if pre-established target performance goals are attained. The number of performance shares that actually vest may be more or less than the specified number of performance shares to the extent Morningstar exceeds or fails to achieve, respectively, the target performance goals over a three-year performance period.

We base the grant date fair value for these awards on the closing market price of the underlying common stock on the day prior to the grant date. We amortize that value to stock-based compensation expense ratably over the vesting period based on the satisfaction of the performance condition that is most likely to be satisfied over the three-year performance period.

The table below shows target performance share awards granted and shares that would be issued at current performance levels for performance share awards granted as of December 31, 2016:

As of December 31, 2016

Target performance share awards granted	117,386
Weighted average fair value per award	\$ 78.23
Number of shares that would be issued based on current performance levels	1,287
Unamortized expense, based on current performance levels (in millions)	\$ (0.7)

PitchBook Bonus Plan

In connection with our acquisition of PitchBook, we adopted a management bonus sub-plan under the 2011 Plan for certain employees of PitchBook (the PitchBook Plan). Pursuant to the terms of the PitchBook Plan, awards having an aggregate target value equal to \$30.0 million will be available for issuance with annual grants of \$7.5 million for 2017, \$7.5 million in 2018, and \$15.0 million in 2019.

Each grant will consist of performance-based share unit awards which will vest over a one-year period and will be measured primarily based on the achievement of certain annual revenue targets specifically related to PitchBook's business. Upon achievement of these targets, earned performance units will be settled in shares of our common stock on a one-for-one basis. If PitchBook exceeds certain performance conditions, the PitchBook Plan participants may receive payment for performance units in excess of the aggregate target values described above. If PitchBook fails to meet threshold performance conditions, the PitchBook Plan participants will not be entitled to receive payment for any performance units. In certain circumstances, the PitchBook Plan participants may be able to receive a catch-up award with respect to 2017 or 2018 if certain additional performance conditions are met in a subsequent year.

The table below shows target performance share awards granted and shares that would be issued at current performance levels for performance share awards granted as of December 31, 2016:

As of December 31, 2016

Target performance share awards granted	100,924
Weighted average fair value per award	\$ 74.31
Number of shares that would be issued based on current performance levels	100,924
Unamortized expense, based on current performance levels (in millions)	\$ 6.9

Stock Options

Stock options granted to employees vest ratably over a four-year period. Grants to our non-employee directors vest ratably over a three-year period. All grants expire 10 years after the date of grant.

In May 2011, we granted 86,106 stock options under the 2004 Stock Incentive Plan. In November 2011, we granted 6,095 stock options under the 2011 Plan. All options granted in 2011 have an exercise price equal to the fair market value on the grant date. We estimated the fair value of the options on the grant date using a Black-Scholes option-pricing model. The weighted average fair value of options granted during 2011 was \$23.81 per share, based on the following assumptions:

Assumptions for Black-Scholes Option Pricing Model

Expected life (years):	7.4
Volatility factor:	35.1%
Dividend yield:	0.35%
Interest rate:	2.87%

The following tables summarize stock option activity in the past three years for our various stock option grants. The first table includes activity for options granted at an exercise price below the fair value per share of our common stock on the grant date; the second table includes activity for all other option grants.

	2016		2015		2014	
Options Granted At an Exercise Price Below the Fair Value Per Share on Grant Date	Underlying Shares	Weighted Average Exercise Price	Underlying Shares	Weighted Average Exercise Price	Underlying Shares	Weighted Average Exercise Price
Options outstanding—beginning of the year	—	\$ —	—	\$ —	179,559	\$ 21.47
Granted	—	—	—	—	—	—
Cancelled	—	—	—	—	(150)	22.24
Exercised	—	—	—	—	(179,409)	22.08
Options outstanding—end of year	—	\$ —	—	\$ —	—	\$ —
Options exercisable—end of year	—	\$ —	—	\$ —	—	\$ —
	2016		2015		2014	
All Other Option Grants, Excluding Activity Shown Above	Underlying Shares	Weighted Average Exercise Price	Underlying Shares	Weighted Average Exercise Price	Underlying Shares	Weighted Average Exercise Price
Options outstanding—beginning of the year	52,096	\$ 57.20	169,810	\$ 40.20	253,972	\$ 36.48
Granted	—	—	—	—	—	—
Cancelled	—	—	—	—	(526)	38.61
Exercised	(6,095)	59.35	(117,714)	32.91	(83,636)	30.82
Options outstanding—end of year	46,001	\$ 57.28	52,096	\$ 57.52	169,810	\$ 40.20
Options outstanding—end of year	46,001	\$ 57.28	52,096	\$ 57.52	154,864	\$ 38.53

The following table summarizes the total intrinsic value (difference between the market value of our stock on the date of exercise and the exercise price of the option) of options exercised:

(in millions)	2016	2015	2014
Intrinsic value of options exercised	\$ 0.1	\$ 5.1	\$ 12.0

The table below shows additional information for options outstanding and exercisable as of December 31, 2016:

Range of Exercise Prices	Options Outstanding			
	Number of Options	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price	Aggregate Intrinsic Value (in millions)
\$57.28	46,001	4.37	\$ 57.28	\$ 0.7
Vested or Expected to Vest				
\$57.28	46,001	4.37	\$ 57.28	\$ 0.7
Exercisable Shares	Options Exercisable			
		Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price	Aggregate Intrinsic Value (in millions)
46,001		4.37	\$ 57.28	\$ 0.7

The aggregate intrinsic value in the table above represents the total pretax intrinsic value all option holders would have received if they had exercised all outstanding options on December 31, 2016. The intrinsic value is based on our closing stock price of \$73.56 on December 30, 2016.

12. Defined Contribution Plan

We sponsor a defined contribution 401(k) plan, which allows our U.S.-based employees to voluntarily contribute pre-tax dollars up to a maximum amount allowable by the U.S. Internal Revenue Service. In 2016, 2015, and 2014, we made matching contributions to our 401(k) plan in the United States in an amount equal to 75 cents for every dollar of an employee's contribution, up to a maximum of 7% of the employee's compensation in the pay period.

The following table summarizes our matching contributions:

(in millions)	2016	2015	2014
401(k) matching contributions	\$ 9.0	\$ 8.3	\$ 7.5

13. Income Taxes

Income Tax Expense and Effective Tax Rate

The following table shows our income tax expense and our effective tax rate for the years ended December 31, 2016, 2015, and 2014:

(in millions)	2016	2015	2014
Income before income taxes and equity in net income (loss) of unconsolidated entities	\$ 224.9	\$ 193.7	\$ 114.0
Equity in net income (loss) of unconsolidated entities	(0.2)	1.8	—
Net loss attributable to the noncontrolling interest	—	(0.2)	—
Total	\$ 224.7	\$ 195.3	\$ 114.0
Income tax expense	\$ 63.7	\$ 62.7	\$ 35.7
Effective tax rate	28.3%	32.1%	31.3%

The following table reconciles our income tax expense at the U.S. federal income tax rate of 35% to income tax expense as recorded:

(in millions, except percentages)	2016		2015		2014	
	Amount	%	Amount	%	Amount	%
Income tax expense at U.S. federal rate	\$ 78.6	35.0%	\$ 68.4	35.0%	\$ 39.9	35.0%
State income taxes, net of federal income tax benefit	4.5	2.0	6.6	3.4	2.1	1.9
Stock-based compensation activity	(0.6)	(0.3)	0.4	0.2	0.1	0.1
Holding gain upon acquisition of additional ownership of equity method investments	(12.1)	(5.4)	—	—	(1.4)	(1.2)
Net change in valuation allowance related to non-U.S. deferred tax assets, primarily net operating losses	(0.1)	—	(2.0)	(1.0)	(0.6)	(0.5)
Difference between U.S. federal statutory and foreign tax rates	(5.3)	(2.4)	(4.4)	(2.3)	(4.0)	(3.5)
Change in unrecognized tax benefits	2.6	1.2	(1.4)	(0.7)	1.5	1.3
Credits and incentives	(3.7)	(1.6)	(5.1)	(2.6)	(2.9)	(2.6)
Recognition of deferred tax assets	—	—	—	—	(0.1)	(0.1)
Other—net	(0.2)	(0.1)	0.2	0.1	1.1	0.9
Total income tax expense	\$ 63.7	28.3%	\$ 62.7	32.1%	\$ 35.7	31.3%

Income tax expense consists of the following:

(in millions)	Year ended December 31		
	2016	2015	2014
Current tax expense:			
U.S.			
Federal	\$ 42.8	\$ 42.8	20.8
State	6.5	8.3	2.0
Non-U.S.	9.7	8.7	9.6
Current tax expense	59.0	59.8	32.4
Deferred tax expense (benefit):			
U.S.			
Federal	5.1	4.3	3.7
State	0.4	1.8	1.3
Non-U.S.	(0.8)	(3.2)	(1.7)
Deferred tax expense, net	4.7	2.9	3.3
Income tax expense	\$ 63.7	\$ 62.7	\$ 35.7

The following table provides our income before income taxes and equity in net income (loss) of unconsolidated entities, generated by our U.S. and non-U.S. operations:

(in millions)	Year ended December 31		
	2016	2015	2014
U.S.	\$ 186.5	\$ 160.6	\$ 80.4
Non-U.S.	38.4	33.1	33.6
Income before income taxes and equity in net income (loss) of unconsolidated entities	\$ 224.9	\$ 193.7	\$ 114.0

Deferred Tax Assets and Liabilities

We recognize deferred income taxes for the temporary differences between the carrying amount of assets and liabilities for financial statement purposes and their tax basis. The tax effects of the temporary differences that give rise to the deferred income tax assets and liabilities are as follows:

(in millions)	As of December 31	
	2016	2015
Deferred tax assets:		
Stock-based compensation expense	\$ 2.6	\$ 3.1
Accrued liabilities	19.0	14.3
Deferred revenue	5.1	0.9
Net operating loss carryforwards- U.S. federal and state	12.9	7.6
Net operating loss carryforwards-Non-U.S.	3.0	3.7
Credits and incentive carryforwards	0.6	0.6
Deferred royalty revenue	0.3	0.3
Allowance for doubtful accounts	1.2	1.0
Deferred rent	10.3	8.9
Unrealized exchange losses, net	—	0.4
Total deferred tax assets	55.0	40.8
Deferred tax liabilities:		
Acquired intangible assets	(34.3)	(13.2)
Property, equipment, and capitalized software	(37.6)	(28.1)
Unrealized exchange gains, net	(0.1)	—
Prepaid expenses	(5.3)	(4.3)
Investments in unconsolidated entities	(14.0)	(13.7)
Other	(0.3)	(0.1)
Total deferred tax liabilities	(91.6)	(59.4)
Net deferred tax liability before valuation allowance	(36.6)	(18.6)
Valuation allowance	(1.6)	(1.2)
Deferred tax liability, net	\$ (38.2)	\$ (19.8)

The deferred tax assets and liabilities are presented in our Consolidated Balance Sheets as follows:

(in millions)	As of December 31	
	2016	2015
Deferred tax liability, net	\$ (38.2)	\$ (19.8)

The following table summarizes our U.S. net operating loss (NOL) carryforwards:

(in millions)	As of December 31	
	2016	2015
Expiration Dates	2023-2036	2023-2034
U.S. federal NOLs subject to expiration dates	\$ 36.9	\$ 21.6

The net increase in the U.S. federal NOL carryforwards as of December 31, 2016 compared with 2015 primarily reflects \$23.9 million of acquired U.S. federal NOLs from the acquisition of PitchBook in 2016 offset by \$8.6 million of utilization of U.S. federal NOLs from prior acquisitions during 2016. We have not recorded a valuation allowance against the U.S. federal NOLs of \$36.9 million because we expect the benefit of the U.S. federal NOLs to be fully utilized before expiration.

The following table summarizes our NOL carryforwards for our non-U.S. operations:

(in millions)	As of December 31	
	2016	2015
Non-U.S. NOLs subject to expiration dates from 2019 through 2036	\$ 3.8	\$ 2.9
Non-U.S. NOLs with no expiration date	10.8	15.5
Total	\$ 14.6	\$ 18.4
Non-U.S. NOLs not subject to valuation allowances	\$ 6.8	\$ 12.1

The decrease in non-U.S. NOL carryforwards as of December 31, 2016 compared with 2015 primarily reflects the use of NOL carryforwards.

We have not provided federal and state income taxes on accumulated undistributed earnings of certain foreign subsidiaries aggregating approximately \$171.6 million as of December 31, 2016, because these earnings have been permanently reinvested. It is not practicable to determine the amount of the unrecognized deferred tax liability related to the undistributed earnings.

In assessing the realizability of our deferred tax assets, we consider whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. We have recorded a valuation allowance against all but approximately \$6.8 million of the non-U.S. NOLs, reflecting the likelihood that the benefit of these NOLs will not be realized.

Uncertain Tax Positions

We conduct business globally and as a result, we file income tax returns in U.S. federal, state, local, and foreign jurisdictions. In the normal course of business we are subject to examination by tax authorities throughout the world. The open tax years for our U.S. Federal tax returns and most state tax returns include the years 2008 to the present.

We are currently under audit by federal, state and local tax authorities in the United States as well as tax authorities in certain non-U.S. jurisdictions. It is likely that the examination phase of some of these U.S. federal, state, local, and non-U.S. audits will conclude in 2017. It is not possible to estimate the effect of current audits on previously recorded unrecognized tax benefits.

As of December 31, 2016, our Consolidated Balance Sheet included a current liability of \$8.9 million and a non-current liability of \$5.4 million for unrecognized tax benefits. As of December 31, 2015, our Consolidated Balance Sheet included a current liability of \$4.2 million and a non-current liability of \$6.0 million for unrecognized tax benefits. These amounts include interest and penalties, less any associated tax benefits.

The table below reconciles the beginning and ending amount of the gross unrecognized tax benefits as follows:

(in millions)	2016	2015
Gross unrecognized tax benefits—beginning of the year	\$ 14.5	\$ 11.9
Increases as a result of tax positions taken during a prior-year period	2.2	4.4
Decreases as a result of tax positions taken during a prior-year period	(0.1)	(0.7)
Increases as a result of tax positions taken during the current period	2.4	2.4
Decreases relating to settlements with tax authorities	—	(1.8)
Reductions as a result of lapse of the applicable statute of limitations	(0.6)	(1.7)
Gross unrecognized tax benefits—end of the year	\$ 18.4	\$ 14.5

In 2016, we recorded a net increase of \$4.5 million of gross unrecognized tax benefits before settlements and lapses of statutes of limitations, of which \$3.1 million increased our income tax expense by \$2.8 million. In addition, we reduced our unrecognized tax benefits by \$0.6 million for settlements and lapses of statutes of limitations, of which \$0.6 million decreased our income tax expense by \$0.4 million.

As of December 31, 2016, we had \$18.4 million of gross unrecognized tax benefits, of which \$14.4 million, if recognized, would reduce our effective income tax rate and decrease our income tax expense by \$13.3 million.

We record interest and penalties related to uncertain tax positions as part of our income tax expense. The following table summarizes our gross liability for interest and penalties:

(in millions)	As of December 31	
	2016	2015
Liabilities for interest and penalties	\$ 1.6	\$ 1.2

We recorded the decrease in the liability, net of any tax benefits, to income tax expense in our Consolidated Statement of Income in 2016.

14. Contingencies

We are involved in legal proceedings and litigation that have arisen in the normal course of our business. While it is difficult to predict the outcome of any particular proceeding, we do not believe the result of any of these matters will have a material adverse effect on our business, operating results, or financial position.

15. Share Repurchase Program

We have an ongoing authorization, originally approved by our board of directors in September 2010 and subsequently amended, to repurchase up to \$1.0 billion in shares of our outstanding common stock. The authorization expires on December 31, 2017. We may repurchase shares from time to time at prevailing market prices on the open market or in private transactions in amounts that we deem appropriate.

As of December 31, 2016, we had repurchased a total of 10,028,125 shares for \$672.9 million under this authorization, leaving approximately \$327.1 million available for future repurchases.

16. Recently Issued Accounting Pronouncements

On May 28, 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers*, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The ASU will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. The original effective date for ASU 2014-09 would have required us to adopt it beginning on January 1, 2017. In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers—Deferral of the Effective Date*, which defers the effective date of ASU 2014-09 for one year and permits early adoption as early as the original effective date of ASU 2014-09. We elected the deferral, and the new standard is effective for us on January 1, 2018. The company has obtained an understanding of ASU No. 2014-09 and has begun to analyze the impact of the new standard on its financial results. We have completed a high-level assessment of the attributes within the company's contracts for its major products and services, and we have started assessing potential impacts to our internal processes, control environment, and disclosures. While the company does not currently anticipate that the adoption of ASU 2014-09 will result in a material change to the timing of when revenue is recognized and believes that it will retain similar accounting treatment used to recognize revenue under current standards, we are continuing to evaluate the impact of the new standard on our financial results and other possible impacts. The standard allows for both retrospective and modified retrospective methods of adoption. The company is in the process of determining the method of adoption it will elect and the impact on our consolidated financial statements and footnote disclosures. We will continue to provide enhanced disclosures as we continue our assessment.

On March 17, 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*, which provides guidance on assessing whether an entity is a principal or an agent in a revenue transaction and whether an entity reports revenue on a gross or net basis. On April 14, 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing*, which provides guidance on identifying performance obligations and accounting for licenses of intellectual property. On May 6, 2016, the FASB issued ASU No. 2016-11, *Revenue Recognition and Derivatives and Hedging: Rescission of SEC guidance because of ASU No. 2014-09 and ASU No. 2014-16 pursuant to staff announcements at the March 3, 2016 EITF Meeting*, which rescinds the following SEC Staff Observer comments from ASC 605, *Revenue Recognition*, upon an entity's early adoption of ASC 606, *Revenue from Contracts with Customers*: Revenue and expense recognition

for freight services in process, accounting for shipping and handling fees and costs, and accounting for consideration given by a vendor to a customer (including reseller of the vendor's products). On May 9, 2016, the FASB issued ASU No. 2016-12, *Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients*, which makes narrow-scope amendments to ASU No. 2014-09 and provides practical expedients to simplify the transition to the new standard and clarify certain aspects of the standard. On December 21, 2016, the FASB issued ASU No. 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, which makes narrow-scope amendments to ASU No. 2014-09.

The effective date and transition requirements for ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-11, ASU No. 2016-12, and ASU No. 2016-20 are the same as the effective date and transition requirements of ASU No. 2014-09. We are evaluating the effect that ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-11, ASU No. 2016-12, and ASU No. 2016-20 will have on our consolidated financial statements and related disclosures.

On February 25, 2016, the FASB issued ASU No. 2016-02, *Leases*, which will require lessees to recognize almost all leases on their balance sheet as a right-of-use asset and a lease liability. The new standard is effective for us on January 1, 2019. The new standard must be adopted using a modified retrospective transition, and provides for certain practical expedients. Transition will require application of the new guidance at the beginning of the earliest comparative period presented. We are evaluating the effect that ASU No. 2016-02 will have on our consolidated financial statements and related disclosures.

On March 15, 2016, the FASB issued ASU No. 2016-07, *Investments—Equity Method and Joint Ventures: Simplifying the Transition to the Equity Method of Accounting*, which eliminates the requirement to apply the equity method of accounting retrospectively when a reporting entity obtains significant influence over a previously held investment. The new standard is effective for us on January 1, 2017. Early adoption is permitted. The new standard should be applied prospectively for investments that qualify for the equity method of accounting after the effective date. We elected to early adopt ASU No. 2016-07 in the quarter ended March 31, 2016. The adoption of ASU No. 2016-07 did not have a material effect on our consolidated financial statements.

On March 30, 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation: Improvements to Employee Share-Based Payment Accounting*, which includes amendments to accounting for income taxes at settlement, forfeitures, and net settlements to cover withholding taxes. The new standard is effective for us on January 1, 2017. Early adoption is permitted but requires all elements of the amendments to be adopted at once rather than individually.

We elected to early adopt ASU No. 2016-09 in the quarter ended June 30, 2016, which requires us to reflect any adjustments as of January 1, 2016, the beginning of the annual period that includes the interim period of adoption. The primary impact of adoption was the recognition of excess tax benefits in our provision for income taxes rather than paid-in capital for all periods in 2016. Additional amendments to the accounting for income taxes and minimum statutory withholding tax requirements had no impact to retained earnings as of January 1, 2016, where the cumulative effective of these changes are required to be recorded. We have elected to continue to estimate forfeitures expected to occur to determine the amount of compensation cost to be recognized in each period.

We elected to apply the presentation requirements for cash flows related to excess tax benefits retrospectively to all periods presented, which resulted in an increase to both net cash provided by operating activities and net cash used for financing activities of \$2.6 million and \$4.4 million for the years ended December 31, 2015 and December 31, 2014, respectively. The presentation requirements for cash flows related to employee taxes paid for withheld shares had no impact to any of the periods presented in our consolidated cash flow statements because such cash flows have historically been presented as a financing activity.

Adoption of the new standard resulted in the recognition of excess tax benefits in our provision for income taxes rather than paid-in capital of \$0.8 million for the year ended December 31, 2016.

On August 26, 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments*, which reduces diversity in practice of how certain transactions are classified in the statement of cash flows. The new guidance clarifies the classification of cash activities related to debt prepayment or debt extinguishment costs, settlement of zero-coupon debt instruments, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims, proceeds from the settlement of corporate and bank-owned life insurance policies, distributions received from equity-method investments, and beneficial interests in securitization transactions. The guidance also describes a predominance principle in which cash

flows with aspects of more than one class that cannot be separated should be classified based on the activity that is likely to be the predominant source or use of cash flow.

The new standard is effective for us on January 1, 2018. Early adoption is permitted, including adoption in an interim period, but requires all elements of the amendments to be adopted at once rather than individually. The new standard must be adopted using a retrospective transition method. We are evaluating the effect that ASU No. 2016-15 will have on our consolidated financial statements and related disclosures.

On January 5, 2017, the FASB issued ASU No. 2017-01, *Business Combinations: Clarifying the Definition of a Business*, which revises the definition of a business. When substantially all of the fair value of gross assets acquired is concentrated in a single asset (or a group of similar assets), the assets acquired would not represent a business. To be considered a business, an acquisition would have to include an input and a substantive process that together significantly contribute to the ability to create outputs. The new guidance provides a framework to evaluate when an input and substantive process are present (including for early-stage companies that have not generated outputs). To be a business without outputs, there will now need to be an organized workforce. The new guidance also narrows the definition of the term outputs to be consistent with how it is described in *Topic 606, Revenue from Contracts with Customers*. The new standard is effective for us on January 1, 2018. Early adoption is permitted. We are evaluating the effect that ASU No. 2017-01 will have on our consolidated financial statements and related disclosures.

On January 26, 2017, the FASB issued ASU No. 2017-04, *Intangibles—Goodwill and Other*, which simplifies the accounting for goodwill impairment. The guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance will remain largely unchanged. Entities will continue to have the option to perform a qualitative assessment to determine if a quantitative impairment test is necessary. The same one-step impairment test will be applied to goodwill at all reporting units, even those with zero or negative carrying amounts. Entities will be required to disclose the amount of goodwill at reporting units with zero or negative carrying amounts. The new standard is effective for us on January 1, 2020. The new standard should be applied prospectively. Early adoption is permitted for any impairment tests performed after January 1, 2017. We are evaluating the effect that ASU No. 2017-05 will have on our consolidated financial statements and related disclosures.

17. Selected Quarterly Financial Data (unaudited)

	2015				2016			
(in millions except per share amounts)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Revenue	\$ 189.8	\$ 202.1	\$ 195.3	\$ 201.6	\$ 192.1	\$ 198.2	\$ 196.1	\$ 212.2
Total operating expense	145.3	152.4	149.1	151.5	149.8	153.8	151.9	162.3
Operating income	44.5	49.7	46.2	50.1	42.3	44.4	44.2	49.9
Non-operating income (expense), net	(0.4)	0.6	1.4	1.4	0.5	3.0	2.1	38.5 (1)
Income before income taxes and equity in net income (loss) of unconsolidated entities	44.1	50.3	47.6	51.5	42.8	47.4	46.3	88.4
Equity in net income (loss) of unconsolidated entities	0.5	0.6	0.5	0.3	0.5	(0.2)	0.4	(0.9)
Income tax expense (benefit)	14.8	18.7	14.6	14.5	14.6	15.4	16.5	17.2
Consolidated net income	29.8	32.2	33.5	37.3	28.7	31.8	30.2	70.3
Net loss attributable to the noncontrolling interests	(0.1)	—	—	—	—	—	—	—
Net income attributable to Morningstar, Inc.	\$ 29.7	\$ 32.2	\$ 33.5	\$ 37.3	\$ 28.7	\$ 31.8	\$ 30.2	\$ 70.3
Net income per share attributable to Morningstar, Inc.								
Basic	\$ 0.67	\$ 0.73	\$ 0.76	\$ 0.85	\$ 0.67	\$ 0.74	\$ 0.70	\$ 1.63
Diluted	\$ 0.67	\$ 0.72	\$ 0.76	\$ 0.85	\$ 0.67	\$ 0.73	\$ 0.70	\$ 1.63
Dividends per common share:								
Dividends declared per common share	\$ 0.19	\$ 0.19	\$ 0.19	\$ 0.22	\$ 0.22	\$ 0.22	\$ 0.22	\$ 0.23
Dividends paid per common share	\$ 0.19	\$ 0.19	\$ 0.19	\$ 0.19	\$ 0.22	\$ 0.22	\$ 0.22	\$ 0.22
Weighted average shares outstanding:								
Basic	44.3	44.3	44.2	43.8	43.0	43.0	43.1	43.0
Diluted	44.5	44.4	44.3	43.9	43.1	43.3	43.3	43.2

(1) Non-operating income in the fourth quarter of 2016 included a \$37.1 million holding gain related to the purchase of the remaining ownership interest in PitchBook, which was previously a minority investment.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

We design disclosure controls and procedures to reasonably assure that information required to be disclosed in the reports filed or submitted under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to reasonably assure that information required to be disclosed in the reports filed under the Exchange Act is accumulated and communicated to management, including the chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

We carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act, as of December 31, 2016. Management, including our chief executive officer and chief financial officer, participated in and supervised this evaluation. Based on that evaluation, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures are effective to provide reasonable assurance that information required to be disclosed in the reports we file or submit under the Exchange Act meets the requirements listed above.

(b) Management's Report on Internal Control Over Financial Reporting

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

We carried out an evaluation, under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, of the effectiveness of our internal control over financial reporting based on the framework set forth in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of PitchBook Data, which we acquired on December 1, 2016. The operations of PitchBook Data constituted \$283.3 million of our consolidated assets and \$4.1 million of our consolidated revenue as of and for the year ended December 31, 2016, respectively.

Based on that evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2016.

KPMG LLP, our independent registered public accounting firm, has issued its report on the effectiveness of our internal control over financial reporting, which is included in Part II, Item 8 of this Form 10-K under the caption "Financial Statements and Supplementary Data" and incorporated herein by reference.

(c) Changes in Internal Control Over Financial Reporting

During the quarter ended December 31, 2016, we completed the migration of our remaining international operations to the new version of our primary accounting system. This application is an integral part of our financial reporting process and materially affects our internal control environment over financial reporting. As of December 31, 2016, management is not aware of any control deficiencies related to this change.

Other than the change noted above, there were no changes in our internal control over financial reporting during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

There is no information that was required to be disclosed in a report on Form 8-K during the fourth quarter of the year covered by this Annual Report on Form 10-K that was not reported.

Part III

Item 10. Directors, Executive Officers, and Corporate Governance

The information contained under the headings Proposal 1—Election of Directors, Board of Directors and Corporate Governance—Independent Directors, Board of Directors and Corporate Governance—Board Committees and Charters, and Section 16(a) Beneficial Ownership Reporting Compliance in the definitive proxy statement for our 2017 Annual Meeting of Shareholders (the Proxy Statement) and the information contained under the heading Executive Officers in Part I of this report is incorporated herein by reference in response to this item.

We have adopted a code of ethics, which is posted in the Investor Relations section of our website at <http://www.morningstar.com/company>. We intend to include on our website any amendments to, or waivers from, a provision of the code of ethics that apply to our principal executive officer, principal financial officer, principal accounting officer, or controller that relates to any element of the code of ethics definition contained in Item 406(b) of SEC Regulation S-K. Shareholders may request a free copy of these documents by sending an e-mail to investors@morningstar.com.

Item 11. Executive Compensation

The information contained under the headings Board of Directors and Corporate Governance—Directors' Compensation, Compensation Discussion and Analysis, Compensation Committee Report, Compensation Committee Interlocks and Insider Participation, and Executive Compensation in the Proxy Statement is incorporated herein by reference in response to this item.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information contained under the headings Security Ownership of Certain Beneficial Owners and Management and Equity Compensation Plan Information in the Proxy Statement is incorporated herein by reference in response to this item.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information contained under the headings Certain Relationships and Related Party Transactions and Board of Directors and Corporate Governance—Independent Directors in the Proxy Statement is incorporated herein by reference in response to this item.

Item 14. Principal Accountant Fees and Services

The information contained under the headings Audit Committee Report and Principal Accounting Firm Fees in the Proxy Statement is incorporated herein by reference in response to this item.

Part IV

Item 15. Exhibits and Financial Statement Schedules

(a)

1. Consolidated Financial Statements

The following documents are filed as part of this Annual Report on Form 10-K under Item 8—Financial Statements and Supplementary Data:

Report of KPMG LLP, Independent Registered Public Accounting Firm

Financial Statements:

Consolidated Statements of Income—
Years ended December 31, 2016, 2015, and 2014
Consolidated Statements of Comprehensive Income—
Years ended December 31, 2016, 2015, and 2014
Consolidated Balance Sheets—
December 31, 2016 and 2015
Consolidated Statements of Equity—
Years ended December 31, 2016, 2015, and 2014
Consolidated Statements of Cash Flows—
Years ended December 31, 2016, 2015, and 2014
Notes to Consolidated Financial Statements

2. Financial Statement Schedules

Report of Independent Registered Public Accounting Firm

The report of KPMG LLP dated February 28, 2017 concerning the Financial Statement Schedule II, Morningstar, Inc., and subsidiaries Valuation and Qualifying Accounts, is included at the beginning of Part II, Item 8 of this Annual Report on Form 10-K for the years ended December 31, 2016, December 31, 2015, and December 31, 2014.

The following financial statement schedule is filed as part of this Annual Report on Form 10-K:

Schedule II: Valuation and Qualifying Accounts

All other schedules have been omitted as they are not required, not applicable, or the required information is otherwise included.

(in millions)	Balance at Beginning of Year	Charged (Credited) to Costs & Expenses	Additions (Deductions) Including Currency Translation	Balance at End of Year
Allowance for doubtful accounts:				
Year ended December 31,				
2016	\$ 1.8	\$ 1.3	\$ (1.0)	\$ 2.1
2015	1.5	0.5	(0.2)	1.8
2014	1.1	0.5	(0.1)	1.5

3. Exhibits

Exhibit Description

3.1	Amended and Restated Articles of Incorporation of Morningstar are incorporated by reference to Exhibit 3.1 to our Registration Statement on Form S-1, as amended, Registration No. 333-115209 (the Registration Statement).	10.10*	Form of Morningstar 2011 Stock Incentive Plan Performance Share Award Agreement, as amended and restated effective December 3, 2015, for awards made on and after March 15, 2015 is incorporated by reference to Exhibit 10.14 to the 2015 10-K.
3.2	By-laws of Morningstar, as in effect on September 30, 2016, are incorporated by reference to Exhibit 3.2.1 to our Current Report on Form 8-K that we filed with the SEC on October 4, 2016.	10.11 [†] *	Form of Morningstar 2011 Stock Incentive Plan CEO Restricted Stock Unit Award Agreement for award made on January 3, 2017.
4.1	Specimen Common Stock Certificate is incorporated by reference to Exhibit 4.1 to the Registration Statement.	10.12	Settlement Agreement dated July 17, 2014 between Morningstar, Ibbotson Associates, and Business Logic is incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K that we filed with the SEC on July 17, 2014.
10.1*	Form of Indemnification Agreement is incorporated by reference to Exhibit 10.1 to the Registration Statement.	10.13	Amended and Restated Credit Agreement dated as of November 4, 2016 among Morningstar, Inc., certain subsidiaries of Morningstar, Inc., and Bank of America, N.A. is incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K that we filed with the SEC on November 8, 2016.
10.2*	Morningstar Incentive Plan, as amended and restated effective January 1, 2014, is incorporated by reference to Exhibit 10.2 to our Annual Report on Form 10-K for the year ended December 31, 2013.	21.1 [†]	Subsidiaries of Morningstar.
10.3*	Morningstar 2004 Stock Incentive Plan, as amended and restated effective as of July 24, 2009, is incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2009.	23.1 [†]	Consent of KPMG LLP.
10.4*	Morningstar 2011 Stock Incentive Plan is incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K that we filed with the SEC on May 18, 2011.	31.1 [†]	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
10.5*	Form of Morningstar 2004 Stock Incentive Plan Stock Option Agreement for awards made on May 15, 2011 is incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2011 (the June 2011 10-Q).	31.2 [†]	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
10.6*	Form of Morningstar 2004 Stock Incentive Plan Director Stock Option Agreement for awards made on May 15, 2011 is incorporated by reference to Exhibit 10.2 to the June 2011 10-Q.	32.1 [†]	Certification of Chief Executive Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
10.7*	Form of Morningstar 2011 Stock Incentive Plan Restricted Stock Award Agreement for awards made on and after May 15, 2013 is incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2013 (the June 2013 10-Q).	32.2 [†]	Certification of Chief Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
10.8*	Form of Morningstar 2011 Stock Incentive Plan Director Restricted Stock Unit Award Agreement, as amended and restated effective December 3, 2015 is incorporated by reference to Exhibit 10.12 to our Annual Report on Form 10-K for the year ended December 31, 2015 (the 2015 10-K).	101 [†]	The following financial information from Morningstar Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on February 28, 2017, formatted in XBRL: (i) Consolidated Statements of Income, (ii) Consolidated Statements of Comprehensive Income, (iii) Consolidated Balance Sheets, (iv) Consolidated Statements of Equity, (v) Consolidated Statements of Cash Flows and (vi) the Notes to Consolidated Financial Statements.
10.9*	Form of Morningstar 2011 Stock Incentive Plan Performance Share Award Agreement, as amended and restated effective December 3, 2015, for awards made on March 15, 2014 is incorporated by reference to Exhibit 10.13 to the 2015 10-K.		

* Management contract with a director or executive officer or a compensatory plan or arrangement in which directors or executive officers are eligible to participate.

[†] Filed or furnished herewith.

Item 16. Form 10-K Summary

Not applicable.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized on February 28, 2017.

MORNINGSTAR, INC.

By: /s/ Kunal Kapoor

Kunal Kapoor

Title: Chief Executive Officer

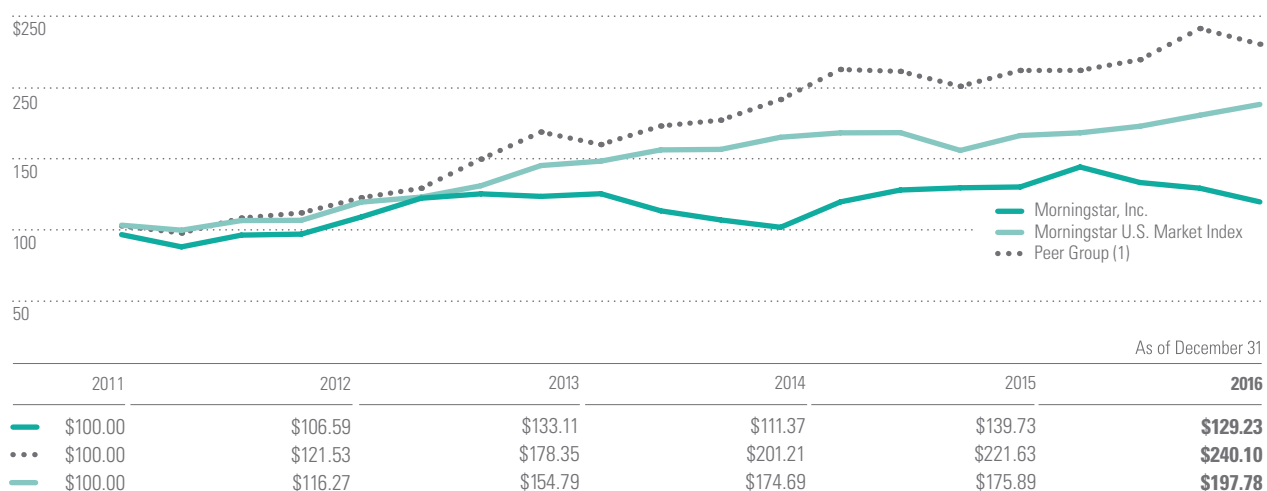
Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Kunal Kapoor Kunal Kapoor	Chief Executive Officer (principal executive officer) and Director	February 28, 2017
/s/ Stéphane Biehler Stéphane Biehler	Chief Financial Officer (principal financial and accounting officer)	February 28, 2017
/s/ Joe Mansueto Joe Mansueto	Chairman of the Board	February 28, 2017
/s/ Robin Diamonte Robin Diamonte	Director	February 28, 2017
/s/ Cheryl Francis Cheryl Francis	Director	February 28, 2017
/s/ Steven Kaplan Steven Kaplan	Director	February 28, 2017
/s/ Gail Landis Gail Landis	Director	February 28, 2017
/s/ Bill Lyons Bill Lyons	Director	February 28, 2017
/s/ Jack Noonan Jack Noonan	Director	February 28, 2017
/s/ Paul Sturm Paul Sturm	Director	February 28, 2017
/s/ Hugh Zentmyer Hugh Zentmyer	Director	February 28, 2017

Stock Price Performance Graph

The graph below shows a comparison of cumulative total return for our common stock, the Morningstar U.S. Market Index, and a group of peer companies, which are listed below the graph. The graph assumes an investment of \$100 beginning on January 1, 2012, in our

common stock, the Morningstar U.S. Market Index, and the peer group, including reinvestment of dividends. The returns shown are based on historical results and are not intended to suggest future performance.



(1) Our peer group consists of the following companies: Envestnet, Inc., FactSet Research Systems Inc., Financial Engines, MSCI, SEI Investments Company, S&P Global, Thomson Reuters, and Value Line, Inc.

Corporate Headquarters

Morningstar, Inc., 22 West Washington Street, Chicago, Illinois 60602, +1 312 696-6000

Transfer Agent and Registrar

Computershare Investor Services LLC, 2 North LaSalle Street, Chicago, Illinois 60602, +1 866 303-0659 (toll free)

Ethics Hotline

Morningstar has established a confidential Ethics Hotline that anyone may use to report complaints or concerns about ethics violations, including accounting irregularities, financial misstatements, problems with internal accounting controls, or noncompliance with external rules and regulations.

The Morningstar Ethics Hotline is operated by Global Compliance, an independent company that is not affiliated with Morningstar. The hotline is available 24 hours a day, seven days a week.

Anyone may make a confidential, anonymous report by calling the hotline toll free at: +1 800 555-8316.

Annual Meeting

Morningstar's annual meeting of shareholders will be held at 9 a.m. on Friday, May 12, 2017 at our corporate headquarters, 22 West Washington Street, Chicago, Illinois 60602.

Investor Questions

We encourage all interested parties—including securities analysts, potential shareholders, and others—to submit questions to us in writing. We publish responses to these questions on our website and in Form 8-Ks furnished to the SEC, generally on the first Friday of every month. If you have a question about our business, please send it to investors@morningstar.com.

Board of Directors

- Robin Diamonte
Vice President and Chief Investment Officer, United Technologies Corp.
- ■ Cheryl Francis
Co-Chairman, Corporate Leadership Center
- ▲ ■ Steve Kaplan
Neubauer Family Professor of Entrepreneurship and Finance, University of Chicago Booth School of Business
- Kunal Kapoor
Chief Executive Officer and Interim Chief Financial Officer
- ▲ Gail Landis
Former Managing Principal, Evercore Asset Management, LLC
- ▲ ■ William Lyons
Former President and Chief Executive Officer, American Century Companies, Inc.
- Joe Mansueto
Executive Chairman, Morningstar, Inc.
- ■ Jack Noonan
Former Chairman, President and Chief Executive Officer, SPSS Inc.
- ▲ Paul Sturm
Private Investor
- ■ Hugh Zentmyer
Former Executive Vice President, Illinois Tool Works Inc.

Executive Officers

Bevin Desmond
Head of Global Markets and Human Resources

Danny Dunn
Chief Revenue Officer

Kunal Kapoor
Chief Executive Officer and Interim Chief Financial Officer

Haywood Kelly
Head of Global Research

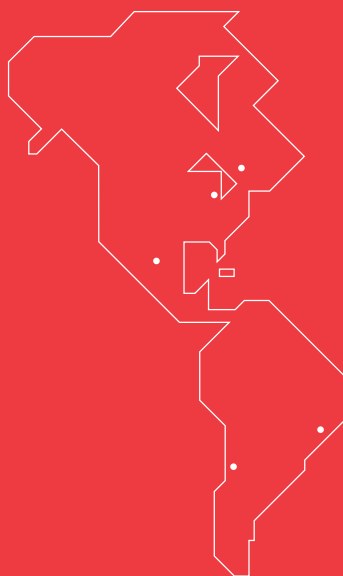
Patrick Maloney
General Counsel

Joe Mansueto
Executive Chairman

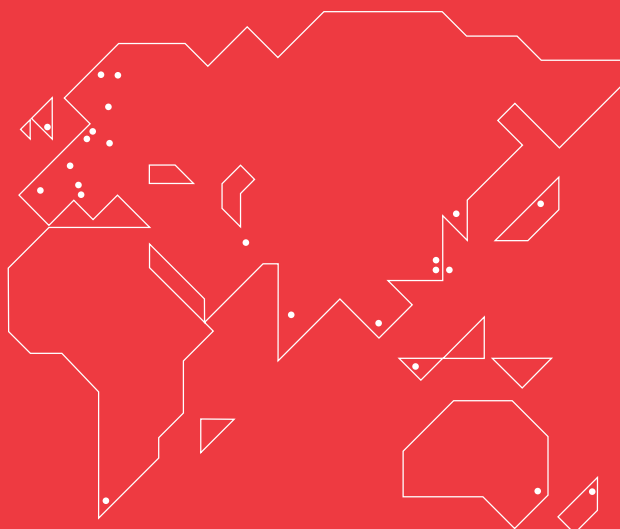
Daniel Needham
President and Chief Investment Officer, Investment Management

Tricia Rothschild
Chief Product Officer

-
- Member of audit committee
 - Member of compensation committee
 - ▲ Member of nominating/governance committee



Canada
United States
Mexico
Brazil
Chile



Denmark
France
Germany
Italy
Luxembourg
The Netherlands
Norway
Spain
South Africa
Sweden
Switzerland
United Kingdom
China
India
Japan
Singapore
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Taiwan
Thailand
United Arab Emirates
Australia
New Zealand

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