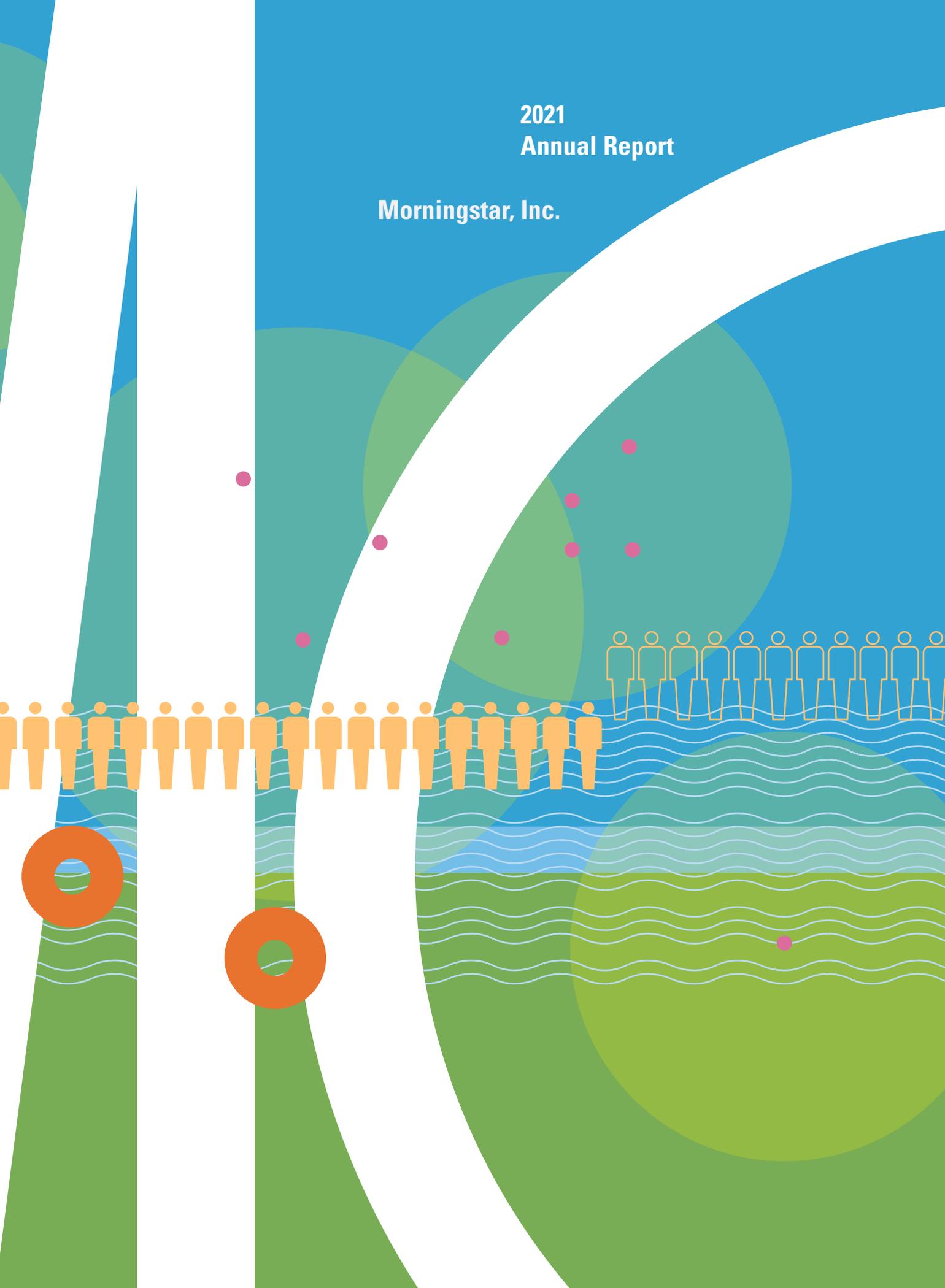


2021
Annual Report

Morningstar, Inc.



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Financial Highlights

				PitchBook			DBRS	SUSTAINALYTICS			
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Revenue (\$M)	\$658.3	\$698.3	\$760.1	\$788.8	\$798.6	\$911.7	\$1,019.9 ⁽¹⁾	\$1,179.0	\$1,389.5	\$1,699.3	22.3%
Operating Income (\$M)	\$150.7	\$170.7	\$105.6 ⁽²⁾	\$190.6	\$180.8	\$169.8 ⁽³⁾	\$215.8 ⁽¹⁾	\$189.6	\$215.2	\$257.0	19.4%
Free Cash Flow (\$M)⁽⁵⁾	\$123.2	\$159.0	\$78.3 ⁽²⁾	\$184.2	\$150.9	\$183.5	\$238.7 ⁽¹⁾	\$254.4	\$307.6	\$348.1	13.2% ⁽⁴⁾
Cash Flows	\$153.2	\$192.6	\$136.6	\$241.5	\$213.7	\$250.1	\$314.8	\$334.4	\$384.3	\$449.9	
Cash provided by operating activities											
Capital expenditures	(30.0)	(33.6)	(58.3)	(57.3)	(62.8)	(66.6)	(76.1)	(80.0)	(76.7)	(101.8)	
Free cash flow ⁽⁵⁾	\$123.2	\$159.0	\$78.3 ⁽²⁾	\$184.2	\$150.9	\$183.5	\$238.7 ⁽¹⁾	\$254.4	\$307.6	\$348.1	

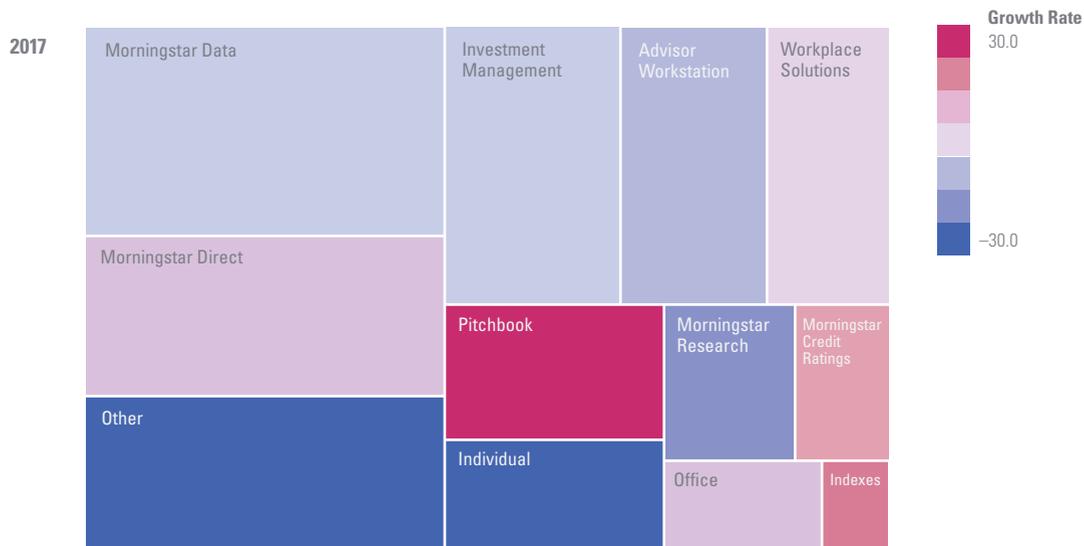
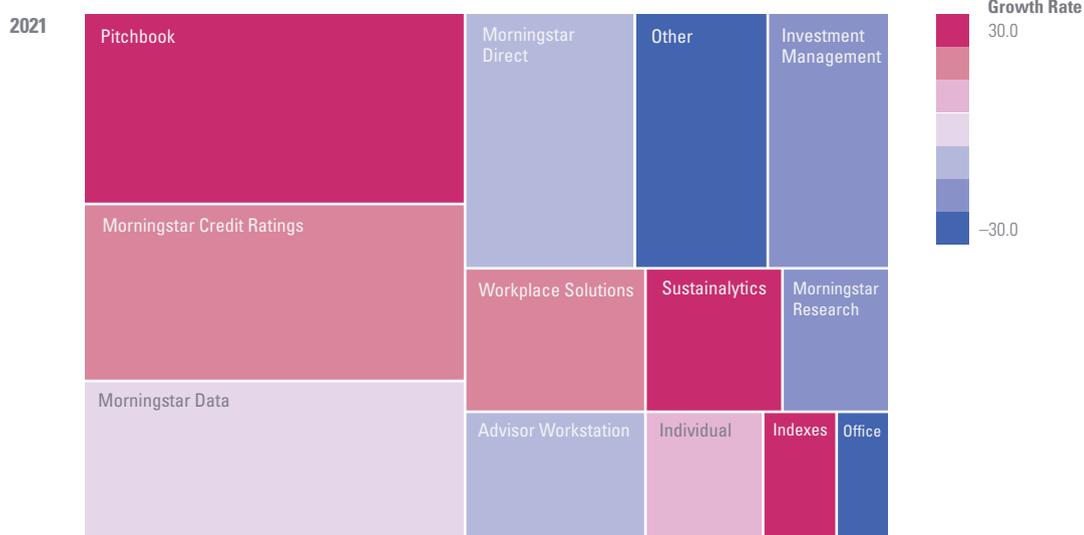
(1) Revenue, operating income, and free cash flow in 2018 include a \$10.5 million revenue benefit related to an amended license agreement and a corresponding favorable cash impact.

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

(3) Operating income for 2017 includes the negative impact of a \$4.1 million impairment charge for certain software licenses due to the shift to our cloud-based strategy.

(4) Excluding \$16.6 million of M&A-related earn-out payments in Q2 2021, free cash flow would have grown by 18.6%.

(5) Free cash flow, which we define as cash provided by operating activities less capital expenditures, is considered a non-GAAP financial measure.



Dear shareholders,

The big themes we have been positioning Morningstar for are playing out. Our firm is benefiting from being at the center of many important and sustainable trends: index innovation, ESG, data analytics, private markets, credit ratings, holistic financial and investment planning, and integrated retirement solutions. We have great opportunities to weave our growing capabilities together to meet evolving investor needs.

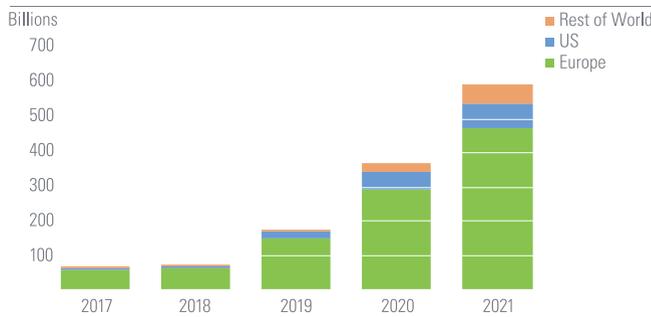
With this backdrop, 2021 was a very successful year. Public and private markets soared to new heights, growth across our business was stellar, and we found ourselves running fast to help environmental, social, and governance- and climate-focused investors redefine how they connect with their investments and assess their portfolios. The relevance of our mission to empower investor success grew alongside the expanding pool of investors who have recently discovered the financial markets.

We're serving this diverse set of investors in more ways than ever before. Just over five years ago, we welcomed PitchBook into the fold, kicking off a journey that has kept us core to the evolving investor portfolio. At that time, we were also a nascent player in credit ratings, Morningstar Indexes was beginning to resonate broadly, and we were scratching the surface of ESG. When you look at the difference between our portfolio of offerings—and whom it served in 2017—and where our portfolio stands today, it's clear we have remained ahead of shifts in investor portfolios and preferences. Revenue growth aside, PitchBook, DBRS Morningstar, and Morningstar Indexes are reaching a wider pool of investors. Meanwhile, one of our flagship products, Morningstar Retirement

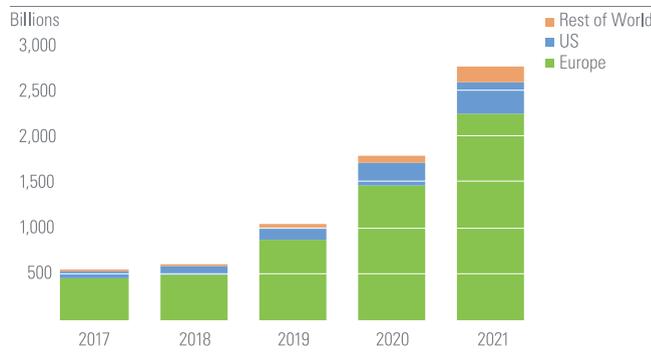
Manager (Workplace Solutions), transformed itself from a single-channel, single-segment approach to a wider-reaching one that serves advisors, firms, and plan sponsors to propel participant success. Our strategy and investment themes have clicked, making Morningstar as relevant as ever across the investing ecosystem.

Morningstar Direct’s fund flows data began to show an appreciable uptick in demand for sustainable funds in 2019, and the rate at which investors today deploy capital toward sustainable investing strategies remains robust. In three short years, sustainable investing transformed from a largely Europe-centered investing approach to one that is fundamental for investors globally. We see this as considerable evidence that ESG has emboldened and empowered investors of all types, and we’re positioning Morningstar to be at the center of this transition in finance.

Global Sustainable Net Flows, Annually



Global Sustainable Total Net Assets, Annually



At this time last year, we published the Morningstar Corporate Sustainability Report, which covered our global practices. We are focused on establishing a leadership position in corporate sustainability, which we see as consistent with our historical commitment

to transparency, disciplined disclosure, and a long-term view. Gabriel Presler and Charity Driggs deserve tremendous credit for moving us forward purposefully in this realm.

It's inspiring to think about how far we've come since 1987 (Morningstar was just three years old!) when the United Nations World Commission on Environment and Development defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." While the U.N.'s definition largely sprang from environmental concerns at the time, it's the vision of future preservation in pursuit of present value that continues to resonate with me. Linking this concept to our mission of empowering investor success validates our conviction that sustainable investing is the new face of long-term investing. You can invest in the future you want to live in, and you can move toward achieving your financial goals while engaging more personally with your investments.

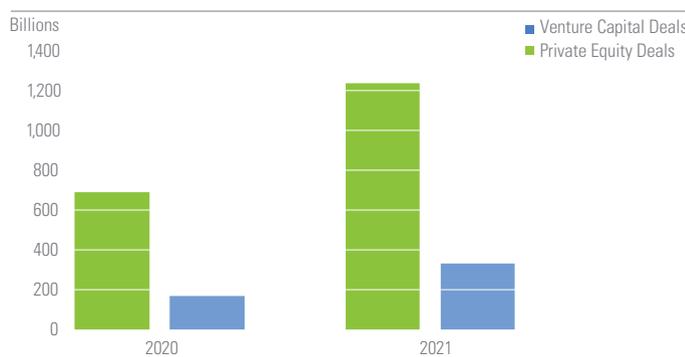
Sustainable investing looks at today's investment opportunities through a risk framework that broadens the definition of impact beyond financial outcomes, while enabling investors to use their voices to stimulate change and hold companies accountable. It acknowledges that, broadly speaking, ESG "happy talk" isn't the real driver of positive outcomes; it's actions. Rising retail investor interest in issues like climate change, labor practices, food security, and water scarcity often correspond to the desire to be part of something exciting and meaningful.

Many of you know that the name of our firm came from the last line of Henry David Thoreau's *Walden*: "The sun is but a morning star." Our founder, Joe Mansueto, derived a great amount of optimism from this sentence, recognizing the dawn of an incredible age of opportunity where individual investors could have a seat at the table and take control of their financial futures. Decades later, the morning star is as bright as ever, as our efforts in sustainable investing light up an infinite horizon of opportunity.

The notion of meeting today's needs without sacrificing the future also applies to our own decision-making. We strive to create sustainable value and attractive outcomes for our stakeholders over time. Our aim is to always deploy our considerable resources to ensure sustainable, profitable growth—not just for next quarter or year, but for the long term.

The heady environment we've seen in fintech and the broader financial services world—and really, across most industry sectors—is as attractive as ever from an opportunity standpoint. There is no shortage of interesting firms and innovative ideas, which is especially apparent when analyzing private market deal activity. PitchBook reported that in 2021, U.S. private equity deal-making eclipsed \$1 trillion in total deal value and set several new high-water marks, while U.S. venture-backed companies raised \$329.6 billion in 2021, nearly double the previous record of \$166.6 billion raised in 2020.

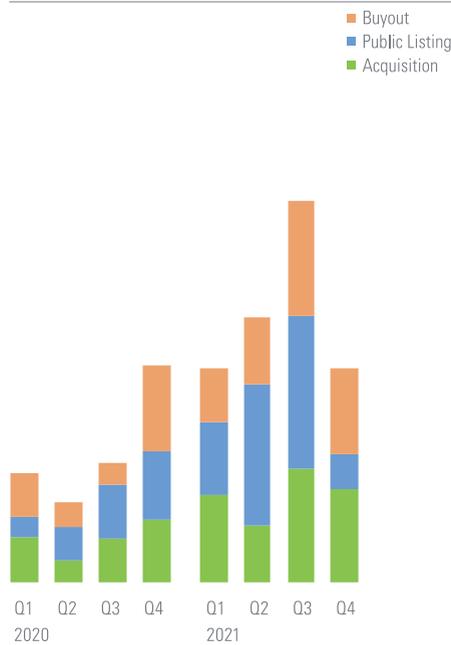
Private Market Deal Funding



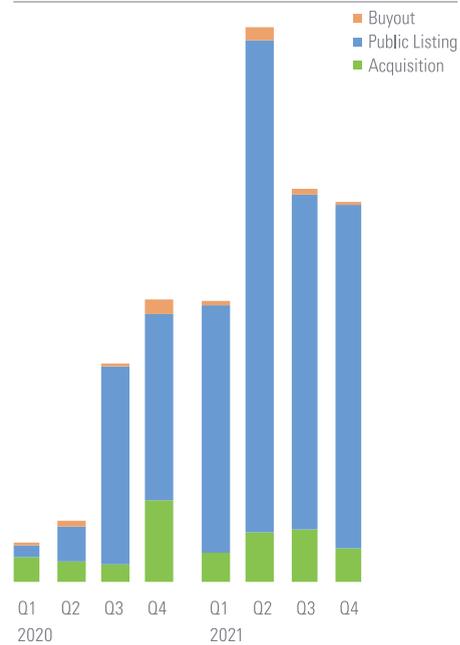
This level of activity also supported sky-high public equity market valuations, as private equity and venture-backed investments raced to exit toward the tail end of 2021. It's notable that in the U.S. in 2021, of the 144 private equity and 297 venture-backed public listings, about one-third of each were SPAC reverse mergers rather than direct listings or initial public offerings. The initial enthusiasm and subsequent fall from grace seen by many of these special-purpose acquisition companies in mid-2021 coming into early 2022 is not only a symptom of irrational exuberance in the markets, which valued many of these pre-profit—and in some cases even pre-revenue!—companies at many times the multiples of companies with actual cash flow and proven business models. It is also a tribute to the undeniable entrepreneurialism that fuels the private capital markets.

Frothy valuations are challenging even in the best of times, so we largely stayed on the sidelines in 2021 with respect to larger deals. Instead, we announced two targeted, deliberate acquisitions in 2021: Moorgate in the third quarter and Praemium's U.K. and international business in the fourth quarter—small but mighty assets. Moorgate brings us closer to controlling our own destiny as an index provider, especially in Europe, reducing

Private Equity Exits



Venture Capital Exits



our reliance on outside partners for services such as index calculation. The acquisition brought with it an impressive team, including Moorgate founders Tobias Sproehle and Mark Pralle and CTO Gareth Parker, who have joined our Indexes global leadership team. We're also excited about leveraging Praemium's technology platform to scale our wealth-management solutions, particularly in the United Kingdom and Europe, where we have big ambitions but need scale. We expect this deal to close in 2022's second half.

Strategic Priorities

Sustainability and accountability go hand in hand, and since our beginning, Morningstar has played an important role in holding various actors in the financial-services world to account for their actions. We turn that mirror on ourselves, too. So, last year we laid out our strategic priorities, inviting our shareholders and other stakeholders to help keep us accountable. Here is how we progressed against those goal posts.

Delivering Differentiated Insights Across Asset Classes to Public and Private Market Investors

When raw data meets the power of the human mind, differentiated insights spring forth, and this has been happening at Morningstar for decades. Nevertheless, it is important

for our company to continue innovating in bigger and better ways to generate ideas and provide solutions for our clients, making this strategic pillar one of the most important drivers of future growth for the firm.

In 2021, PitchBook was one of the most prolific generators of innovation in our portfolio, adding new data points and insights like hedge fund profiles, public company capital structures, emerging tech indicators, and private debt filings to the powerful PitchBook Platform. I believe the relentless focus on finding solutions for clients is a major reason the PitchBook team managed to grow revenue by 44.3% in 2021, ending the year just shy of \$300 million. PitchBook's Net Promoter Score remains an impressive 51, well above what is considered best in class in the software-as-a-service industry.

We continue to believe the indexes market is ripe for disruption, given how irrationally expensive benchmarking—a commodity service!—remains. Morningstar Indexes' differentiated, intellectual property-driven indexes support the creation of investable products with strong records of success. I am super excited about our potential to leverage ESG and private markets data to innovate in this area even further. With ESG in particular, we think our solution is as good as any, and we're only doing more there. Revenue in this area grew 59.3%, or 55.8% organically, in 2021, partially driven by growth in our strategic beta products that let clients leverage our data and research to build investable products. A notable example of this is the iShares Cloud and 5G ETF, launched by BlackRock in June 2021, which replicates our Global Digital Infrastructure & Connectivity Index. For the year ended Dec. 31, 2021, our index returned 33.2% versus the 18.3% return of the Morningstar Global Markets Index, underscoring the attractiveness of research-based index construction versus replicating the broader market.

DBRS Morningstar also delivered impressive growth in 2021, increasing revenue 30.8%, or 26.4% organically, to just over \$270 million and cementing its position as the fourth-largest credit rating agency globally. While a recovery in structured finance issuance volume certainly helped, we continued to work on expanding our footprint outside of Canada in fundamental ratings, focusing specifically on middle-market lending. It's a great example of how our differentiated rating methodology extends to markets largely ignored by the

three large legacy firms. Furthermore, in 2021, we launched Morningstar Credit Information & Analytics, which will combine our DealView and Viewpoint platforms to provide a comprehensive, 360-degree view of an organization's commercial real estate loan risk. We have high hopes for this unit.

By leveraging our core capabilities in new ways, we've also delivered differentiated solutions in long-held areas of our business, such as Advisor Workstation, which grew revenue 5.4%, or 4.8% organically, in 2021. Advisor Workstation rolled out Morningstar's Risk Ecosystem across 7 million portfolios in the summer of 2021, which combines Morningstar's Portfolio Risk Score with an innovation we call Risk Comfort Range. The Risk Ecosystem modernizes the traditional risk tolerance questionnaire by evolving it toward a more investor-centric approach, ultimately helping advisors deliver and demonstrate more personalized investment advice. We are committed to developing this further for advisors and increasing adoption.

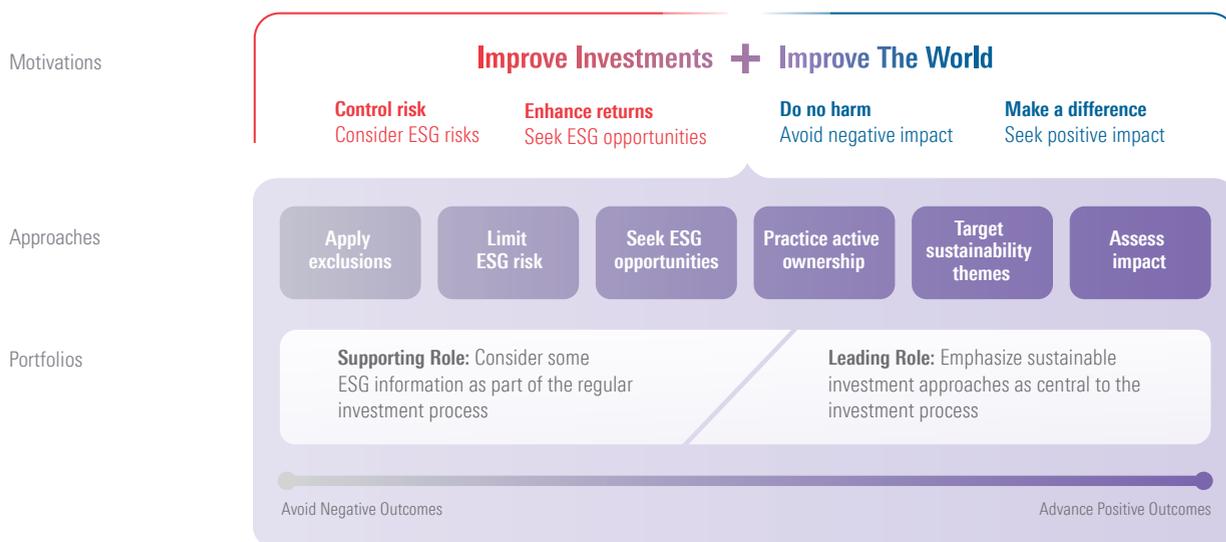
I'll address our Workplace business more fully below, but I wanted to wrap up this section by highlighting a major win for the team. It just completed the enrollment of 11,000 Raytheon Technologies participants, representing about \$3.2 billion in assets under management, now officially live on Morningstar Retirement Manager! Raytheon Technologies is a roughly \$50 billion plan sponsor and is the largest Retirement Manager win to date. Even more impressive, this is one of the most complex defined-contribution plans in the market because it includes multiple pension programs, multiple variants of lifetime income, and over 200 different employee matching structures. There was a lot of work involved to make this happen, including over the holidays.

Establishing Leading ESG Positions Across Each Business

We celebrated the one-year anniversary of the Sustainalytics acquisition in July 2021 and ended the year with over \$78 million in Sustainalytics revenue. Rising interest in ESG continues to drive adoption of Sustainalytics' core ESG Risk Ratings, and in 2021, we introduced the Sustainable Investing Framework to help investors integrate ESG into their portfolios by providing them with a lens through which they can evaluate and compare strategies.

Framework MAP

SUSTAINABLE INVESTING: PEOPLE, PLANET, PROFITS



The framework identifies six sustainable investment approaches, which may be paired with a range of investment approaches (active or passive, growth or value, and so on) and applied to most asset and subasset classes. This is a great example of how we are using our leadership in the industry to empower investor success in sustainable investing, and it reminds me very much of our early days innovating the Morningstar Style Box for funds, which ultimately revealed frequent mismatches between a fund’s investment mandate and marketing strategy and its actual holdings. Today, we see similar mismatches in so-called sustainable funds whose portfolios carry holdings that wouldn’t universally be considered sustainable.

In keeping with this theme, we believe a common categorization framework that is simple and easily accessible for investors of all types is sorely needed for sustainable investing to win the trust of the broader public; stay tuned for more from us on new ratings and tools that will help make a company’s position along the framework clear to investors. For example, in late 2022, we will debut new ratings that help investors more directly understand how the changing climate could affect a company (physical risk) and how a company is adapting to the shift toward a low-carbon economy (transition risk). That’s in addition to meaningful enhancements coming to the impact metrics that we rolled out in February.

Not only has Sustainalytics succeeded in executing its own expansion plans, but Bob Mann and his team have helped identify areas across Morningstar that can also benefit from pulling through ESG-related data and research. This effort is driving growth broadly across the firm.

For example, we're excited about what we can do with ESG in Workplace Solutions, as the U.S. retirement industry hasn't yet figured out a way to offer sustainable investing strategies at scale. Workplace was one of our fastest-growing areas in 2021, delivering 23.6% organic revenue growth as Brock Johnson and his team continued to attract plan participants and assets under management to Morningstar Retirement Manager. In late 2021, Workplace announced the industry's first pooled employer plan intentionally designed to limit exposure to material ESG risks. This innovation allows even smaller organizations, which typically have limited options available when designing retirement plans for their employees, to offer ESG-related investment vehicles. What a great example of how we can use our leadership position in ESG to break new ground by innovating solutions in the industry to bring investors the confidence that sustainability is reflected in their retirement portfolio.

We also attribute some of Morningstar Direct's 9.6% revenue growth (7.5% organic) to rising demand for sustainable investing strategies. In 2021, the release of new data sets within Morningstar Direct's Analytics Lab allowed users to analyze assets and flows across the global thematic fund landscape, evaluate a fund's underlying exposure to controversial product areas, determine whether a fund has met its stated exclusions commitments, and track diversity data across asset-management firms.

Our Indexes team also partnered with Sustainalytics to expand our range of index solutions, introducing the Morningstar EU Climate Indexes, which are designed to enable investors to implement climate risk mitigation and climate-related opportunities, channeling investments toward sustainable activities while meeting EU regulatory requirements. Plus, we are excited that Morningstar.com and PitchBook now have ESG Risk Ratings available for public market securities. We continue to innovate on ways to pull sustainability ratings through the private markets.

Driving Operational Excellence and Scalability to Support Growth

Growth at Morningstar has been fast over the past several years. We're scaling our infrastructure and resources to ensure that we can support a firm that is much larger than even a few years ago, and one that has continued growth prospects in the years ahead.

In 2021, we made progress in scaling many of the behind-the-scenes functions at Morningstar that may not be readily apparent even to those of you who peruse every figure in our financial statements. An important example is the maturation of our global sales organization in support of a growing, multinational business, including processes and technology governing demand generation and customer support. We've also done work to further develop a "generalist/specialist" sales model, which will help us better surface the multiple solutions we have to the clients who need them the most. And we continue to invest in our Morningstar Design System, a standardized set of interface components that help our teams scale design across our product development by enabling faster delivery of prototypes and products, with more brand consistency. We're also evolving our data lake strategy, which ultimately intends to offer all of Morningstar's data through a centralized platform, so that our researchers can have access to and run analytics on all of the data we house across the firm. In 2021, we made significant progress by incorporating Sustainalytics' Global Access data and linking Morningstar Direct's new analytics platform to the effort.

Our investments on the technology front are critical and meaningful, too. Perhaps no better is this illustrated than in all the behind-the-scenes work of our information security team. In today's world, you can't do enough here, and we're constantly raising the bar thanks to the leadership of our chief information security officer, Daniel Mayer. For a person who faces some stressful situations, Daniel is calm, collected, and deserves kudos for scaling Morningstar's efforts effectively in this space.

We're also investing heavily in our quantitative research organization, which we believe will better scale our analytical capability across the firm. This is especially important because our clients need to digest ever-increasing amounts of data. We recently enhanced our forward-looking Morningstar Quantitative Rating by introducing automatically generated written context, designed to replicate the style of the reports Morningstar

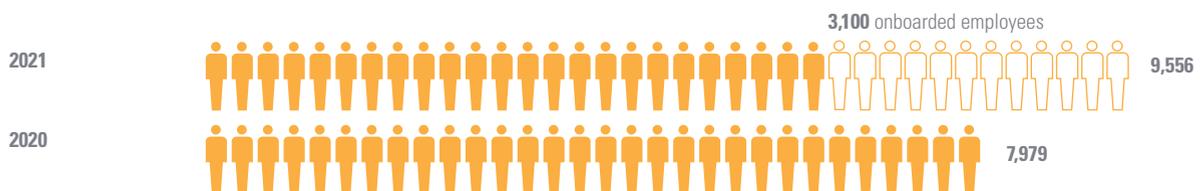
analysts publish accompanying funds that receive a Morningstar Analyst Rating. MQR Analysis contextualizes the opinions of the Morningstar Quantitative Rating by translating the data and analytics behind the rating into opinion-based text, helping investors understand what's driving the rating. MQR Analysis has expanded Morningstar's collective written coverage of managed investments from 4,000 (spanning 20,000 share classes) to 40,000 (spanning 150,000 share classes). You can find the new MQR Analysis on fund quote pages; please check it out!

The person driving these efforts is Lee Davidson, who was recently promoted to run our entire manager research team. Lee is a clear, innovative thinker and someone who I anticipate will only take on bigger roles at Morningstar over time.

Building an Inclusive Culture That Supports Exceptional Talent

We cannot sustainably empower investor success or deliver differentiated insights without properly deploying and investing in a sustainable workforce. So it is critical for us to nurture, protect, and preserve the special culture we've developed at Morningstar and to ensure this is a workplace where employees feel meaning, belonging, and professional growth.

To that end, our global Talent and Culture organization made great strides in 2021 to revamp our hiring process to include an emphasis on structured interviews, with the goal of reducing unconscious bias and identifying potential across both internal and external candidates. Even as the COVID-19 pandemic surprised us with several surges around the world in 2021, T&C ensured that over 3,100 new employees onboarded remotely and felt connected to their new Morningstar family. This team has been burning the candle on both ends, and I'd be remiss if I didn't acknowledge all the efforts it put win to meet the demands of our fast-growing organization at a time when the talent wars are at a level we have not witnessed in decades.

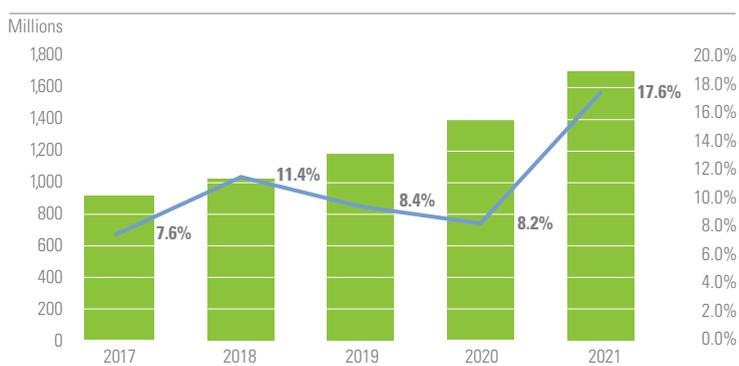


While Morningstar’s overall employee engagement score in 2021 increased slightly to 81% from 80% in 2020, another important metric—employee turnover—unfortunately also showed an upward trend. In 2021, turnover reached almost 19%, underscoring that even a highly engaged workplace isn’t immune from the challenges of this unusual time. It’s all hands on deck, though, as we work to refine our employee value proposition and ensure that especially the newest among us feel as connected to the organization as those who have been here longer, considering that turnover has been highest in the cohort that has joined since the pandemic began.

Financial Highlights⁽¹⁾

We reached nearly \$1.7 billion in revenue in 2021, representing a healthy five-year revenue compound annual growth rate of 16.3%. Importantly, we averaged about 10.6% organic revenue growth over that same five-year period, showing that we have ample opportunity to generate growth from within.

Organic Revenue



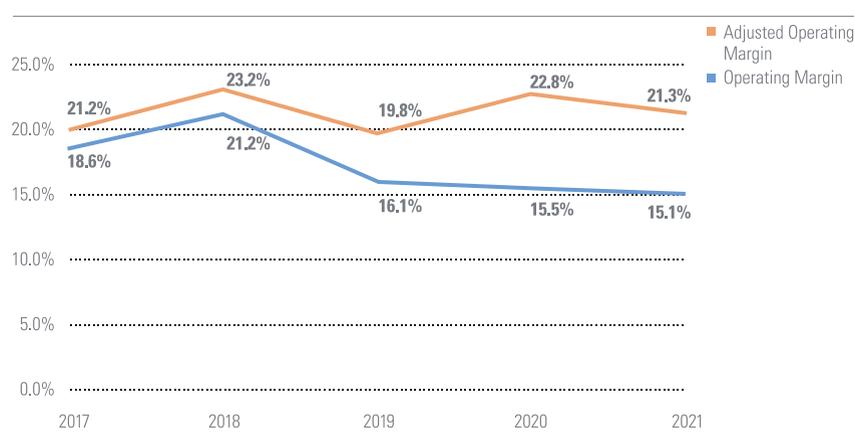
All told, we generated \$257.0 million in operating profit, or \$363.4 million when adjusting for intangible amortization and other M&A-related expenses, resulting in operating and adjusted operating margins of 15.1% and 21.3%, respectively.

Admittedly, our five-year operating profit CAGR of 7.3% hasn’t kept pace with our revenue expansion, although stripping out acquisition-related effects does improve the five-year adjusted operating profit CAGR to 12.7%. So let me address the number-one question we’ve been asked by investors over the past five years: When will Morningstar exhibit the

(1) Organic revenue, adjusted operating margin, and free cash flow are non-GAAP financial measures. Refer to pages 84, 88, and 92 for a reconciliation to the most directly comparable GAAP financial measure.

kind of operating leverage that should be expected from a business like ours? The short answer: I see tremendous opportunities, and we have invested behind them, delaying realization of growth in that margin. I've been OK with this because our returns have backed up the investments we've made, as highlighted in the heat map near the start of this letter. As Warren Buffett said, "Someone is sitting in the shade today because someone planted a tree a long time ago," and we've been steadily cultivating a grove. Those trees will keep growing, and we're preparing for a future in which we expect the company to be many multiples larger than it is today.

Operating Margins



As such, we are following the tenets of sustainable thinking: We're making the investments necessary now to preserve our ability to grow—profitably—for a long time to come. And we think we're on the right track for two reasons. First, we continue to produce very healthy levels of organic growth, indicating that we're directing our hard-earned capital and resources to the right places. We've boosted our overall revenue growth with targeted acquisition activity over the past five years too, but our organic revenue growth remains healthy. In that sense, we are not reliant on acquiring revenue; we can generate it when we continue to support our business and manage it well.

Second, we're proud of the upward trajectory in our free cash flow, which we believe provides even better evidence that we are on the right path. We ended 2021 with \$348.1 million in free cash flow, representing a five-year CAGR of 18.2%—higher than both our revenue and operating profit CAGR over the same period.

Free Cash Flow

Looking ahead, we are making stronger investments in the wealth space. We started by realigning the various pieces of our wealth-management solutions under Daniel Needham, including managed portfolios from Morningstar's Investment Management group, portfolio-management software Morningstar OfficeSM, investment data aggregator ByAllAccounts[®], and the individual investor experience across Morningstar.com[®]. Daniel and his leadership team—which recently added a roster of impressive talent—have big ambitions to build on the success of these offerings while connecting them together toward a comprehensive wealth-management platform designed to deliver a better user experience. We can free up advisors' time to spend with clients by making the workflow seamless and bringing freedom of investment choice.

Last year I wrote that this area had some cleanup to do; the increased investment is a reflection that we're past that phase and focusing on increasing value. Kudos to Joanne Brady for stepping in to right the ship from an operational perspective; her good work has been key to allowing us to move to a growth phase. Meanwhile, we're looking to Cindy Galiano, who has led the transformation of our TAMP offering and digital experience, to deliver on our plans to launch a direct indexing capability for advisors later this year. Cindy recently had something to smile about as The Wealth Advisor's audience named our turnkey asset-management platform America's Best TAMP for 2022. Speaking of success in this space, kudos as well to Victoria Reuvers, our wealth team's managing director in South Africa, for outstanding leadership and results despite significant COVID-19 challenges. Starting as just a two-person shop in 2014, we now manage ZAR 23.7 billion in assets and occupy a leading position with advisors in that country.

People Highlights

At our 2018 annual meeting of shareholders, I mentioned that I'm often asked, "What keeps you up at night?" My answer then included "Finding great talent." As companies worldwide remain in the throes of the "Great Resignation," that concern remains present today as well. We've taken a hard look at what it takes to motivate our employees, as well as what they need to sustain satisfaction over the course of their careers.

Part of this work includes identifying weaknesses, of course, and we spent this year trying to better understand pay equity across Morningstar. We used state-of-the-art pay analysis software and a multivariate regression model that will help us better monitor this area across the firm. We started our analysis by considering the diversity dimensions of gender (globally) and race/ethnicity (U.S. only, where the data is available) and measured for two pay equity concepts: adjusted and unadjusted pay gap.

While I've always been confident that Morningstar's intent to pay our employees equally for equal work was well realized, the data bore that out. Our adjusted gender pay ratio was 97.1% and our adjusted pay ratio for underrepresented minorities in the United States was 95.9%—close to 100%, but not close enough to claim pay equality. We reacted swiftly to rectify these gaps with pay equity increases in January 2022. Our work also revealed that "raw" unadjusted pay ratios, which may represent a better measure of equality of opportunity, were far lower. On an unadjusted basis, women globally were paid 68.5% of what men are paid, while U.S. underrepresented minorities were paid 79.2% of what nonminorities are paid. That tells us that fewer women and underrepresented minorities in the U.S. rise to senior positions. In the spirit of continuous improvement, we'll apply these learnings to strengthen our employee experience here and will continue to share the outcomes of these initiatives in our Corporate Sustainability Report. I am committed to getting better here, and fast.

Morningstar's Sustainability Journey

In 2021, we took steps to align Morningstar with principles that reflect our commitment to sustainability across the firm and to serve as an example for other companies embarking on their own sustainability journeys. In May 2021, we submitted an expanded report to the United Nations' Principles for Responsible Investment that included DBRS Morningstar's activities. As part of our initial effort to integrate ESG into our research, products, and services, Morningstar became a signatory to the UNPRI in August 2016.

Looking ahead, we intend to consolidate and align our UNPRI reporting efforts with those of Sustainalytics, reflecting our shared future. In August 2021, Morningstar joined the U.N. Global Compact, committing to align our operations and business strategy with 10 universal principles in the areas of human rights, labor, the environment, and anticorruption. This partnership is a natural extension of our focus on being a leading voice in ESG research and building a sustainable business for customers, shareholders, employees, and the communities in which we operate. In September 2021, we joined peers across the industry to launch the Net Zero Financial Service Providers Alliance, the latest addition to the larger Glasgow Financial Alliance for Net Zero. Our participation reflects our understanding that climate change represents a global challenge and that coordinated and ambitious commitments across the industry are necessary to limit global emissions and build a sustainable future.

In Closing...

This past year brought along some significant anniversaries I'd like to highlight. Don Phillips celebrated 35 years at Morningstar and Michael Jantzi celebrated 30 years since founding what is now Sustainalytics. Don and Michael are unique in that they see things well before others do, and they have a way to make their insights relatable and mission-centric. Every time I'm in a conversation with Don or Michael, I just soak it up. Our organization's impact would not be what it is without these two amazing individuals.

The year marked John Rekenhaller's 30th anniversary, too. I observed the occasion by sending John a congratulatory note and reminding him that his writing and the voice it represented was one of my primary inspirations for joining Morningstar. John shot back, in his usual tongue-in-cheek manner, that since most of his personal net worth is tied up in Morningstar, we were even. Thanks, John, no pressure there.

And speaking of handling pressure well, this March marks 15 years since the founding of PitchBook—an anniversary of importance for founder John Gabbert, who is the force behind building an amazing organization. John is a terrific leader, a good friend to many, and the voice in my head intoning me to “focus on focus.”

One of the early decisions John made was to engage with a firm in Ukraine to help with PitchBook's development efforts. John has reminded me over the years that while the

teams in Ukraine are not direct employees, he treats and thinks of them in that way. Thus, as I wrap up writing this letter in the early days of March, I find myself thinking of the development teams in Ukraine who find their country under siege. We are supporting them and hoping that they will remain safe.

Finally, our annual shareholder meeting in Chicago on May 13 holds a tad more significance for me because it comes five days before I celebrate 25 years at Morningstar myself. I chose to work here as a 22-year-old, one week out of college, because I felt that we were out to change the world and redefine how you could build a good business by doing the right thing. I also loved investing, as I do to this day, and felt that we had the best ways to empower investors. I hope all our stakeholders who are reading this take away the continued importance I place on independence, transparency, and trust. While many things have evolved at Morningstar over time—as they should—I’m proud that we’ve kept our mission and culture front and center. It’s the thread that binds us together even as our firm evolves to stay relevant to the modern investor.

I hope you’ll join us in person for the meeting; I’d love to see you there. And for those who prefer the virtual format, that will remain an option, too.

Thanks for your support and partnership,

A handwritten signature in black ink, appearing to be the name 'Kunal', with a large, stylized initial 'K' and a long horizontal stroke extending to the right.

Kunal

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, 2021

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) (Zip Code)

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	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common stock, no par value	MORN	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 every Interactive Data File required to be submitted 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 such files). Yes No

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

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

The aggregate market value of shares of common stock held by non-affiliates of the registrant as of June 30, 2021 was \$6.2 billion. As of February 11, 2022, there were 42,962,319 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 2022 Annual Meeting of Shareholders are incorporated into Part III of this Form 10-K.

Auditor Name: KPMG LLP

Auditor Location: Chicago, IL

Auditor Firm ID: 185

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Part I

Item 1. Business

Our Business

Morningstar, Inc. is a leading provider of independent investment research in North America, Europe, Australia, and Asia. Our core competencies are data, research, and design, and we employ each of these to create products that clearly convey complex investment information. We started with affordable publications for individuals, then moved to creating technology solutions for professionals to help them research and select investments for clients. Today, we offer a variety of products and solutions that serve market participants of all kinds, including individual and institutional investors in public and private capital markets, financial advisors, asset managers, retirement plan providers and sponsors, and issuers of securities. We also apply our investing philosophy to managing assets for clients who prefer not to make investment decisions themselves. Since our founding in 1984, we've expanded our presence in global markets where investors need an independent view they can trust.

We help investors in two primary ways. First, we support asset managers, individual and institutional investors, and financial advisors who make their own investment decisions with an extensive product line of desktop and web-based tools, investment data, ratings, and research that helps investors make informed choices and advisors make suitable and compliant recommendations. Our customers have access to a wide selection of investment data, fundamental equity research, manager research, private capital markets research, credit ratings, environmental, social and governance (ESG) ratings, fund ratings, and indexes directly on our proprietary desktop or web-based software platforms, or through subscriptions, data feeds, and third-party distributors.

Second, we provide investment management services, investment analysis platforms, and portfolio management and accounting software tools to advisors and financial institutions. Our managed portfolio offerings help financial institutions deliver investor-friendly products based on our valuation-driven, fundamentals-based approach to investing. Applying our expertise in asset allocation, investment selection, and portfolio construction, our global investment team creates long-term investment strategies built on Morningstar's data and ratings. We help retirement plan sponsors build high-quality savings programs for employees. Our financial technology solutions allow advisors to continually demonstrate their value to clients, from creating an initial investment proposal to reporting portfolio performance and providing automated rebalancing tools. Investors also use our indexes as benchmarks, to create investable products based off our proprietary research, or to construct portfolios using customized indexes.

Through DBRS Morningstar, we also provide independent credit ratings services for financial institutions, corporate and sovereign entities, and structured finance products and instruments. Through Sustainalytics, issuers of green bonds can also obtain Second-Party Opinions, which facilitate alignment with industry standards for sustainable finance.

While other companies may offer research, ratings, data, software products, indexes, or investment management services, we are one of the few companies that can deliver all of these with the best interest of the investor in mind. We believe that our primary goal of putting investors first, paired with the way we use design and technology to communicate complex financial information, sets us apart from our peers in the financial services industry.

Our Research

Our independence and our history of innovation make us a trusted resource for investors. Morningstar's research covers a wide range of investment offerings, including managed investment products, publicly listed companies, private companies, fixed-income securities, and real-time global market data. We focus our data and research efforts on several areas:

Manager research (including mutual funds, exchange-traded funds, separately-managed accounts, and other vehicles)

We've been providing independent analyst research on managed investment strategies since the mid-1980s. We use this analysis to provide research reports and qualitative, forward-looking Morningstar Analyst Ratings for approximately 4,900 mutual funds, ETFs, separately managed accounts, and collective investment trusts (CITs) globally spanning more than 24,000 share classes. We also offer the Morningstar Quantitative Rating, which is a forward-looking rating that uses algorithmic techniques to evaluate mutual funds that significantly expands the breadth of our forward-looking ratings to an additional 50,000 funds and over 370,000 share classes worldwide. The Morningstar Quantitative Rating employs machine learning to infer patterns from the way Morningstar's manager research analysts assign ratings to funds and then applies those learnings to rate funds that the analysts don't cover. This analysis augments other quantitative ratings and analytics, such as the Morningstar Rating for funds (the "star rating"), which ranks managed investment strategies such as mutual funds based on their past risk-adjusted performance versus peers. We also publish qualitative research and ratings on state-sponsored college-savings plans, target-date funds, and health-savings accounts.

In addition, the Morningstar Style Box visually depicts a strategy's underlying investment style, making it easier to compare investments and build portfolios. The star rating and style box have become important tools that millions of investors and advisors use in making investment decisions.

We also offer the Morningstar Sustainability Rating and Low Carbon Risk Designation to help investors evaluate funds based on ESG factors.

As of December 31, 2021, we had more than 125 manager research analysts globally, including teams in North America, Europe, Australia, and Asia.

Equity research

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 companies using a consistent, proprietary methodology that focuses on fundamental analysis, competitive advantage assessment, and intrinsic value estimation. Morningstar's data and research on publicly traded companies is used extensively in our products and solutions, such as institutional equity research, Morningstar Indexes such as the Morningstar Wide Moat Focus Index, our Global Market Barometer, and as a basis for equity portfolio strategies used in Morningstar Managed Portfolios.

Morningstar adheres to a globally consistent framework that integrates ESG risk into our equity research. Analysts identify valuation-relevant risks for each company using Sustainalytics' ESG Risk Ratings, which measure a company's exposure to material ESG risks, and then evaluate the probability that those risks materialize and the associated valuation impact. Results from this research inform Morningstar's assessment of a stock's intrinsic value and the margin of safety required before assigning a Morningstar Rating for stocks.

PitchBook's Institutional Research Group is a provider of investment strategy, fund performance and industry research. The group leverages PitchBook's proprietary data, such as valuations, deal multiples, and fund returns, to deliver analysis that allows clients

to quickly gauge trends, map industries, and identify notable company sets in the private capital markets. As of December 31, 2021, the team provides coverage of the private equity, venture capital, real assets and private credit asset classes. PitchBook also provides full-time analyst coverage of emerging technology industries, delivering comprehensive assessments of disruptive sectors to help clients better segment and size markets, understand company and investor landscapes, evaluate opportunities and develop conviction around the growth trajectories of emerging industries.

As of December 31, 2021, we had over 130 public equity analysts and over 30 private markets analysts globally, making us one of the largest providers of independent equity research. In addition to our analyst-driven coverage, we provide quantitative ratings and reports for approximately 57,000 publicly traded companies across Morningstar's solutions and cover 3.3 million privately-held companies through the PitchBook Platform.

Credit ratings

DBRS Morningstar provides global credit ratings as the world's fourth largest credit rating agency. We rate more than 3,000 issuers and 60,000 securities worldwide, providing independent credit ratings for financial institutions, corporate and sovereign entities, and structured finance products and instruments. Our goal is to bring more clarity, diversity, and responsiveness to the ratings process. Our approach and size provide the agility to respond to customers' needs with the necessary expertise and resources.

In addition to ratings and research opinions, DBRS Morningstar also offers data derived from its ratings activities and analytical tools. These include ratings data feeds that can be integrated into companies' internal databases, web-based research, and analytical tools. We also offer DBRS Viewpoint, which is an interactive platform that provides access to commercial mortgage-backed securities (CMBS) transaction information and research reports, as well as commentary and work-product for DBRS Morningstar rated deals.

As of December 31, 2021, we had 480 credit rating analysts and analytical support staff based in the United States (U.S.), Canada, the United Kingdom, Europe, and India.

ESG ratings

Sustainalytics' ESG Risk Ratings empower investors with a consistent approach to assessing financially material ESG risks that could affect the long-term performance of their investments at the security, fund, and portfolio levels. Built on a transparent rules-based methodology, the ratings introduce a single measurement unit to assess ESG risks across material ESG topics. Unlike other ESG ratings that are based on a relative, best-in-class approach, Sustainalytics' ESG Risk Ratings consist of ESG data that provides a powerful signal of a company's absolute ESG risk that is comparable across peers and sub-industries while allowing for aggregation at the portfolio level. As of December 31, 2021, we rated more than 20,000 companies worldwide, and offered more than 14,000 ESG Risk Ratings free to the public so that any investor can benefit from our research.

As of December 31, 2021, we had more than 500 ESG ratings analysts based in the U.S., Canada, Europe, and Asia.

Portfolio advice methodologies

Since the beginning, Morningstar has provided individual investors with tools to monitor their own investments, such as the Ownership Zone, Sector Delta, and Portfolio X-Ray. These do-it-yourself applications allow investors to see how different investments work together to form a portfolio and to track its progress. We also continue to improve our total wealth approach to investing and asset allocation capabilities, which are mainly used in the investment management products we offer to professional investors. We also look for ways to infuse these capabilities into decision support tools. Whereas traditional asset allocation methodologies focus solely on financial assets (such as stocks and bonds), our investment management group has developed methodologies that provide a more holistic view of all sources of wealth, including financial capital, human capital, housing assets, and retirement and pension benefits. Our investment management group offers 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 also published research

on “gamma,” an innovative measure that quantifies how much additional retirement income investors can generate by making better financial planning decisions.

Our People

Our people are one of Morningstar’s most important assets, so we’re committed to fostering an inclusive community where our employees thrive. Our success depends on the values and performance of our people, and we support them through a range of initiatives in the areas of diversity, equity, and inclusion (DEI), engagement, and professional growth.

As of December 31, 2021, we had 9,556 permanent, full-time employees around the world. Approximately 34% of our employees work in India, 31% in the U.S., 10% in Continental Europe, 9% in China, 6% in Canada, 6% in the United Kingdom, and the remainder in Australia, Asia, and other regions. Our U.S.-based employees are not represented by any unions or other collective bargaining arrangements, and we have never experienced a walkout or strike.

Diversity, Equity, and Inclusion

We believe that diverse teams make better decisions, and contend that a collective mixture of different backgrounds, beliefs, and experiences makes Morningstar a stronger firm. Our goal is to create a more transparent and inclusive financial system. As a global employer, our aim is to build an inclusive environment that encourages open deliberation and unique perspectives, driving creativity, innovation, and better business outcomes. We are doing this with clear objectives, education, and data-driven recruiting, hiring, retention, and employee experience programs.

As of December 31, 2021, approximately 42% of our employees are female. As of the same date, 50% of our board of directors are female. In the U.S., where we are currently able to collect information on racial identity, our employee population identifies as approximately 68% White, 22% Asian, 5% Hispanic, 3% Black, and 2% Mixed Race.

Employee Engagement

We recognize the importance of data in assessing our workplace culture and employee engagement. In recent years, we’ve built robust feedback mechanisms to understand the experience of our colleagues around the globe and to track changes in perceptions, experience, and culture. We track the company’s attrition or “turnover” rate as an indication of employee commitment and longevity. In 2021, Morningstar’s average turnover rate increased to 18.5% from 11.8% in 2020 for all permanent employees globally, reflecting the wider trend of workers rethinking their expectations of work at companies across the world. Even in times of labor market upheaval, year-to-year data shows that our employees continue to respond favorably to questions on topics such as motivation, intent to stay, and overall satisfaction. Based on our internal quarterly measure in December 2021, Morningstar’s overall engagement score increased slightly to 81% from 80% in 2020, continuing the upward trend from 73% in 2019.

Morningstar believes that an attractive benefits and total rewards package, which includes a voluntary equity ownership program, promotes employee engagement by supporting the financial, emotional, and physical well-being of our employees. We’re also proud of our sabbatical program, which is available globally to all employees once every four years of service, and varies between two and six weeks in duration depending on office location and local legal parameters.

In 2021, we researched and enhanced individual benefit programs in multiple locations, including improvements to our retirement benefits in many countries, expanding our Employee Assistance Program benefits into European regions and India, funding an annual health screening in South Korea, introducing risk benefits in Romania, offering a new childcare benefit in India, and enhancing supplemental coverages in Spain and France, to name a few. Many of these enhancements will take effect in the first half of 2022.

Professional Growth

Continuous learning by our employees is crucial to maintain Morningstar's competitive advantage, engage employees, and pursue our mission. Our learning and development programs provide our people with access to a diverse set of training and educational opportunities designed to help them reach their potential in ways that fits their interests and builds on their strengths. We offer our employees annual educational stipends to spend on their choice of professional development activities, while also providing financial support for continuing education and the pursuit of professional certifications. We also make available a variety of internal opportunities for growth, including programs designed for employees just starting their careers and those at manager and executive levels looking for coaching and training.

In 2021, Morningstar piloted a New Managers Mentorship program. This program is designed for newly promoted managers and managers who recently joined Morningstar, providing them the opportunity to engage with, and learn from, tenured managers across the organization.



Our Mission

Our mission is to empower investor success. Everything we do at Morningstar is in the service of the investor. The investing ecosystem is complex, and navigating it with confidence requires a trusted, independent voice. We deliver our perspective to institutions, advisors, and individuals with a single-minded purpose: to empower every investor with conviction that he or she can make better-informed decisions and realize success on his or her own terms.

Our Strategy

Our strategy is to deliver insights and experiences essential to investing. Proprietary data sets, meaningful analytics, independent research, and effective investment strategies are at the core of the powerful digital solutions that investors across our client segments rely on. We have a keen focus on innovation across data, research, product, and delivery so that we can effectively cater to the evolving needs and expectations of investors globally.

We execute our strategy through four connected elements: our values, our work, our clients, and our brand. The interaction between these four elements has enabled Morningstar to establish a position in the industry that is differentiated from our competition. We believe that our intangible assets, including the strength of our brand and our unique intellectual property, are difficult for competitors to replicate. Additionally, we strive to ensure our customers receive demonstrable value from our solutions causing them to be reluctant to undertake the cost of switching to other providers.

We are focused on these four strategic priorities:

Deliver differentiated insights across asset classes to public and private market investors

Shifting investor needs and expectations, innovative investment approaches and technologies, and a changing political and regulatory environment continue to drive the evolution of the financial services industry. We remain committed to ensuring that the modern investor is empowered with new data, research, and analytics. This includes:

- ▷ Expanding our data, research, and analytics to deliver unique, personalized, and impactful insights to investors across asset classes.
- ▷ Optimizing our advisor platform and service position by driving innovation and delivering exceptional investment solutions—including sustainable options—to advisors, driving great outcomes for the clients they serve around the world.
- ▷ Providing regulatory and compliance solutions for the wealth, buy-side and asset management segments.
- ▷ Pursuing actionable information and developing workflow tools to serve core use cases of identifying private market investment opportunities, raising capital, valuing companies and investments, and buying/selling a company.

Establish a leading ESG position across each business

The Sustainalytics acquisition in 2020 has positioned us to successfully drive ESG across the investing landscape, which is a pivotal part of our long-term strategy. We remain focused on the growth of Sustainalytics and its ESG ratings, while prioritizing ESG integration across all areas of our business to empower investors with ESG research, solutions, and tools to inform their investment choices. This includes:

- ▷ Developing ESG solutions for wealth managers, advisors, and individual investors.
- ▷ Continuing to expand the use of ESG in credit rating workflows, research, and analyses.
- ▷ Making relevant ESG data points available across our software platforms enabling users to adopt and seamlessly incorporate ESG into their product creation, monitoring, distribution, regulatory, and advice workflows.
- ▷ Integrating ESG into fixed income portfolios and workflows, indexes, and products to support investors with their evolving use cases.

Drive operational excellence and scalability to support growth targets

We have grown significantly in the last few years, and as we have continued to focus on growth in 2021 and beyond, we are emphasizing execution and scalability in our operations, processes, and technology. This includes:

- ▷ Creating a secure, robust, and scalable infrastructure that leverages advanced technology in our data, research, and product quality and delivery efforts.
- ▷ Scaling the demand generation function across Morningstar and driving transformation in global sales, customer success, and customer support functions to improve sales effectiveness.
- ▷ Scaling corporate systems to create more integrated platforms that enable growth of business areas while reducing legacy system fragmentation.

Build an inclusive culture that drives exceptional talent engagement and development

Morningstar is committed to investing in talent and building a culture that realizes our DEI goals. We are successful because of our team, and building an inclusive culture is one of our top priorities. We are committed to cultivating a diverse culture that maximizes talent and drives innovation. Our DEI initiatives are embedded in all areas of our business. This includes:

- ▷ Emphasizing employee activation and education by providing inclusive leadership training to all managers and hosting conferences and speaker series to generate DEI awareness for all employees.
- ▷ Improving talent acquisition processes by forming strategic partnerships, focused campus recruiting and enhanced interview processes.
- ▷ Creating company-wide transparency on DEI metrics with employee dashboards and ongoing reviews with leadership.

Major Customer Groups

Given our strategy and core capabilities discussed above, we focus on six primary customer groups:

- ▷ Advisors (including independent financial advisors and those affiliated with Registered Investment Advisors (RIAs), 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)
- ▷ Fixed-income security issuers and arrangers
- ▷ Private market/venture capital investors
- ▷ Workplace/retirement (including retirement plan providers, advisors, and sponsors)
- ▷ Individual investors

Advisors

Financial advisors work with individual investors to help them reach their financial goals. This customer group includes independent advisors at RIA firms, advisors affiliated with independent broker/dealers, dually registered advisors, and “captive” advisors who are employees of a broker/dealer. These broker/dealers include wirehouses, regional broker/dealers, and banks. The advisor landscape is broad in both the U.S. and in other parts of the world where we focus. Our largest market is the U.S., where Cerulli Associates estimates there were nearly 294,000 financial advisors as of the end of 2021.

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 are 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, Morningstar Office, and Morningstar Managed Portfolios.

Asset management

Asset management firms manufacture financial products and manage and distribute investment portfolios. This customer group includes individuals involved in sales, marketing, product development, business intelligence, 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.

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, DBRS Morningstar, Morningstar Data, Morningstar Direct, and Sustainalytics.

Fixed income security issuers, arrangers, and investors

DBRS Morningstar typically issues credit ratings in response to requests from issuers, intermediaries, or investors. DBRS Morningstar credit ratings are requested for corporate short and long-term fixed income obligations, sovereign debt, single project financings and structured finance programs, including securitizations of receivables, such as auto loans, credit cards, residential real estate loans and commercial real estate loans. In addition, claims-paying-ability credit ratings are issued for life, property/casualty, financial guaranty, title, and mortgage insurance companies. DBRS Morningstar's staff analyzes the factors to assess the credit worthiness of an issuer or a security and summarizes the rationale for the credit ratings. DBRS Morningstar credit ratings are assigned and reviewed by a credit rating committee composed of senior credit rating analysts and analytical managers. DBRS Morningstar typically monitors its credit ratings at appropriate intervals depending on the type of the credit rating.

We estimate that the \$10 billion global ratings market has grown at a 6.3% compound annual growth rate over the past decade, supported by various secular trends. A continuing low-interest-rate environment supports corporate borrowings, and favorable spreads support high-yield and structured finance bond issuance.

Credit markets continue to evolve and use structured products as a key avenue for capital. Overall demand for structured products by institutional investors, including banks in the U.S. and Europe, remains high.

As of December 31, 2021, we served approximately 3,000 issuers of debt.

Private market/venture capital investors

PitchBook covers the full lifecycle of venture capital, private equity, and merger and acquisition (M&A) activities, 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 that gives clients the ability to access data, discover new connections, and conduct research on potential investment opportunities. An Excel plug-in and mobile capabilities are included with the platform license, and Morningstar public equity research can also be delivered through the platform.

As of December 31, 2021, we served over 8,600 clients, including investment and research firms, venture capital and private equity firms, investment banks, limited partners, lenders, law firms, and accounting firms. We also served corporate development teams at firms across industry sectors.

Workplace/retirement

In the U.S., 401(k) retirement plans and other types of defined-contribution (DC) plans, such as 403(b) plans and the Thrift Savings Plan, are the dominant retirement plan offered by employers. According to the Investment Company Institute, there were \$10.4 trillion in assets in DC plans at end of the third quarter of 2021, compared to \$3.7 trillion in private-sector defined benefit (DB) plans and \$7.6 trillion in government DB plans.

Although DC plans help millions of workers in the U.S. save for retirement, the industry continues to struggle to boost employee savings rates, to make it easier for companies to offer retirement plans, and to increase access to high-quality investment lineups. We believe that a significant market exists for solutions, such as our managed retirement accounts offering, that are designed to address these shortcomings by providing personalized advice that helps individuals build assets for retirement and beyond. Currently, our focus is the U.S. market, because it continues to demonstrate healthy growth. In addition, many of our solutions are not easily adapted to foreign markets due to significant differences in regulatory frameworks that govern retirement saving and investing.

Our core retirement products (managed retirement accounts, fiduciary services, and custom models) primarily reach individual investors through employers (plan sponsors) that offer DC plans for their employees. As of December 31, 2021, we served 71 retirement service providers and registered investment advisors (RIAs), representing about 297,000 retirement plans. We can work directly with plan sponsors to help them design a suitable retirement program, but more typically, we distribute our retirement services through retirement plan providers that package our advice and investment lineups with administrative and recordkeeping services.

Over the past two years we have expanded our distribution network to include retirement plan advisors and asset managers and currently offer three advisor-focused services. The first, Morningstar Plan Advantage, is a practice-management platform that helps advisors to build and manage their retirement plans. That service is currently used by two large broker dealers and has data integrations with 25 recordkeepers. The second service, advisor managed accounts (AMA), enables advisors and asset managers to offer a version of managed accounts that incorporates their firm's investment allocation philosophies and branding. We also can now offer managed accounts that sit within an IRA product offered by the RIA or recordkeeper. We currently have 10 recordkeepers signed onto the AMA platform with 15 RIAs and one asset management firm offering it. The third is a service that enables asset managers to offer personalized target-date funds using our methodologies, technology, and recordkeeper data connections. These personal target-date funds enable employees in a retirement plan to receive a blended target-date fund based on several data points, including age, salary, savings rate, and account balance.

Individual investors

We offer tools and content for individual investors who invest to build wealth and save for other goals, such as retirement or college tuition. A Gallup survey released in August 2021 found that approximately 56% of individuals in the U.S. invest in the stock market either directly, through mutual funds, or self-directed retirement plans. We design 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 can be accessed via desktop, tablet, or mobile phone applications, and includes both paid Premium Memberships and free content available to registered users and visitors. We also reach individual investors through licensing our content to other websites, such as Yahoo Finance, MSN Money, and Google Finance.

Revenue Types

We leverage our proprietary data and research to sell products and services across our portfolio that generate revenue in three primary ways:

Licensed-based: The majority of our research, data, and proprietary platforms are accessed via subscription services that grant access on either a per user or enterprise-basis for a specified period of time. Licensed-based revenue includes Morningstar Data, Morningstar Direct, Morningstar Advisor Workstation, PitchBook, Sustainalytics, and other similar products. Licensed-based revenue represented 66.6% of our 2021 consolidated revenue compared to 67.3% in 2020 and 68.9% in 2019.

Asset-based: We charge basis points and other fees for assets under management or advisement. Our Morningstar Investment Management, Workplace Solutions, and Morningstar Indexes products are categorized as asset-based revenue. Asset-based revenue represented 15.6% of our 2021 consolidated revenue compared to 16.1% in 2020 and 17.9% in 2019.

Transaction-based: Credit ratings and ad sales on Morningstar.com comprise the majority of the products that are transactional, or one-time, in nature, versus the recurring revenue streams represented by our licensed and asset-based products. Transaction-based revenue represented 17.8% of our 2021 consolidated revenue compared to 16.6% in 2020 and 13.1% in 2019.

Major Products and Services

The section below describes our top five products by 2021 revenue and some of our other key products and services.

PitchBook

PitchBook's main product is the PitchBook Platform, an all-in-one research and analysis workstation for investment and research professionals, including venture capital and private equity firms, corporate development teams, investment banks, limited partners, lenders, law firms, and accounting firms. Clients rely on us for a central, easy-to-use platform that provides access to the broadest and most powerful collection of data and research covering the private capital markets, including venture capital, private equity, and M&A activities. To accommodate our clients' diverse needs, the platform offers company profiles for both private and public companies, advanced search functionality, and other features that help to optimize workflow by surfacing relevant information and insights. Our clients source deals, raise funds, build buyer lists, create benchmarks, and network with the PitchBook Platform. PitchBook also offers a mobile application, CRM integrations, an Excel plug-in, data feeds, and flexible, à la carte data solutions that allow clients to access a variety of data points on demand.

Over the course of 2021, we continued to make significant investments in our data, research, and product capabilities to create the most comprehensive, fast, and intuitive platform experience for our clients. Improvements included enhanced analytics, data, and better search functionality to help both general and limited partners (GPs and LPs) perform diligence on one another. We released key updates for alternative asset investors, including a new hedge funds dataset that provides a broader view into alternative fund assets. We also added patent data and analytics and Uniform Commercial Code (UCC) filings data to company profiles, and increased the timeliness of our private financials coverage throughout Europe. We continued to expand our core datasets in venture capital, private equity, M&A, and debt. We sharpened our geographic focus on Europe, Asia Pacific and Greater China, increasing the number of companies and funds under coverage in these areas. In Greater China, we now cover the entire flow of capital from LPs to GPs to companies.

We further bolstered our public company data capabilities by introducing new datasets, such as enhanced capital structure data, that give clients the depth of data needed to better determine cost of capital. We also added executive compensation data and earnings calls transcripts to help investors better track management team performance. Additionally, we extended our modeling and pitch deck creation capabilities with the launch of our MAC/Online Excel Plugin and the release of our PowerPoint plugin.

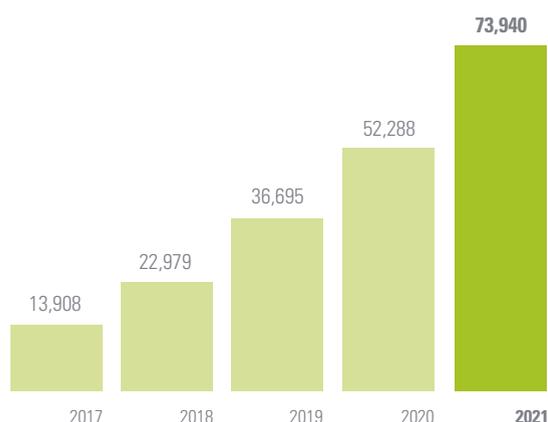
Pricing for the PitchBook Platform is based on the number of seats, with the standard base license fees per user and customized prices for large enterprises, boutiques, and startup firms.

PitchBook's main competitors are CB Insights, Preqin, S&P Capital IQ, and Refinitiv.

PitchBook is our largest product based on revenue and comprised 17.1%, 14.5%, and 12.6% of our consolidated revenue in 2021, 2020, and 2019, respectively. In 2021, we estimate that our annual revenue renewal rate for PitchBook was approximately 127% versus 115% in 2020.

PitchBook had 73,940 licensed users worldwide as of December 31, 2021.

PitchBook Platform Licenses



DBRS Morningstar

DBRS Morningstar is the fourth largest credit rating agency in the world, offering a wide range of credit rating services and products that contribute to the transparency of international and domestic credit markets.

DBRS Morningstar generates its revenue from providing independent credit ratings on financial institutions, corporates, and sovereigns, as well as on securitizations and other structured finance instruments, such as asset-backed securities (ABS), residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS) and collateralized loan obligations (CLO). The credit analysis and the assignment of credit ratings can take place on issuance of new bonds or on a continuous basis for existing credit exposures. The fees to the issuer are based on the type of issuance, the size of the transaction, and the complexity of the analysis.

Credit ratings are forward-looking opinions on credit risk that reflect the creditworthiness of a company or fixed-income security. They are determined within the framework of a ratings committee that represents a collective assessment of DBRS Morningstar's

opinion rather than the opinion of an individual analyst. These credit ratings are based on information that incorporates both global and local considerations and the use of approved methodologies, and are determined in compliance with policies and procedures designed to avoid or manage conflicts of interest. DBRS Morningstar's credit rating methodologies are publicly available and support the objectivity and integrity of the credit rating process. DBRS Morningstar also offers a micro-website dedicated to ESG factors deemed relevant to credit ratings analysis.

During 2021, Morningstar expanded the way it interacts with issuers and investors by launching a new credit solution provider, Morningstar Credit Information and Analytics (MCIA), that is separate from DBRS Morningstar and which offers credit products and services beyond credit ratings. DealView, a commercial mortgage-bond monitoring service, is a product sold by MCIA. Longer term, MCIA plans to offer modular credit information products that leverage our credit expertise and embed in the workflows of internal and external customers.

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

DBRS Morningstar is our second-largest product based on revenue and accounted for 16.0%, 14.9%, and 10.8% of our consolidated revenue in 2021, 2020, and 2019, respectively.

For 2021, we estimate that transaction-based fees comprised 66% of DBRS Morningstar's revenue; the remainder can be classified as transaction-related, or revenue generated by annual fees tied to surveillance, research, and other services.

Morningstar Data

Morningstar Data provides institutions with access to a full range of investment data spanning numerous databases, including equity fundamentals, managed investments, fixed income, ESG factors, and market data (such as end-of-day and intra-day pricing, as well as historical tick data). We aim to match what investors hold in their portfolios with the raw data we've acquired and analytical insights that we derive. We are well-known for enriching managed investment raw data with research driven intellectual property, resulting in proprietary statistics, such as the Morningstar Category, Morningstar Style Box, and Morningstar Rating, which we distribute through licensed data feeds. We also offer a wide range of other data, including information on investment performance, risk analytics, full historical portfolio holdings, operations data (such as managed investments' fees and expenses), cash flows, financial statement data, consolidated industry statistics, and investment ownership. Our breadth of global coverage between proprietary and fundamental datasets allows us to combine our datasets and analytical capabilities as a holistic offering. Our clients typically serve retail investors and their intermediaries, and they use Morningstar Data for a variety of investor communications, including websites, print publications, and marketing fact sheets, as well as for internal research and product development. Demand for Morningstar Data increases as clients build digital solutions, prepare for regulatory requirements, and incorporate automation, artificial intelligence, machine learning, and other forms of data analytics into their workflows.

The Morningstar Data team applies emerging methods in artificial intelligence to regression, classification, deep learning, natural language processing, and optical character recognition to extract data from structured and unstructured content. The Data team uses a "human in the loop" approach where machine inferences are presented to a Data Analyst for validation. Validated data is published in Morningstar products and used to retrain and continuously improve the Data team's machine learning models. This approach enables Morningstar to produce data faster without compromising the quality of data that our clients use in making sound investment decisions.

In 2021, we launched new data sets relating to asset management firms' diversity and DEI-related policies and practices to support clients' manager selection processes. We enriched our multi-asset portfolio construction and due diligence analytics with the release of expanded economic exposure data and twelve new fixed income data sets, including option-adjusted analytics, average

credit ratings, fixed income sector and country of risk breakdowns. We increased coverage of model portfolios by 87% to over 2,400 models and released nineteen new model portfolio data points.

We are continuing to migrate users to the cloud-based Data Services delivery system we launched in 2020. This new system allows users to more easily explore our data capabilities, access the data they specifically want, and have flexibility around format and delivery options. The delivery platform connects data sets across portfolios, corporate entities and underlying instruments, delivering consolidated feeds and improving our customers' end-to-end user experience. We will further enhance the data delivery experience for users who wish to configure data sets within Direct or transform data within Analytics Lab, so that data feeds of such content can be more efficiently created by clients and embedded in their wider business workflows. In 2022, we are also launching new regulatory data solutions in response to global investor protection, capital adequacy and sustainability regulations, as well as new data management solutions to support our asset management and wealth management clients, by driving connectivity across their business functions, and will also expand our asset class coverage to capitalize on the rising importance of alternatives in investment portfolios.

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, the level of distribution, and the intended use by the client, otherwise known as the "use-case."

Our main global competitors for mutual fund data include Refinitiv and FE fundinfo. We also compete against smaller players that focus on local or regional information. For market and equity data, we primarily compete with FactSet, S&P Global, ICE Data Services, Bloomberg, and Refinitiv.

Morningstar Data is our third-largest product based on revenue and accounted for 14.3%, 15.5%, and 16.7% of our consolidated revenue in 2021, 2020, and 2019, respectively. We estimate that the annual revenue renewal rate for Morningstar Data in 2021 was approximately 100% versus 101% in 2020.

Morningstar Direct

Morningstar Direct is an investment-analysis platform that delivers rich data and analytics across asset classes, built on Morningstar's global database of both registered and non-registered securities, as well as data from third-party providers. Users can create advanced performance comparisons and in-depth analysis of an investment's underlying investment style, as well as custom-branded reports and presentations. Morningstar Direct helps equity and multi-asset strategy asset managers with market research, product positioning, competitive analysis, and distribution strategies, whereas wealth managers predominately use the tool to assist with manager research, fund selection, and the construction, monitoring, and distribution of model portfolios.

In 2021, Morningstar Direct began executing against a new product strategy centered on the ongoing evolution of regulatory standards, the mass consumption of data through automation, and rising interest in ESG and personalized investments. Some of the key platform enhancements resulting from the strategy include the launch of Analytics Lab, the execution of our unified Direct experience, and the release of new datasets, insights, and analytics embedding ESG more deeply throughout client workflows.

Analytics Lab is the new big data analytics platform within Morningstar Direct that integrates Jupyter Notebook, an open-source technology, with Morningstar's proprietary data, research, and investment and portfolio objects. Analytics Lab allows our clients to explore and discover insights from a library of standardized datasets and analytical flows delivered as Notebooks. Our vision is to grant clients access to the open environment, enabling firms to programmatically build custom analytics by integrating their data with Morningstar Direct data and share those automated workflows within their firm.

In 2021, we introduced a robust collection of new ESG capabilities to aid financial professionals to better fit sustainability within their workflow. Some of these enhancements include ESG groupings within asset flows, European Union (EU) Sustainable Finance Disclosure Regulation (SFDR) article 8 and article 9 designations, Commitment level data, Security Globes, Risk Ratings, and Product Involvement metrics. These are a mixture of data points, research, and ratings, all with the goal of helping to communicate complex data and analysis in manner that is easy for investors to understand and act upon. We also released new reporting templates in Direct's Presentation Studio that enable clients to communicate their unique ESG stories.

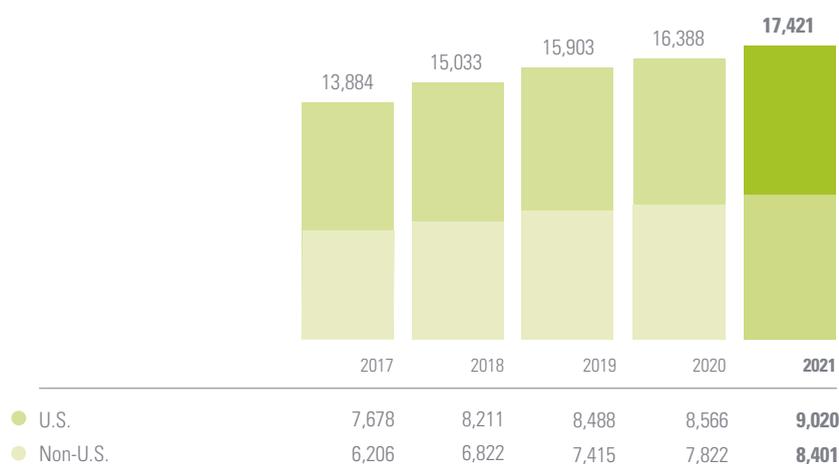
Pricing for Morningstar Direct is based on the number of licenses purchased. We have simplified our licensing model to eliminate add-on features in an effort to maximize our customer experience and allow users to extract more value from our products.

Morningstar Direct's primary competitors are Bloomberg, eVestment Alliance, FactSet Research System's Cognity and SPAR, Zephyr, Strategic Insight's Simfund, and Refinitiv's Eikon.

Morningstar Direct is our fourth-largest product based on revenue and accounted for 10.2%, 11.4%, and 12.6% of our consolidated revenue in 2021, 2020, and 2019, respectively. We estimate that our annual revenue renewal rate for Morningstar Direct in 2021 was approximately 97% versus 96% in 2020.

Morningstar Direct had 17,421 licensed users worldwide as of December 31, 2021.

Morningstar Direct Licenses



Investment Management

Investment Management's flagship offering is Morningstar® Managed PortfoliosSM, an advisor service consisting of model portfolios designed for fee-based independent financial advisors. Our core markets are the U.S., U.K., South Africa, Australia, and India. We target like-minded advisors that hire us to manage a substantial portion of their client's assets the Morningstar way—putting investors first, keeping costs low, and investing for the long-term. We build our multi-asset strategies using mutual funds, ETFs, and individual securities, and tailor them to meet specific investment time horizons, risk levels, and projected outcomes. In 2021, we surpassed \$1 billion in global net flows across our Managed Portfolios.

Morningstar Managed Portfolios are available through two core distribution channels: our fee-based discretionary asset management service, also known as a turnkey asset management program (TAMP), or as strategist models on third-party managed account platforms. We charge asset-based program fees for Managed Portfolios, which are typically based on the distribution channel (i.e., TAMP versus strategist models) and the products contained within the portfolios. We have TAMPs available in the U.S. and India, and act as a fund and model provider in our other international markets.

Our TAMP is an end-to-end digital investing experience, in which advisors access our model portfolios through a proprietary wealth management platform that offers functionality, such as risk assessments, proposals, digital account opening and ongoing management, client reporting, customer support, marketing services, and back-office features, such as trading and billing services. Using our TAMP allows the advisor to share fiduciary responsibility with us.

In 2021, Morningstar agreed to acquire Praemium's U.K. and international wealth management platform business. Praemium offers proprietary, friction-free, SaaS-based technology and services that allow fee-based advisors to outsource key elements of the advice workflow. The platform will enable us to expand our wealth management platform capabilities internationally beyond the U.S. and India. We expect this transaction to close mid-to-late 2022, subject to regulatory approval.

We continued to enhance the advisor and client experience on our TAMP, primarily augmenting customer support with a digital self-service help center, document submission, and case tracking center. We plan to launch direct indexing capabilities through the TAMP later in 2022, as part of our recently-announced strategy to build a comprehensive Wealth Management platform leveraging capabilities from Morningstar Office, ByAllAccounts, and Morningstar.com.

Finally, we continued to see positive flows in our ESG-focused portfolios as an increasing number of advisors and their investor clients sought investment solutions aligned with their sustainable investing inclinations.

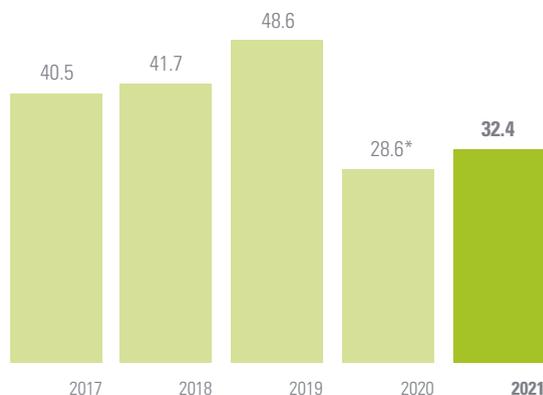
In addition to Morningstar Managed Portfolios, other services we provide include institutional asset-management (e.g., act as a subadvisor) and asset-allocation services for asset managers, broker/dealers, and insurance providers. We offer these services through a variety of registered entities in Australia, Canada, the United Arab Emirates (UAE), France, India, Japan, South Africa, the U.K., and the U.S.

We base pricing for institutional asset-management and asset-allocation services on the scope of work, our degree of investment discretion, and the level of service required. For most of our contracts, we receive asset-based fees.

For Morningstar Managed Portfolios offered through our TAMP, our primary competitors are AssetMark, Orion/Brinker Capital, and SEI Investments. Our primary strategist offering competitors are Blackrock, Russell, and Vanguard in the U.S., and we face competition from Financial Express and Tatton in Europe, Middle East, and Africa (EMEA), and Blackrock, Dimensional, and Vanguard in Australia. 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.

Morningstar Investment Management is our fifth-largest product based on revenue and comprised 7.4%, 8.5%, and 9.8% of our consolidated revenue in 2021, 2020, and 2019, respectively.

Morningstar Managed Portfolios Assets under Management/Advisement (\$bil)



* The decline in Morningstar Managed Portfolios assets was largely attributed to a client contract change from a variable to fixed-fee arrangement. Excluding the assets from this client contract in the prior-year period, assets in Morningstar Managed Portfolios increased 1.8%.

Workplace Solutions

Morningstar Workplace Solutions includes several different offerings, including managed retirement accounts (MRA), fiduciary services, Morningstar Lifetime Allocation Funds, and custom models.

Delivered primarily through the Morningstar Retirement Manager platform, our MRA program helps retirement plan participants define, track, and achieve their retirement goals. As part of this service, we deliver personalized recommendations for a target retirement income goal, a recommended contribution rate to help achieve that goal, a portfolio mix based on our Total Wealth methodology, and specific investment recommendations. We then manage the participant's investment portfolio for them, assuming full discretionary control. We also offer Advisor Managed Accounts, a program that allows advisor firms to specify and assume fiduciary responsibility for the underlying portfolios that are used within MRA. We do not hold assets in custody for the MRA we provide.

Our main competitors in MRA are Edelman/Financial Engines, Fidelity, and NextCapital. Companies that provide automated investment advice to consumers, such as Betterment and Wealthfront, are also attempting to break into employer-sponsored retirement markets.

In our fiduciary services offering, we help plan sponsors build out and manage an appropriate investment lineup for their participants while helping to mitigate their fiduciary risk. Morningstar Plan Advantage is an extension of our fiduciary services that includes a technology platform that enables advisors at broker/dealer firms to more easily offer fiduciary protection, provider pricing, and investment reporting services to their plan sponsor clients.

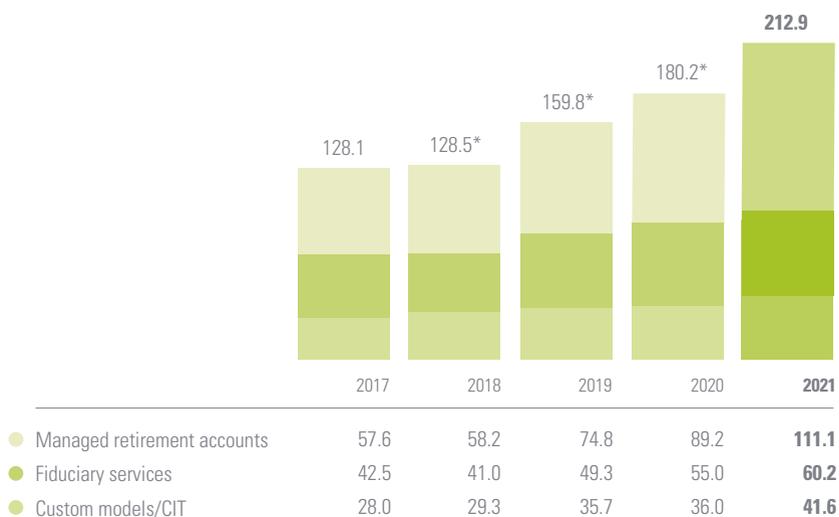
Our main competitors in fiduciary services are Mesirow and Wilshire Associates, but we are starting to see growing competition from smaller players, such as LeafHouse Financial and IRON Financial. Broker/dealers are also looking to introduce their own fiduciary services distributed through their advisors.

With our custom models, we offer two different services. We work with retirement plan record-keepers to design scalable solutions for their investment lineups, including target maturity models and risk-based models. We also provide custom model services direct to large plan sponsors, creating target date funds that are customized around a plan’s participant demographics and investment menus. For custom models, we often compete with retirement plan consultants. We also serve as a non-discretionary subadvisor and index provider for the Morningstar Lifetime Allocation Funds, a series of target-date CITs offered by UBS Asset Management to retirement plan sponsors. Retirement plan sponsors can select a conservative, moderate, or growth version of the glide path for the funds based on the needs of participants in the plan. For the Lifetime Allocation Funds, we compete with other providers of target-date funds.

In 2021, we expanded our relationships with eight key retirement RIA clients, giving us a total of 15 RIA clients signed on to use our Advisor Managed Accounts solution. As an extension of our fiduciary services offering, we also announced the Morningstar ESG Pooled Employer Plan (PEP), which is slated to be launched in early 2022. The PEP is designed to help employees mitigate ESG risk in their retirement portfolios.

Pricing for Workplace Solutions is generally asset-based and depends on several 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, total assets under management or advisement, and the availability of competing products.

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



*Revised to reclass CIT assets previously reported in Institutional Asset Management to Custom Models/CIT.

Morningstar Advisor Workstation

Morningstar Advisor Workstation is a web-based research, financial planning, and proposal generation platform that illustrates financial decision trade-offs using our data, research, and robust portfolio analytics. The software is typically sold through an enterprise contract and is primarily for retail advisors due to its strong ties and integrations with home-office applications and processes and a library of Financial Industry Regulatory Authority (FINRA)-reviewed reports for compliance needs. It allows advisors to build and maintain a client portfolio database that can be fully integrated with the home-office firm’s back-office technology and resources. This helps advisors present and clearly illustrate their portfolio investment strategies and show the value of their advice.

In 2021, we continued to improve our financial planning workflow by focusing on the Morningstar Risk Ecosystem, a financial planning tool that extends Advisor Workstation’s investment planning and proposal generation capabilities. These capabilities are becoming more important to the market as planning grows more central to the value advisors deliver to clients and regulations put more focus on ensuring investment plans are well suited to investor goals.

We also launched IDA, a new in-product ‘Intelligent Digital Assistant’ that has improved client retention through enhanced ways to engage, train, and collect feedback from our users. Advisors can access client portfolios within the companion app or the web version of Morningstar Advisor Workstation to perform analysis, generate client reports, and illustrate decision trade-offs with ease.

Throughout 2021, we continued to invest in capabilities to modernize advice and address regulatory changes, including the U.S. SEC’s Regulation Best Interest and the Canadian CSA’s Client Focused Reforms. This included a dedicated workflow to address the “Care Obligation,” which helps advisors find and track their consideration of reasonably available alternatives.

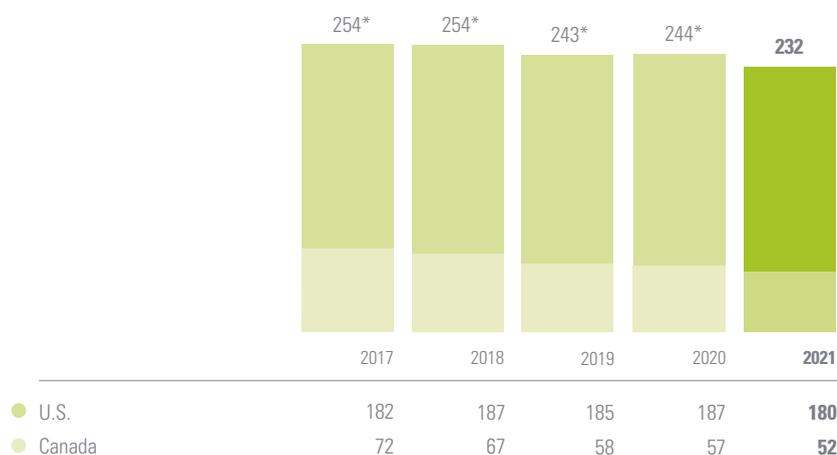
Pricing for Morningstar Advisor Workstation varies based on the number of users, as well as the number of databases licensed and level of functionality. We charge fixed annual fees per licensed user for a base configuration of Morningstar Advisor Workstation, but pricing varies significantly based on the scope of the license.

Competitors for Morningstar Advisor Workstation include AdvisoryWorld (LPL Financial), YCharts, Riskalyze, ASI, Kwanti, and Financial Express outside of the U.S. Occasionally, broker/dealers also decide to build their own internal tools and attempt to bring their advisors’ practice management tools in-house.

We estimate that our annual revenue renewal rate for Advisor Workstation for 2021 was approximately 92% versus 91% in 2020.

As of December 31, 2021, 232 companies held licenses for the enterprise version of Morningstar Advisor Workstation in the U.S. and Canada.

Morningstar Advisor Workstation Clients



*Client counts modified to include U.S. and Canadian clients.

Sustainalytics

Sustainalytics provides ESG data, research, analysis and insights to institutional investors globally, covering equity and fixed income asset classes. Its flagship ESG Ratings also underpin Morningstar's Sustainability Fund Ratings for mutual funds and ETFs, multiple investable indexes and numerous investment platforms. Sustainalytics also serves issuers and banking institutions through its corporate solutions unit and is notably the world's largest provider of green bond Second Party Opinions.

The EU Action Plan is a broad sweeping regulation with multiple components that require asset managers to align with the UN's Sustainable Development Goals (SDGs) and report on portfolio alignment. Investors need high quality ESG research, data and reporting tools to help them comply with the regulation's components: EU Taxonomy Regulation, SFDR, and EU Benchmarks Regulation.

In 2021, Sustainalytics launched several new products under its EU Action Plan Solutions suite, addressing the need for clients to access research and comply with reporting under recently-enacted European regulations. To help investors fulfill sustainable finance disclosure requirements, we delivered a rich new dataset emphasizing principle adverse indicators (PAIs) that cover sustainability factors and risks. We also launched a new product providing an holistic view of an investment portfolio's alignment to the EU Taxonomy. For institutional investor clients, we also worked to incorporate impact metrics and country risk ratings into the Morningstar Sustainability Rating for funds. Corporate issuers were introduced to a new Sustainalytics solution designed to assess ESG risk in a company's supply chain and to a new Issuer Gateway portal that enables more efficient communication and engagement between the issuers and Sustainalytics. Sustainalytics also expanded its Second-Party Opinions coverage to support companies looking to issue Sustainability-Linked Bonds, and increased the number of publicly-available company-level ESG Risk Ratings to over 14,000.

Sustainalytics operates on a subscription-based pricing model for its ESG research products, which supports recurring revenue. The corporate solutions unit deploys a model that combines one-time revenue with subscription-based recurring licensing revenue.

Major competitors for Sustainalytics include MSCI, FTSE Russell, Institutional Shareholder Services (ISS), S&P Global, Moody's, ecovadis, and Federated Hermes. While the traditional ESG research market continues to aggressively consolidate, we expect that the market will continue to evolve as new entrants emerge and investors acquire ESG data from new distributors (for example, directly from stock exchanges). Large asset managers like BlackRock, State Street, UBS, and JP Morgan are also investing heavily to build in-house ESG capabilities and sustainable investing products. New technologies, specifically those that employ artificial intelligence, are facilitating these trends by accelerating the sourcing and use of unstructured ESG data.

Morningstar.com

Our largest website, Morningstar.com, helps individual investors discover, evaluate, and monitor stocks, ETFs, and mutual funds; build and monitor portfolios; and monitor the markets. Revenue is generated from paid memberships through Morningstar Premium and Internet advertising sales.

Our Morningstar Premium offering is focused on bringing clarity and confidence to investment decisions. Members have access to proprietary Morningstar research, ratings, data, and tools, including analyst reports, portfolio management tools (such as Portfolio X-Ray), and stock and fund screeners. We offer Premium Membership services in Australia, Canada, Italy, the U.K., and the U.S.

Unlike many consumer-facing websites, Morningstar.com sells ad space directly to advertisers. This approach allows us to build meaningful relationships with our advertisers and helps us protect the integrity of our brand. In our experience, advertisers continue to support Morningstar.com because of our commitment to transparency and clarity.

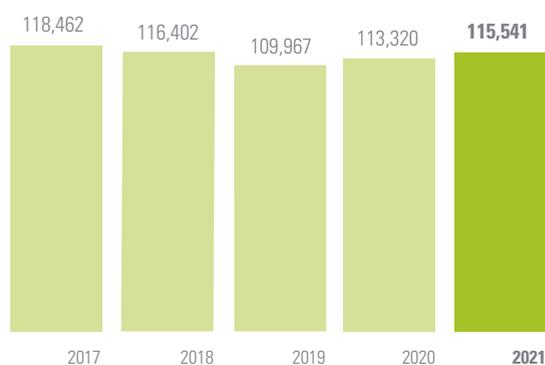
In 2021, we made various upgrades to the technology platform supporting Morningstar.com, which provide improved uptime, faster performance, increased content personalization based on readership behavior, and cost savings in website maintenance. We also further developed our new individual investor digital portfolio management and research tool. Individuals can now leverage the same account aggregation technology used by advisors (By All Accounts) to seamlessly match their investment holdings with our data and proprietary research content to help them better understand what they own across their full portfolio, find new investment ideas, and make more informed investment decisions.

We charge a monthly, annual, or multiyear subscription fee for Morningstar.com's Premium Membership service.

Morningstar.com primarily competes with trading platforms that concurrently offer research and investing advice, such as Fidelity, Schwab, and TD Ameritrade. Research sites, such as The Motley Fool, Seeking Alpha, and Zacks Investment Research, also compete with us for paid membership. In addition, free or "freemium" websites, such as Yahoo Finance, Dow Jones/Marketwatch, The Wall Street Journal, Kiplinger, and TheStreet.com, all compete for the advertising dollars of entities wishing to reach an engaged audience of investors.

As of December 31, 2021, Morningstar.com had more than 115,000 paid Premium members in the U.S. plus an additional 15,600 Premium members across other global markets.

Morningstar.com Premium Memberships (U.S.)



Morningstar Indexes

Morningstar offers a broad range of market indexes that can be used as performance benchmarks and as the basis of investment products and other portfolio strategies. Drawing on Morningstar's deep intellectual property and focus on the end investor, our indexes track all major global regions and asset classes, including equity, fixed income, and multi-asset.

We believe investors today are looking for better value from their index provider. This means two things. First, broad market cap indexes for benchmarking purposes, arguably a commodity, should be inexpensive. Second, strategic beta indexes for investment strategies, of growing importance to all investors, should be unique, research-driven and deliver better outcomes to investors. We are responding to this need by offering core beta benchmarks while delivering our Morningstar research and insights through unique and differentiated strategic beta indexes.

Morningstar Indexes was active on several fronts in 2021. We added and expanded on several high-profile collaborations with marquee global clients such as BlackRock iShares, Jackson National Life and Engine #1. We acquired Moorgate Benchmarks in

September to build on our European indexes client service platform and global index customization capabilities. In addition, we introduced a number of innovative thematic and ESG index products to support investors, drawing on the strengths of Morningstar through our internal collaboration with the Morningstar Equity Research and Sustainalytics teams.

We license Morningstar Indexes to numerous institutions that offer ETFs, exchange-traded notes, mutual funds and separately managed accounts based on the indexes. Firms 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 MSCI, FTSE Russell, S&P Dow Jones Indices (offered through S&P Global), and Bloomberg Indices.

Largest Customer

In 2021, our largest customer accounted for less than 3% of our consolidated revenue.

Acquisitions and Divestitures

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 2021, we also completed 39 acquisitions to support our growth objectives. We acquired Moorgate Benchmarks in the third quarter of 2021. We had no divestitures in 2021.

For more information about our acquisitions, refer to Notes 8 of the Notes to our Consolidated Financial Statements.

International Operations

We conduct our business operations outside of the U.S. through wholly owned or majority-owned operating subsidiaries located in each of the following 28 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), Poland, Romania, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, UAE, and the U.K. See Note 6 of the Notes to our Consolidated Financial Statements for additional information concerning revenue from customers and assets from our business operations outside the U.S.

Intellectual Property and Other Proprietary Rights

We treat our brand name and logo, product names, databases and related content, software, technology, know-how, and the like as proprietary. We seek to protect this intellectual property by using: (i) trademark, copyright, patent and trade secrets laws; (ii) licensing and nondisclosure agreements; and (iii) other security and related technical measures designed to restrict unauthorized access and use. For example, we generally provide our intellectual property to third parties using 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 as trademarks in all relevant international classes in any jurisdiction in which we have business offices or significant operations. We registered the Morningstar name and/or logo in approximately 50 jurisdictions, including the EU, and have registrations pending in several others. In some jurisdictions, we may also choose to register one or more product names.

“Morningstar” and the Morningstar logo are both registered marks of Morningstar in the U.S. The table below includes some of the trademarks and service marks referenced in this report:

Morningstar® Advisor Workstation SM	Morningstar® Plan Advantage SM
Morningstar Analyst Rating TM	Morningstar® Portfolio X-Ray®
Morningstar® ByAllAccounts®	Morningstar Rating TM
Morningstar® Data	Morningstar® Retirement Manager SM
Morningstar Direct SM	Morningstar Style Box TM
Morningstar® Enterprise Components	Morningstar Sustainability Rating TM
Morningstar® Indexes	Morningstar.com®
Morningstar® Managed Portfolios SM	PitchBook®
Morningstar Market Barometer SM	DBRS®
Morningstar Office Cloud SM	Sustainalytics®

In addition to trademark registrations, we hold several U.S. patents, either directly or through our wholly owned subsidiary, Morningstar Investment Management LLC. These patents include those for coordinate-based document processing/data entry, financial portfolio management, portfolio management analysis, lifetime asset allocation, and asset allocation with annuities.

License Agreements

We license our products and related intellectual property to our customers, generally for a fee. Generally, we use our standard agreement forms, 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 Morningstar operating companies around the world to allow them to access our intellectual property, including, without limitation, our products, trademarks, databases and content, technology, and know-how. We put these agreements in place to allow our operating companies to both market standard Morningstar products and services in their operating territories and to develop and sell territory-specific variants of those products under the Morningstar name in their specific territories.

In the ordinary course of our business, we obtain and use intellectual property from a variety of sources, including licensing it from third-party providers, developing it internally, and gathering it through publicly available sources (e.g., regulatory filings).

Seasonality

We believe our business has a minimal amount of seasonality. We sell most of our products with subscription terms of at least one year and we recognize revenue ratably over the term of each subscription agreement. This tends to mitigate most of the seasonality in our business.

We believe market movements and general market conditions 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. In addition, our credit ratings business is subject to market effects on the level of fixed income issuance.

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, Refinitiv, Moody's, and Fitch. 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 and credit 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 and credit 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.

Government Regulation

In addition to generally applicable laws and regulations, certain subsidiaries of Morningstar engage in lines of business or other activities that subject them to various laws and regulations specific to those businesses or activities. These laws and regulations are primarily designed to protect investors and are most pervasive across all or most markets in which we operate in our credit rating, investment management, and investment research businesses. Regulatory bodies or agencies that regulate our credit rating and investment adviser and research subsidiaries often have broad administrative powers, including the power to prohibit or restrict the subsidiary or persons connected with the subsidiary from carrying out business if it or they fail to comply with such laws and regulations or to impose censures, fines, or remedial undertakings as a result of such noncompliance. The rules governing the regulation of these subsidiaries are very detailed and technical. Accordingly, the discussion below is general in nature, does not purport to be complete and is subject to change based on future legislative, enforcement, and examination activities. Additional legislation and regulations, including those not directly tied to regulated activities (e.g., privacy and cybersecurity), or changes in the interpretation or enforcement of existing laws and rules may adversely affect our business and profitability.

Credit Ratings

United States

DBRS Morningstar's U.S. credit rating entity, DBRS, Inc., is registered with the U.S. Securities and Exchange Commission (SEC) as a Nationally Recognized Statistical Rating Organization (NRSRO) and is authorized to rate classes of credit ratings in structured finance instruments, corporate credit issuers, sovereign entities, insurance companies, and financial institutions. As an NRSRO, DBRS, Inc. is subject to certain requirements and regulations under the Exchange Act. These requirements primarily relate to record-keeping, reporting, governance, and conflicts of interest. As part of its NRSRO registration, DBRS, Inc. is subject to annual examination by the SEC. DBRS, Inc.'s affiliated rating agencies, DBRS Limited, DBRS Ratings Limited, and DBRS Ratings GmbH, are each also registered with the SEC as credit rating affiliates of DBRS, Inc.

Canada

DBRS Morningstar's Canadian credit rating entity, DBRS Limited, is designated as a Designated Rating Organization (DRO) in Canada with the Ontario Securities Commission (OSC) as its principal regulator. DBRS Limited provides independent credit rating services in structured finance instruments, corporate credit issuers, governments, insurance companies, and financial institutions. As a DRO, DBRS Limited is subject to certain requirements and regulations under National Instrument 25-101. These requirements primarily relate to record-keeping, reporting, governance, and conflicts of interest. As part of its DRO registration, DBRS Limited is subject to

examination by the OSC. DBRS Limited's affiliated rating agencies, DBRS, Inc., DBRS Ratings Limited, and DBRS Ratings GmbH, are each also designated as DRO affiliates in Canada.

United Kingdom

DBRS Morningstar's credit rating entity located in the U.K., DBRS Ratings Limited, is registered with, and regulated, by the U.K. Financial Conduct Authority (FCA) as a credit rating agency. DBRS Ratings Limited provides independent credit rating services in sovereign and public finance, structured finance, and corporate finance, including financial institutions, corporate credit issuers, and insurance undertakings. As a registered credit rating agency, DBRS Ratings Limited is subject to certain requirements under the U.K. regulations governing credit rating agencies. These requirements primarily relate to record-keeping, reporting, governance, and conflicts of interest.

European Union

DBRS Morningstar's credit rating entity in the EU, DBRS Ratings GmbH (located in Germany), which together with its branch, DBRS Ratings GmbH Sucursal en España (located in Spain), is registered with, and regulated by the European Securities and Markets Authority (ESMA) as a credit rating agency. DBRS Ratings GmbH is registered to provide independent credit rating services in sovereign and public finance, structured finance, and corporate finance, including financial institutions, corporate credit issuers, and insurance undertakings. As a registered credit rating agency, DBRS Ratings GmbH is subject to certain requirements under Regulation (EC) No 1060/2009, as amended. These requirements primarily relate to record-keeping, reporting, governance, and conflicts of interest.

Investment Management and Investment Research

United States

Investment advisory and broker/dealer businesses are subject to extensive regulation in the U.S. at both the federal and state level, as well as by self-regulatory organizations. 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 Management), 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, including certain fiduciary duties to clients. The fiduciary duties of a Registered Investment Adviser to its clients include an obligation of good faith and full and fair disclosure of all facts material to the client's engagement of the advisor, an obligation to provide investment advice suitable for the particular client, an obligation to have a reasonable, independent basis for investment recommendations, an obligation when directing client brokerage transactions to seek the best execution thereof, and an obligation to vote client proxies in the best interests of the client. Other requirements primarily relate to record-keeping and reporting, as well as general anti-fraud prohibitions. As Registered Investment Advisors, these subsidiaries are subject to examination by the SEC, which may include an on-site examination.

Morningstar Funds Trust (the Trust) is registered with the SEC as an open-end management investment company under the Investment Company Act of 1940, as amended (Investment Company Act). Morningstar Investment Management serves as the sponsor and investment advisor of the Trust, and therefore is subject to the requirements of the Investment Company Act. These requirements relate primarily to record-keeping, reporting, standards of care, valuation, and distribution. As sponsor and investment advisor to the Trust, Morningstar Investment Management is subject to examinations by the SEC, which may include on-site examinations.

Connected with the Trust, Morningstar Investment Management is registered with the U.S. Commodity Futures Trading Commission as a commodity pool operator (CPO) and a member of the National Futures Association (NFA). As such, Morningstar Investment

Management is subject to the requirements and regulations applicable to CPOs under the Commodity Exchange Act. These requirements primarily relate to record-keeping and reporting. As a CPO, Morningstar Investment Management is subject to examinations by the NFA and/or the U.S. Commodity Futures Trading Commission, which may include on-site examinations.

In cases where these subsidiaries provide investment advisory services to retirement plans and their participants, they may be acting as fiduciaries under 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 LLC 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 their securities business, including sales practices, capital structure, record-keeping, and the registration and conduct of directors, officers, and employees. As a registered broker/dealer, Morningstar Investment Services LLC 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.

Australia

Morningstar Australasia Pty Limited and Morningstar Investment Management Australia Limited are subsidiaries that provide financial services that include investment management, asset allocation, portfolio construction and investment research services in Australia. They are each registered under an Australian Financial Services license and subject to oversight by the Australian Securities and Investments Commission (ASIC). The licenses require them to maintain positive net asset levels and minimum capital requirements, and to comply with the audit requirements of the ASIC. Morningstar Investment Management Australia Limited is additionally the Responsible Entity and the issuer of units in managed funds for superannuation funds, institutions, platform distributors, financial advisers, and individuals within the Australian market.

United Kingdom

Morningstar Investment Management Europe Limited is authorized and regulated by the FCA to provide financial services commensurate with the regulatory permissions afforded. Those regulatory permissions allow Morningstar Investment Management Europe Limited to advise, arrange, deal and manage investments for professional and eligible counterparty clients across a range of investment instruments including shares, debt securities and units in collective investment schemes. The related services are delivered through managed portfolios, manager selection, segregated mandates and U.K. authorized fund offerings, predominantly to U.K. domiciled clients and investors. As an authorized firm, Morningstar Investment Management Europe Limited is subject to the applicable requirements and regulations, as defined in the FCA Handbook of rules and guidance.

European Union

Morningstar Investment Consulting France SAS is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) as a Markets in Financial Instruments Directive (MiFID) investment firm. Under this authorization and commensurate with the passporting arrangements established, Morningstar Investment Consulting France SAS is permitted to provide investment advice pertaining to shares, debt securities and units, or shares, of collective investment undertakings to financial institutions based in the EU.

South Africa

Morningstar Investment Management South Africa (Pty) Ltd is an authorized financial services provider, regulated by the South African Financial Sector Conduct Authority to provide financial services, commensurate with the regulatory permissions afforded. Specifically, Morningstar Investment Management South Africa (Pty) Ltd is permitted to undertake activity under both Category I

(advisory) and Category II (discretionary) licenses. The related advisory and discretionary activities are delivered pursuant to the associated product approvals, granted by the Financial Sector Conduct Authority.

Other Regions

We have a variety of other entities (including in Canada, Hong Kong, India, Japan, and Singapore) that are registered with their respective regulatory bodies; however, the amount of regulated business activity conducted by these entities remains relatively small to date.

Sustainalytics

Sustainalytics' ESG research, ratings and data supports investors around the world with the development and implementation of investment strategies tied to ESG goals and priorities. Via its subsidiary GES International AB, Sustainalytics has notified the Swedish Finansinspektionen under Section 3 of the Act on Proxy Advisors of its business activity as a proxy advisor in Sweden. Sustainalytics UK Ltd. was added to the FCA's list of Proxy Advisors in early 2022. These regulations require disclosure of information regarding the models and methodologies applied in the preparation of voting recommendations and certain governance information such as a code of conduct and conflicts of interest policies. Other Sustainalytics products including second party opinions on green and sustainability linked bonds, ESG indexes, and the provision of ESG ratings and data have been the subject of proposed legislation. We continue to monitor these developments closely and will assess what modifications will be needed to Sustainalytics' business model, operational processes, and corporate organization in the event potential regulation becomes operative. See the section "Regulatory Trends Affecting Our Business" for a further discussion of these developments.

Indexes

With our acquisition of Moorgate Benchmarks, Morningstar's affiliates, Moorgate Benchmarks Limited and Moorgate Benchmarks GmbH are permissioned to act as a U.K. and EU benchmark administrator, respectively. While this cross-permissioning allows flows of U.K., benchmarks into the EU and vice versa as well as U.S. benchmarks into the UK, the benchmark administrator designation also has significant compliance responsibilities and costs. These compliance responsibilities include specified governance and oversight arrangements, outsourcing limitations, specified items in a code of conduct, key information disclosures, and required systems and controls governing data, complaints and record-keeping. Supplemental regulations under the EU Benchmark Administration contain further operational and administrative requirements and work is underway to evaluate an optimal long-term structure to provision Morningstar's index services across the region.

Information about our Executive Officers

As of February 25, 2022, we had five executive officers. The table below summarizes information about each of these officers.

Name	Age	Position
Joe Mansueto	65	Executive Chairman and Chairman of the Board
Kunal Kapoor	46	Chief Executive Officer
Jason Dubinsky	48	Chief Financial Officer
Bevin Desmond	55	Chief Talent and Culture Officer
Danny Dunn	46	Chief Revenue Officer

Joe Mansueto

Joe Mansueto founded Morningstar in 1984 and served as our chief executive officer from 1984 to 1996 and again from 2000 to 2016. In 2017, he became executive chairman. In September 2019, Mansueto became owner and chairman of Chicago Fire FC, an American professional soccer franchise. Mansueto has served on Morningstar's board of directors since the company's inception.

Under Mansueto's leadership, Morningstar was named twice to Fortune magazine's "100 Best Companies to Work For" list. The Chicago Tribune recognized Morningstar as one of the top 100 workplaces in the Chicago area on three separate occasions under Mansueto's leadership, and Crain's Chicago Business listed Morningstar in its Fast Fifty feature four times. While Mansueto was CEO, Morningstar won the 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 Mansueto to its list of 20 Icons & Innovators. MutualFundWire.com recognized Mansueto 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. Mansueto has 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 Mansueto among its top 40 Chicago pioneers over the past four decades. SmartMoney magazine recognized Mansueto in the "SmartMoney Power 30," its annual list of the 30 most powerful forces in business and finance. He has also received the Distinguished Entrepreneurial Alumnus Award from The University of Chicago Booth School of Business.

Mansueto 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, CFA, is chief executive officer of Morningstar and a member of Morningstar's 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.

Since joining Morningstar in 1997 as a data analyst, Kapoor has held a variety of roles at the firm, including leadership positions in research and innovation. He served as director of mutual fund research and was part of the team that launched Morningstar Investment Services, Inc., before moving on to other roles, including director of business strategy for international operations, and later, president and chief investment officer of Morningstar Investment Services. During his tenure, he also led Morningstar.com and the firm's data business, as well as its global products and client solutions group.

Kapoor 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® designation, is a member of the CFA Society of Chicago, served on the board of PitchBook, prior to its acquisition by Morningstar in late 2016, and currently serves on the board of Wealth Enhancement Group, a privately-owned wealth management firm. Kapoor is also a member of the board of trustees of The Nature Conservancy in Illinois. In 2010, Crain's Chicago Business named him to its annual 40 Under 40 class, a list that includes professionals from a variety of industries who are contributing to Chicago's business, civic, and philanthropic landscape.

Jason Dubinsky

Jason Dubinsky is chief financial officer for Morningstar, responsible for controllership, tax, internal audit oversight, financial planning and analysis, and investor relations.

Before joining Morningstar in 2017, Dubinsky served as senior vice president and chief financial officer of planning and central operations for Walgreens Boots Alliance, Inc., where he was responsible for accounting and shared service functions for Walgreens' U.S. operations and led the financial planning and analysis function for the global business. Prior to the merger of Walgreens and Alliance Boots in 2014, he was Walgreens' vice president of finance and treasurer, with responsibility for business unit finance, treasury operations, risk management, and investor relations. Before joining Walgreens in 2009, he served as vice president of investment banking at Goldman Sachs and Lehman Brothers, where he led mergers and acquisitions and corporate finance activity for clients across various industries.

Dubinsky holds a bachelor's degree in business administration from the University of Michigan and a master's degree in business administration from New York University's Stern School of Business.

Bevin Desmond

Bevin Desmond is chief talent and culture officer, a role she has held since 2010. She is responsible for overseeing talent and culture for all of Morningstar's global operations. She also oversees both quality and transformation as well as Morningstar's data and development centers.

Desmond joined Morningstar in 1993 and was one of three employees who started the company's international business in the late 1990s. From 1999 to 2000, she served as manager of all international ventures. From 2000 to 2008, Desmond was president of Morningstar's international operations while also serving as president of institutional software. Previously, Desmond was head of international operations from 2001 until 2010—from 2010 to 2017, she held the role of head of global markets in tandem with her role as head of talent & culture.

Desmond also sits on the Morningstar Japan K.K. (MJKK) board of directors and the Skills for Chicagoland's Future board of directors. She was named one of Crain's Notable Women Over 50 in both 2019 and 2020, and she 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, Dunn was vice president of the Midwest Enterprise business unit for IBM, a global information technology firm. He was responsible for marketing, sales, client services, and channels for the complete IBM portfolio, including Cloud, Software, Analytics, Services, and Systems in the region. Prior to that, he held a number of different executive leadership roles of increasing responsibility in the marketing, sales and services functions of the company. Before joining IBM in 2007, he was a practice manager at SmithBucklin, a consulting and business process outsourcing firm.

Dunn 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.

Company Information

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

We maintain a corporate website at <http://www.morningstar.com/company>. Shareholders and other interested parties may access our investor relations website at <http://shareholders.morningstar.com>, which we use as a primary channel for disclosing key information to our investors, some of which may contain material and previously non-public information. 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 Morningstar 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 report.

Item 1A. Risk Factors

Risk Factor Summary

Below is a summary of the principal risk factors that could impact our business, financial condition, or operating results. Additional discussion of the risks summarized in this risk factor summary, and other risks that we face, can be found after this summary, and should be carefully considered.

- ▷ Risks Related to Our Business and Industry
 - ▷ Failing to maintain and protect our brand, independence, and reputation may harm our business
 - ▷ Failing to differentiate our products and services and continuously create innovative, proprietary, and insightful financial technology solutions may harm our competitive position and business results
 - ▷ Prolonged volatility or downturns affecting the financial sector, global financial markets, and the global economy may impact our results
- ▷ Risks Related to Legal and Regulatory Matters
 - ▷ Our investment management operations may subject us to liability for any losses that result from a breach of our fiduciary duties or a failure to comply with our duties to clients under applicable securities laws
 - ▷ Compliance failures, regulatory action, or changes in laws applicable to our credit ratings operations, investment advisory, ESG and index businesses could adversely affect our business
- ▷ Risks Related to Our Information Technology and Security
 - ▷ We could face significant reputational and financial consequences relating to cybersecurity and the protection of confidential information, including personal information about individuals
 - ▷ 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 could face liability for the information and data we collect, store, use, create, and distribute or the reports and other documents we publish or that are produced by our software products
- ▷ Risks Related to Our Operations
 - ▷ Our future success depends on our ability to recruit, develop, and retain qualified employees
 - ▷ Our business, products and facilities are at risk of a number of material disruptive events, including an outage of our database, technology-based products and services or network facilities, which our operational risk management and business continuity programs may not be adequate to address
 - ▷ Today's fragmented geopolitical, regulatory and cultural world could adversely affect our ability to maintain growth across our businesses
 - ▷ The continuing COVID-19 pandemic may have material and adverse impacts on our business, financial condition, and results of operations, the nature and extent of which continue to be uncertain and unpredictable

Risk Factors

You should carefully consider the risks and uncertainties described below and all of the other information included in this report when deciding whether to invest in our common stock or otherwise evaluating our business. If any of the following risks or uncertainties materialize, our business, financial condition, or operating results could suffer. In that case, the trading price of our common stock could decline, and you may lose all or part of your investment. Our operations could also be affected by other risks and uncertainties that are not presently known to us or that we currently consider to be immaterial to our operations.

Risks Related to Our Business and Industry

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, by other negative publicity or media reports, or by adverse outcomes in regulatory proceedings.

We believe that our brand is well recognized and highly regarded at both a corporate and product level among key decision makers at purchasers and users of our products and services. We also believe independence is at the core of our brand and business, and that our reputation for integrity and high-caliber products and services is a competitive advantage. Any failure to uphold our high ethical standards and ensure that our customers have a consistently positive experience with us could damage our reputation.

Our ESG offerings insert Morningstar publicly into the debate over a variety of non-financial issues surrounding climate, environment, social concerns, and corporate governance which we may be unsuited or unprepared to address. Our position as a leading source of ESG research and opinions may cause proponents of various causes to demand that we publicly take stands on a variety of controversial topics not directly related to our corporate mission of empowering investor success. Critiques of ESG research can become highly politicized and may reflect differences in societal norms and investor expectations in different areas of the world. New product offerings, such as Sustainalytics' impact ratings, face a challenge to create objective, understandable methodologies in a rapidly developing field without widely accepted standards. We evaluate the potential impact of ESG factors on other companies and risk a claim of hypocrisy if we take or fail to take corporate actions that are or seem inconsistent with our view of best corporate practices.

As our business has evolved, we have entered lines of business and business arrangements that may give rise to allegations of conflicts of interest or perceived failures of our independence. We provide ratings, analyst research, and investment recommendations on mutual funds and other investment products offered by our institutional clients. 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. In our index business, jointly developed products and beta indexes on which we earn a fee defy clean categorization under our historical policies that protect the integrity of our research and marketing efforts. We also provide investment advisory and investment management services, including through our own series of mutual funds, which exposes us to the claim that we are acting as both a referee and a player in the investment management industry. In our credit ratings business and Sustainalytics' Sustainable Finance Solutions products we are participants in an issuer-pay business model under which we receive payments from issuers for our ratings rather than from the investors who consume such ratings. These payments may create the perception that our ratings and research in these areas are not independently determined or reliable. Undertaking proxy voting responsibilities for assets we manage risks a charge of politicizing our investing or false virtue if we don't meet our customers' expectations and exemplify their values.

Our business expansion has also resulted in greater exposure to governmental regulation across our product lines. In some cases, such as with respect to our credit ratings business, interactions with regulators are extensive and continuous, raising the risk that they may result in enforcement investigations and proceedings. To the extent any of those investigations or proceedings result in a finding of misconduct or noncompliance, they could pose a significant reputational risk to us and negatively impact our business. Regardless of source, allegations of improper conduct, whether the ultimate outcome is favorable or unfavorable to us, as well as negative publicity or media reports about Morningstar, whether valid or not, may harm our reputation and damage our business.

Our reputation may also be harmed by factors outside of our control, such as news reports about our clients, consultants, or suppliers or adverse publicity about certain types of investment and ratings products. Our reputation could also suffer if we fail to perform competitively in our investment management offerings. In addition, any failures by us to continue to instill effectively in our employees the non-negotiable expectation of independence and integrity may devalue our reputation over time. Morningstar's corporate culture and reputation contribute to our ability to attract and retain talent, and reputational damage could negatively affect both our hiring and employee retention efforts.

Failing to differentiate our products and services and continuously create innovative, proprietary and insightful financial technology solutions may harm our competitive position and business results.

Our core competencies are around data and research, technology, and design. Morningstar deploys each of these to create unique intellectual property, products, and solutions that clearly convey complex investment information to investors of all kinds. Morningstar offers a suite of solutions that serve individuals, financial advisors, asset managers, retirement plan providers and sponsors, institutional investors in the private capital markets, and participants in the fixed income markets. Morningstar also applies its long-term investing philosophy to managing assets for clients. Our customers have access to a wide selection of investment data, fundamental equity research, manager research, credit ratings, private capital markets research, and ESG data and research, directly on Morningstar's proprietary desktop or web-based software platforms, or through subscriptions, data feeds, and third-party distributors. Our financial technology solutions also allow advisors to serve investors at all stages of the investing process. Morningstar's managed portfolio offerings help advisors outsource investment selection and asset allocation through proprietary portfolio strategies based on Morningstar's valuation-driven, fundamentals-based approach to investing. Applying its expertise in asset allocation, investment selection, and portfolio construction, our global investment team creates long-term investment strategies built on Morningstar's data and ratings. We also help retirement plan sponsors build high-quality savings programs for employees and advise participants in retirement plans on saving for retirement and choosing plan investments. The breadth and depth of our service offerings set us apart from our competitors, which is a significant competitive advantage.

If we fail to continuously innovate and develop new datasets, research, methodologies, content or software 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 or their financial advisors. These changing needs include a greater reliance on goals-based investing, the increased use of asset allocation portfolio models, and a significant emphasis on financial planning. There is also increased interest in alternative asset classes creating a need for applicable datasets and analytical expertise. Clients may also delay purchases of our currently offered research tools and software in anticipation of us offering new products or enhanced versions of existing products. Our competitive position and business results may also suffer if other companies have greater breadth of product offerings or are able to successfully introduce innovative, proprietary research tools and software that gain attention from our clients. For example, our credit ratings business' lack of presence in the CLO market represents a lost opportunity compared to our competitors. We believe lower technology costs, the growth of open software platforms, and cloud computing technologies have lowered the barriers to entry for new competitors, making it easier for new players to enter many of the markets in which we operate. Smaller companies, including startup firms funded by private equity and venture capital, may be able to move more quickly than us to develop data sets, research, tools, and advisor software platforms that gain a wide following.

In addition, the value of our products and services may be negatively affected by the increasing amount of information and tools that are available for free, or at low cost, through Internet sources or other low-cost delivery systems, and by the ability of machine learning and other artificial intelligence systems to process and organize large data sets. Regulations, such as the SEC's requirement that registered investment companies report their fund portfolio holdings publicly on Form N-PORT, may reduce demand for some of our data sets or make them more easily replicable, at least on a going forward basis. Although we believe our products and services contain value-added features and functionality that deeply embed them in our customers' workflows, such developments may over time reduce the demand for, or customers' willingness to pay for, certain of our products and services.

If we fail to introduce innovative, proprietary research tools and frameworks or financial advisor software, we may not generate enough interest from potential clients to win new business. Consolidation within the financial services industry has provided our competitors resources to expand into adjacent business lines, often using our data in innovative ways or focusing on different client types or use cases. We cannot guarantee that we will successfully develop new product features and tools that differentiate our product offerings from those of our competitors.

In addition, we must make long-term investments and commit significant resources often before knowing whether such investments will result in products or services that satisfy our clients' needs or generate revenues sufficient to justify such investments. For example, the adoption of ESG strategies across the financial adviser segment has been slower than we expected, impacting Sustainalytics' products, and the reticence of some recordkeepers to embrace direct to plan participant sales and marketing efforts has impacted the pace of adoption of some of our retirement solutions offerings. In addition, from time to time, we also incur costs to transition clients to new or enhanced products or services. Such transitions can involve material execution risks and challenges. If we are unable to manage these investments and transitions successfully, our business, financial condition, and results of operations could be materially adversely affected.

Prolonged volatility or downturns affecting the financial sector, global financial markets, and the global economy may impact our results, resulting in lower revenue from asset-based fees and credit ratings business, as well as other parts of our business to a lesser extent.

Our business results are partly driven by factors outside of our control, including general economic and financial market trends which may be impacted by changes in interest rates, availability of credit, inflation rates, changes in laws, trade barriers, commodity prices, currency exchange rates and controls, and national and international political circumstances. Prolonged downturns, sustained volatility in the financial markets, interest and inflation rate fluctuations, or a lack of investor confidence could reduce investor interest and investment activity and decrease demand for our software, data, and analyst research products. Intermittent volatility that reduces credit issuance or increases investor interest in non-traditional investment vehicles can put negative pressure on our credit ratings and investment management businesses, respectively. Any unfavorable changes in the market environment in which we operate 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.

For our licensed-based businesses, many of our customers are asset-management firms and other financial-services companies, which are also subject to external trends and changes. The ascendance of passive strategies may affect both the profitability of asset managers, on whose success we in part depend, and the perceived value of our research regarding such strategies. A sustained global recession or other financial crisis would likely lead to material spending cutbacks among many of the companies to which we sell and longer sales cycles. There is currently uncertainty regarding the duration and long-term economic and societal consequences of the COVID-19 pandemic, as well as the effects of unprecedented levels of fiscal and monetary stimulus, which may cause clients to modify spending decisions. Consolidation in the financial services sector reduces the number of potential clients for our products and services. These trends could impact demand for our products and services or change the financial services landscape in which we operate.

Many companies in the financial services industry have also been subject to sustained pressure to reduce fees. As a result, 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. Changes in the nature of the financial advice delivered to investors or the manner of its delivery can also negatively affect our business. For instance, changes in financial advisor activity away from security selection to goals-based asset allocation and portfolio construction and the increasing use of model portfolios, as well as the growth of online wealth management tools that provide automated, algorithm-based portfolio management advice, sometimes called robo-advice, may further reduce demand for our security-specific data and analyst research. Our PitchBook business may also be subject to cyclical trends specific to the private capital markets. Many of PitchBook's clients are investment banks and other participants in the capital and M&A markets, which are subject to periodic business downturns driven by changes in such 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 M&A activities), PitchBook may also be subject to volatility based on the amount of activity and market interest in these areas.

The amount of asset-based revenue we earn primarily 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. Our revenue from asset-based fees may be adversely affected by market declines, and the industrywide trend toward lower asset-based fees. 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. A drop in net inflows or an increase in redemptions can result from a variety of factors, including overall market conditions or uncompetitive investment performance. 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. The introduction of non-traditional asset classes such as cryptocurrencies, private debt, real estate, structured products and collectibles, which lack a historical record of performance akin to traditional assets, into our investment research and strategies and managed assets may result in adverse outcomes and headline risk if they fail to perform in the manner that we anticipate.

In addition, consolidation throughout the financial services industry among custodians, registered investment advisers, discount brokers, and record keepers provides surviving companies scale and resources to expand into adjacent service offerings which may compete with ours. For example, we have seen asset managers roll out model portfolios that compete with our managed portfolio offering. This trend requires us to continually expand and customize our service offerings and ensure that our products remain seamlessly integrated with our customers' business processes and technology.

Our largest transaction-based business, the credit ratings business, can be severely impacted by volatility in U.S. and international financial markets due to its dependence on the number and dollar volume of debt securities issued in the capital markets. Market disruptions and economic slowdowns have in the past negatively impacted, and may in the future negatively impact, the volume of debt securities issued in global capital markets and the demand for credit ratings. Ample market liquidity may be masking the true impact on credits as global economies emerge from the pandemic government support programs and central bank interventions. This makes it harder to explain our differentiated credit views and may produce a wave of negative publicity against the credit ratings business generally if an unanticipated wave of defaults result in conditions that reduce issuers' ability or willingness to issue debt securities, such as market volatility, uncertainty in the outlook for inflation, declining growth, currency devaluations, or other adverse economic trends, reduce the number and value of debt issuances for which we provide credit ratings services and thereby adversely affect the fees we earn in our credit ratings business. Future debt issuances also could be negatively affected by increases in interest rates, widening credit spreads, regulatory and political developments, growth in the use of alternative sources of credit, and defaults by significant issuers. Our ability to reduce costs in the event of such adverse developments can be negatively impacted by, among other things, our obligations to monitor and maintain outstanding ratings. Declines or other changes in the markets for debt securities may materially and adversely affect our business, operating results, and financial condition.

Our transactional business results may also be hurt by negative trends in Internet advertising sales. Many advertisers have shifted some of their advertising spend to programmatic buying platforms that target users on other sites, which has from time to time had a negative effect on advertising revenue for our website for individual investors, Morningstar.com. The reliance on virtual or hybrid events as the COVID-19 pandemic continued to restrict large gatherings during 2021 impacted our financial results for our Morningstar-sponsored investor conferences around the world. We are uncertain whether these trends will continue.

Our acquisitions and other investments may not be efficiently integrated or may not produce the results we anticipate.

We have completed numerous acquisitions over the past 10 years, and we intend to continue to pursue selective acquisitions to support our business strategy. However, there can be no assurance we can identify suitable acquisition candidates at acceptable prices. In addition, each acquisition presents potential challenges and risks. We may not achieve the growth targets that we established for the acquired business at the time of the acquisition. The process of integration may require more resources than we expected or present challenges that were not foreseen.

We may assume unintended liabilities or experience operating difficulties or costs that we did not forecast. We may also fail to retain key personnel of the acquired business, which would make it difficult to follow through on our operating goals for the business. If an acquisition does not generate the results we anticipate, it could have a material adverse effect on our business, financial condition, and results of operations.

We also have, and intend to continue to make, various investments in companies where we do not have or obtain a controlling interest. Such investments are motivated both by their prospective financial return and the access they give us to certain new technologies, products, business ideas, and management teams. While we obtain various rights in connection with such investments, the future value of such investments is highly dependent on the management skill of the managers of those companies.

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.

Risks Related to Legal and Regulatory Matters

Our investment management operations may subject us to liability for any losses that result from a breach of our fiduciary duties or a failure to comply with our duties to clients under applicable securities laws.

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 Advisers Act. As Registered Investment Advisors, these entities are subject to the requirements and regulations of the Advisers Act. These requirements primarily relate to record-keeping, reporting, and standards of care, as well as general anti-fraud prohibitions. The fiduciary duties of a Registered Investment Adviser to its clients include an obligation of good faith and full and fair disclosure of all facts material to the client's engagement of the advisor, an obligation to provide investment advice suitable for the particular client, an obligation to have a reasonable, independent basis for investment recommendations, an obligation when directing client brokerage transactions to seek the best execution thereof, and an obligation to vote client proxies in the best interests of the client. 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 ERISA. 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. 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. Such activities have been the subject of extensive class action litigation, including one such proceeding involving us that was dismissed.

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. As these become more interconnected with other product offerings, including the technology of clients and other third parties, the increasing complexity of the technology requires more expertise and efforts to manage and test. Problems could arise if these programs do not work as intended, particularly if we failed to detect program errors over an extended period and are found to be a breach of our fiduciary

duty or applicable law. There is a need to continually invest in training to develop and maintain in-house expertise to manage these systems effectively.

We seek to constantly innovate and improve our retirement services offering, for example to add new capabilities in annuities, and in doing so, we regularly release new versions of the technology and update our methodology. Additional customer support may be needed to ensure that clients implement the new, more complex, versions and updates properly and understand the implications for their plan participants. More resources may also be required to continue to support legacy versions of the Wealth Forecasting Engine. 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.

Our subsidiaries outside the U.S. that have investment advisory operations are subject to similar requirements. In addition, we may face other legal liabilities based on other theories of liability relating to various substantive requirements of the Advisers Act and other federal and state securities laws, even in the absence of an actual or claimed breach of fiduciary duty. We could face substantial liabilities related to the investment advisory and management services we provide.

Compliance failures, regulatory action, or changes in laws applicable to our credit ratings operations, investment advisory, ESG and index businesses could adversely affect our business.

DBRS Morningstar, our credit ratings business, operates in a highly regulated environment in Canada, the U.S., the U.K., and the EU. The laws and regulations governing credit ratings impose substantial ongoing compliance obligations and costs and subject DBRS Morningstar to regular regulatory examinations and occasional investigations, relating to the company itself or sometimes to the credit ratings industry as a whole. In operating under these laws and regulations, DBRS Morningstar can experience good faith uncertainty over the scope, interpretation, and administration of such laws and regulations. In addition, differences between the laws and rules governing credit rating agencies in Canada, the U.S., the U.K., and the EU can result in inconsistent regulatory requirements that it may not be possible to fully reconcile in a cost-efficient manner for a credit rating agency of DBRS Morningstar's size.

New laws, regulations and regulatory implementation guidance may also affect the day-to-day operation of the business of DBRS Morningstar, its customers, and users of its credit ratings, including by imposing new or expanded requirements on such matters as communications with issuers as part of the rating assignment process, conflict of interest monitoring, the manner in which DBRS Morningstar's ratings are developed and communicated, the manner in which customers may use credit ratings, and other aspects of the business model for credit rating agencies. Failures by DBRS Morningstar could lead to negative publicity, fines, settlements, and/or temporary or permanent operating restrictions. Further, many aspects of credit ratings agency policies and practices and their compliance with applicable law, regulations, contracts and license arrangements are not the subject of definitive regulatory guidance or case law.

Our investment management operations are subject to complex securities laws and other laws in multiple jurisdictions. The activities of our investment advisory operations in the U.S. are subject to provisions of the Advisers Act, ERISA, and, in the case of our advisory relationship with the Morningstar Funds Trust, the Investment Company Act of 1940 and the Commodity Exchange Act. In addition, Morningstar Investment Services is a broker/dealer registered under the Exchange Act and is subject to the rules of FINRA. 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. For example, recent SEC amendments to the advertising and solicitation rule for registered investment advisers, resulted in costs to comply with new evaluation, implementation, and disclosure requirements in our investment management operations, as well as costs to modify software used by our unaffiliated registered investment adviser clients who must also comply with such amendments.

We also provide investment advisory services in other areas around the world, and our operations are subject to additional regulations in markets outside the U.S. In preparation for the end of the transition period following the U.K.'s exit from the EU, we restructured our European investment management operations. While we have been conditionally granted authorization for our French investment advisory subsidiary to continue to provide investment advisory services to those EU institutional clients previously serviced by our U.K. based investment advisory subsidiary, this process has been time consuming and has resulted in increased costs and duplication of functions. Furthermore, as there has not been an "equivalence" determination in terms of applicable regulations in the U.K. and the EU following Brexit, we anticipate ongoing costs to monitor and comply with potentially diverging legal and regulatory developments in each jurisdiction.

The Morningstar Funds Trust, a registered open-end mutual fund for which Morningstar Investment Management acts as investment advisor under an investment management agreement. The independent Board of Trustees of the Morningstar Funds Trust must annually approve the terms of the investment management agreement (including fees) and can terminate the agreement upon 60-days' notice. If we are no longer able to satisfy the Board of Trustees of our effective management of the Morningstar Funds Trust, the Board has authority to lower the fees that we receive or terminate our contract, which could have a material adverse effect on the revenues and net income of our investment advisory services.

Our Sustainalytics business could be negatively affected by increased regulation of ESG research and data. The European Commission's legislative proposal for registering and supervising companies that act as external reviewers for green bonds aligned with the European Green Bond Standards (EuGBS) framework would require significant investments to build and maintain appropriate internal control and compliance processes for these teams. Similarly, the FCA and International Organization of Securities Commissions' consultation papers on proposed ESG regulation of climate-related issuer disclosures and ESG rating and data providers prescribe governance policies, quality assurance and control programs, and standardized procedures and methodologies related to data collection and fees. We are also monitoring activities of regulators in North America and APAC that have announced that they are reviewing this topic and are preparing proposed legislation. Such regulatory regimes could impose significant compliance burdens and costs on Sustainalytics and, as with all new regulation, could be subject to ambiguous interpretation that could result in inadvertent noncompliance. Furthermore, as our Sustainalytics business operates globally and we look to integrate ESG factors throughout our products, we may be subject to future regulation in multiple jurisdictions, which may be inconsistent.

Our index business could be negatively affected by increased regulation of benchmarks generally, which could increase the costs and risks of producing and administering indexes. With our acquisition of Moorgate Benchmarks, Morningstar has affiliates permissioned to act as a EU and U.K. benchmark administrator. While this cross-permissioning allows flows of U.K. benchmarks into the EU and vice versa, the benchmark administrator designation also has significant compliance responsibilities and costs. These compliance responsibilities include specified governance and oversight arrangements, outsourcing limitations, specified items in a code of conduct, key information disclosures, and systems and controls governing data, complaints and record-keeping. Supplemental regulations under the EU Benchmark Administration contain further operational and administrative requirements which may be costly to implement. Such regulations may create a competitive advantage for Morningstar by discouraging competitors but they may also lead to declining demand for indexes among market participants.

The laws, rules, and regulations, and their interpretations, applicable to our business may change in the future, and we may not be able to comply with these changes without extensive changes to our business practices. In the recent past, the scope and pace of global regulatory change has both increased and involved shorter compliance time frames, which has increased both the risk that we will properly identify and respond to regulatory changes applicable to our operations and the risk that we will implement such changes on a timely and complete basis. Regulations aimed at increasing transparency for investors or providing individuals greater control over their own data may devalue the investments we have made in our data sets or reduce their use cases. 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. Developments, such as the National Security Law in Hong Kong which reduce press freedoms, could impact the safety of our local employees and ultimately cause us to discontinue operations in that jurisdiction. If we fail to comply with any applicable law, rule, or regulation, we could be fined, sanctioned, or barred from providing certain products and services in the future, which could adversely affect our business.

Failure to protect our intellectual property rights, or claims of intellectual property infringement against us, 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. We rely primarily on patent, trademark, copyright, and trade secret rights, as well as contractual protections and technical safeguards, to protect our intellectual property rights and proprietary information. Despite these efforts, third parties may still attempt to challenge, invalidate, or circumvent our rights or improperly obtain our proprietary information. Further, effective trademark, copyright, and trade secret protection may not be available in every country in which we offer our services. Some of our intellectual property was obtained pursuant to a business or asset acquisition and the previous owners of the acquired business may not have taken similar measures to protect the acquired intellectual property. 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.

We have from time to time been subject to claims by third parties alleging infringement of their intellectual property rights. Such claims can also be alleged against clients, customers, or distributors of our products or services whom we have agreed to indemnify against third party claims of infringement. The defense of such claims can be costly and consume valuable management time and attention. We may be forced to settle such claims on unfavorable terms, which can include the payment of damages, the entry into royalty or licensing arrangements on commercially unfavorable terms, or the suspension of our ability to offer affected products or services. If litigation were to arise from any such claim, there can be no certainty we would prevail in it. If any of these risks were to materialize, it could have a material adverse effect on our business, financial condition, or results of operations.

Risks Related to Our Information Technology and Security

We could face significant reputational and financial consequences relating to cybersecurity and the protection of confidential information, including personal information about individuals.

Our business requires that we securely collect, process, store, and transmit confidential information, including personal information, relating to our operations, customers, employees, and other third parties. We continuously invest in systems, processes, controls, and other security measures to guard against the risk of improper access to or release of such information. However, these measures do not guarantee absolute security, and improper access to or release of confidential information may still occur through employee error or malfeasance, system error, other inadvertent release, failure to properly purge and protect data, or cyberattack.

We may suffer malicious attacks by individuals or groups (including those sponsored by nation-states, terrorist organizations, or global corporations) seeking to attack our products and services or penetrate our network infrastructure to gain access to intellectual property, confidential or personal information, or to facilitate distributed denial of service attacks. While we have dedicated resources responsible for maintaining appropriate levels of cybersecurity and implemented systems and processes intended to help identify

cyberattacks and protect and remediate our network infrastructure, these attacks have become increasingly frequent, sophisticated, and difficult to detect. Even if we are not directly impacted by an attack, time and effort must be spent confirming our status and communicating internally and with other stakeholders. Our measures may not be adequate for all eventualities and may be vulnerable to circumvention of security systems, denial of service attacks or other cyberattacks, hacking, “phishing” attacks, computer viruses, ransomware or malware, employee or insider error, employee or vendor malfeasance, social engineering, physical breaches or other malicious actions. Furthermore, these security measures are less effective in situations where employees are utilizing personal devices and home networks while working remotely.

We may also be impacted by a cyberattack targeting one of our vendors or within our technology supply chain or infrastructure. Security breaches at government agencies and other companies have led to enhanced government and regulatory scrutiny of the measures taken by companies to protect against cyberattacks and may in the future result in heightened cybersecurity requirements, including additional regulatory expectations for oversight of customers, vendors, and service providers. These risks may be heightened as we offer employees flexibility to work more frequently from remote work environments, our dependency on certain service providers, such as video conferencing and web conferencing services, has significantly increased. Our information technology systems interact with those of customers, vendors, and service providers and collect an increasing amount of data as we expand our product and service offerings. As a result, inadequacies of our customers’ security technologies and practices introduce additional risk and cost of monitoring, and may only be detected after a security breach has occurred.

Any failure to safeguard confidential information or any material cybersecurity failures or incidents in our systems (or the systems of a customer, vendor, or service provider which stores or processes confidential information for which we are responsible) could cause us to experience reputational harm, loss of customers, regulatory actions, sanctions or other statutory penalties, litigation, or financial losses and increased expenses related to addressing or mitigating the risks associated with any such material failures or incidents.

In addition to the risks above related to general confidential information, we may also be subject to specific obligations relating to personal information and personal financial information. Our products and websites in certain cases collect, store, process, and transmit personal information about an individual, including personally identifiable information and personal financial information such as portfolio holdings, account numbers, and credit card information. Our business also operates across national borders and routinely moves personal information from one jurisdiction to another. Regulators and political leaders in various countries are increasingly interested in restricting cross-border data transfers that they perceive as problematic. We and our customers are often subject to federal, state, and foreign laws relating to privacy, cybersecurity, and data protection. The scope of the laws that may be applicable is often uncertain and required practices may be inconsistent with laws of other jurisdictions. Consequently, our business is subject to a variety of continuously evolving and possibly conflicting regulations and customer requirements. Our compliance with these changing and increasingly burdensome regulations and requirements may cause us to incur substantial costs or require us to change our business practices which may impact financial results. If we fail to comply with these regulations or requirements, we may be exposed to litigation expenses and possible significant liability, fees, or fines. For example, in the EU, noncompliance with the General Data Protection Regulation (GDPR) requirements could result in penalties of up to 4% of worldwide revenues.

One of Morningstar’s core strengths is the ability to collect data and enrich it with data from another part of the business to provide valuable information and insights to investors. As data is accessible across our products, consistent data privacy practices and disclosure becomes more important and challenging. Failure to comply with our public statements or to adequately disclose our privacy or data protection practices could result in costly investigations by governmental authorities, litigation, and fines as well as reputational damage and customer loss.

We also from time to time acquire other companies that collect and process personal information. While we perform extensive due diligence on the technology systems and practices of these companies, there can be no assurance that such companies have not

suffered data breaches or system intrusions prior to or continuing after our acquisition for which we may be liable. Acquired businesses may not have invested as heavily in such security measures or data privacy controls and they introduce additional cybersecurity and data privacy risk as their systems are integrated with ours.

While we maintain insurance coverage that is intended to address certain aspects of cybersecurity and data protection risks, such coverage may not be sufficient to cover all or the majority of the costs, losses, or types of claims. Our insurance coverage would not extend to any reputational damage, loss of customers, or required improvements to our systems.

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 innovation in the financial technology landscape continues to accelerate. Developments in technology are fundamentally changing the ways investors, financial intermediaries, and other market participants access data and content. Examples include the shift from local network computing to cloud-based systems, the proliferation of wireless mobile devices, rapid acceleration in the use of social media platforms, the dissemination of data through application programming interfaces that permit real-time updating rather than raw data feeds, the proliferation of machine learning and other artificial intelligence technologies, and the adoption of distributed ledger or “blockchain” technologies. These technological developments can render our existing products less competitive, obsolete or unmarketable. As a result, our future success will continue to depend upon our ability to identify and develop new products and enhancements that address the future needs of our target markets and to deliver them in ways that support our customers’ business models.

As our customers further automate their business processes, their need for our products may change and the technological flexibility and interoperability of our systems may become more important. For example, the pandemic accelerated advisor and client demand for digital, friction-free technology and experiences with our turnkey asset management platform, shining a light on dated, legacy operational workflows. In addition, there has been an increasing focus on technology not merely supplying additional tools for users, but also offering solutions to specific client problems. We have a myriad of potential technology investments across our product lines and need to prioritize scarce technology resources to focus on products that best meet the needs and priorities of our customers.

Our software development process is based on frequently rolling out new features so that we can quickly incorporate user feedback. However, at times adoption of new features or enhanced versions, for example of some of our workplace solutions products, is slowed by the significant client investment required for more advanced use cases. 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 or that the transition to such new offerings will be seamless. 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 or if clients decline to migrate to new systems and we must support multiple platforms over an extended period of time. Our competitive position depends on our execution speed and we regularly face new competitors from venture capital funded fintech firms that may be significantly more focused or nimble.

Our technology is also heavily dependent on the quality and comprehensiveness of our data and our ability to successfully build analytics, research, and other intellectual property around that data. For example, in order to provide the personalized holistic advice that clients value, we need to collect, organize, and protect large, non-homogenous datasets and synthesize and effectively analyze the insights offered by this data. We are investing significant resources in consolidating our various data assets and improving their usability and deliverability across our platform of products. Our competitive position and business results may suffer if we fail to realize the value and potential of our data assets.

Finally, we rely on technology for our own internal business operations and must continually evaluate these tools to ensure they are sufficient for our expanding needs. If we are unable to develop or purchase technology to support our finance, legal, compliance, audit, human resources, and other corporate teams, these functions may operate inefficiently, at higher cost, or with greater risks than is necessary.

We could face liability for the information and data we collect, store, use, create, and distribute or the reports and other documents we publish or that are produced by our software products.

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 credit ratings. 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. In addition, in our credit ratings business, we have access to significant amounts of material nonpublic information on issuers of securities, the inadvertent disclosure of which, or the misappropriation by employees or others, could expose us to various liabilities under securities and other laws. Less significant errors could still require us to remove ratings, research, or data temporarily which could diminish the perceived value of the product or cause us to be deficient in our service-level agreements with clients that require us to meet certain obligations for delivering time-sensitive, up-to-date data and information.

Some of our products support the investment processes or the client account reporting practices and other activities of our clients who manage significant assets of other parties. Use of our products as part of such activities creates the risk that clients, or the parties whose assets are managed by our clients, may pursue claims against us for losses that may have some connection to our products, and we may be subject to investigation of our products and their use by government regulators who regulate the business of our clients. In the case of software products, even though most of our contracts for such products contain limitations of our liability in such cases, we may be required to make such clients or their customers whole for any losses in order to maintain our business relationships. 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, issuers, and other data providers. We also incorporate data from a variety of third-party sources for many of our products including PitchBook. 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. For example, our Sustainalytics business is reliant on self-reported information for some of its issuer focused ESG ratings and analysis. We also face the risk that a significant data source terminates its distribution of the data to us, which could impact our products, research, or other calculations that utilize that information.

We could be subject to claims by providers of 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, such as securities exchanges from which we license and redistribute data and information, that we have used or redistributed the data or information in ways not permitted by our license rights or that we have inadequately permissioned our clients to use such data. The agreements with such exchanges and other data providers give them extensive data use audit rights, and such audits can be expensive and time consuming and potentially result in substantial fines. We could also be subject to claims from regulators that we have mishandled private ratings or nonpublic data and information, in particular in our credit ratings business. These regulatory bodies have audit rights regarding our data use which could have similar adverse consequences in terms of time, expense, or fines. 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.

Finally, our global business regularly seeks to optimize our data storage in order to improve information accuracy and streamline the technology, which supports our business operations. These efforts are constrained by data privacy legislation, such as GDPR, which defines standards for storage, transfer, and use of certain personal information from and about individuals. Legislation aimed at protecting material nonpublic information or mitigating potential conflicts of interest further define how certain information can be accessed and retained which may result in less efficient or higher cost technological processes and infrastructure.

Risks Related to Our Operations

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

Our strategy envisions building and expanding our business which requires identifying, attracting, hiring, and on-boarding new qualified employees. Engineering, research, quantitative, fixed income data, credit analysis and ESG skill sets are particularly needed to capitalize on near-term growth opportunities. We experience competition for analysts, technology experts, data and software engineers, and other employees from other companies and organizations. While we have a geographically diversified workforce location strategy, building valued teams in a variety of locations around the globe, we experience recruiting challenges in nearly all our global locations. Such significant talent acquisition activities place a strain on our human resource management team. We must continue to refine and expand our recruiting capabilities, our systems and processes in order to meet this need in a highly competitive employment market.

The development, maintenance, and support of our products and services are also dependent upon the knowledge, skills, experience, and abilities of our existing employees. We invest in our employees' continued development and growth through learning tools, educational stipends, speaker series, mentoring, and other resources to help them chart a fulfilling career at Morningstar. We are also thoughtful about employee engagement and communications to keep our staff focused and motivated by our mission. However, recent changes in labor markets such as the willingness of some employers to offer fully remote work and the so-called "Great Resignation" brought on, in part, by the COVID-19 pandemic, may make it more difficult for us to retain existing employees or maintain traditional workplace arrangements.

We believe the success of our business depends to a significant extent upon the continued service of our executives and other key employees. However, the talents and experience of these individuals make them attractive candidates to many of our peers, which are also experiencing significant business growth, as well as to early-stage companies that can offer the potential for outside financial rewards if they are successful. Thus competition for these employees is intense and a high velocity of employee turnover creates a need to think strategically about the timing of new projects and initiatives to manage workloads. We may not be able to retain these employees or to develop and retain similar highly qualified personnel in the future.

In addition, we are exposed to overall rising wage scales in the employment markets in which many of our facilities are located, which negatively affects our ability to hire personnel generally without significantly increasing our compensation costs. Inflationary concerns, the recent strong stock performance in our sector and shortages of applicants with certain skills put upward pressure on wages. Shifting preferences regarding remote work flexibility and a backlog of immigration applications can further complicate employment offer negotiations with potential candidates and delay start dates.

Our future success also depends on the continued service of our executive officers, including Joe Mansueto, our Executive Chairman and Chairman of the Board and largest shareholder, and Kunal Kapoor, our Chief Executive Officer. The loss of Mansueto, Kapoor, or other executive officers could hurt our business, operating results, or financial condition. We do not have employment agreements, noncompete 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 business, products and facilities are at risk of a number of material disruptive events, including an outage of our database, technology-based products and services or network facilities, which our operational risk management and business continuity programs may not be adequate to address.

Our business and major products are dependent on our ability to provide data, software applications, and other products and services on a current and time-sensitive basis. We rely extensively on our computer systems, database storage facilities, and other network infrastructure, which is located across multiple facilities in the U.S. and globally. We are at risk of disruptions from numerous factors, including pandemic, violent incident, natural disaster, power loss, telecommunications and Internet failures, civil unrest, cybersecurity attacks and breaches, and other events beyond our reasonable control. We are also subject to potential shortcomings in our own business resilience practices, such as failures to fully understand dependencies between different business processes across the locations in which they are performed, inadequate vendor risk assessment and management processes and critical vendor dependencies, concentration of certain critical activities in areas of geopolitical risk, concentration of certain skills and know-how with small groups of key employees, and possibly ineffective location recovery strategies in the event of a location disruption. As we grow through acquisitions, the newly acquired businesses may not have invested in technological infrastructure and disaster recovery to the same extent as we have. As their systems are integrated into ours, a vulnerability could be introduced, which could impact our platforms across the company.

We continue to develop processes to support our employees working remotely, but we remain exposed to disruptive events at our significant office locations. Our corporate headquarters in Chicago, Illinois is the home office for a significant number of our employees including most of our executive leadership team, as well as substantial numbers of employees involved in the delivery of most of our major products and services. Our data collection, technology, and operational center in Mumbai, India is also a significant location where employees maintain and update our equity database and PitchBook's data and research operations, and provide shared services to many of our operations. We also have a substantial number of 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. We engage third party vendors in several locations, including Colombia, India, and Ukraine, which provide contract labor in support of our operations. If a pandemic, war, natural disaster, violent incident, or another dangerous emergency significantly impacted the safety or communication connectivity of people living in and around these locations, we might not be able to continue business operations at an acceptable level that would meet all our legal and contractual commitments. Each of these locations has experienced various types of geopolitical risks and changes in laws and regulations relating to data privacy, security, protection of intellectual property rights, and acceptable telecommunication infrastructure which create uncertainty regarding our long-term operations there. Any extended disruptions to our operations in these locations would make it difficult for us to meet our operating goals.

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. We rely on cloud providers and other vendors to maintain, service, and improve our technological infrastructure, which underpins and protects our data, research, and other products and services. 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, antivirus software, training, 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. If disruptions, failures, or slowdowns of these 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 are shifting the storage of our data and delivery of several of our products and services to cloud-based delivery systems. We rely on cloud providers and other vendors to maintain, service, and improve our technological infrastructure, which underpins and

protects our data, research, and other products and services. Some of these providers have recently experienced widely reported service disruptions that affected numerous customers including ourselves. In addition, as we offer our employees opportunities to work from remote environments more frequently, the daily activities and productivity of our work force is now closely tied to key vendors, such as video conferencing services, consistently delivering their services without material disruption. Our ability to deliver information using the Internet and to operate in a remote working environment 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 these 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 backup facilities for our data, but we cannot guarantee that these facilities will operate as expected during an interruption that affects our primary facility. 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.

Today's fragmented geopolitical, regulatory, and cultural world could adversely affect our ability to maintain growth across our businesses.

Morningstar's strategy for growth involves, in part, continuous expansion into new and adjacent product lines to anticipate and meet our customers' needs. Our ability to realize those opportunities in one of our businesses, however, may be hindered by regulatory requirements governing a different business within the Morningstar group. In certain cases, regulatory sanctions against one of our businesses could affect our ability to continue to operate in unrelated regulated areas. In addition, the day-to-day sharing and optimization of the value of our intellectual property across our product lines can be affected by regulatory concerns. For example, in response to regulatory requirements we are evaluating our implementation of information barriers to segregate the data and research accessible by some members of our credit ratings team from those involved in investment management. Similarly, differences in data privacy regimes and governmental surveillance rights applicable in specific countries significantly affect our workforce location strategy and technology infrastructure in relation to cross-border processing of personally identifiable information of customers, employees and other third parties. Such limitations, which seem likely to proliferate as global consensus regarding regulatory principles wanes, may impact our ability to maintain growth across our businesses.

The dynamics of today's geopolitical discourse may also impact business growth across different markets. It has been our experience that adoption of many ESG focused products has been more rapid in European countries than in other parts of the world, and there is more agreement on ESG taxonomies, methodologies, and acceptable sources of data in that market. Customer opinions about such products, or preferences regarding their methodology or approach, are at times impacted by regional or national political trends which may differ significantly. Preferred terminology and information sources may similarly differ from place to place. In such an environment, Morningstar may struggle to maintain its reputation for methodological transparency and consistency which underpins the value and reputation of our research.

Morningstar's growth also places increasing demands on our functional resources to scale and optimize globally and to balance global consistency with local flexibility. Our sales and marketing teams are focused on multi-product based strategies to bring the breadth of our offerings and the full value of our intellectual property to our customers. However, such sales efforts can breed customer confusion, implicate regulatory limits on how certain products or services can be sold and by whom in certain jurisdictions, and if coupled with misaligned incentive structures, can create opportunities for misconduct or excessive risk taking. Additional complexity also creates a need for clear responsibilities and ownership across various global teams within Morningstar. A higher velocity of hiring and turnover in the competitive talent acquisition environment also creates challenges for cross-company collaboration. Morningstar is fortunate to have many opportunities for global growth in its strategic plan, however, we cannot be

certain that further growth or profitability will be at the same or higher level given the headwinds of deglobalization and political, regulatory, and cultural fragmentation. Accordingly, an inability to maintain growth, or an inability to effectively manage growth, could have an adverse effect on our business, financial condition and results of operations.

The continuing COVID-19 pandemic may have material and adverse impacts on our business, financial condition, and results of operations, the nature and extent of which continue to be uncertain and unpredictable.

The continuing COVID-19 pandemic and the governmental and societal responses to it worldwide have the potential to materially and adversely affect our business, financial condition, and results of operations in ways that continue to be uncertain and unpredictable. The COVID-19 pandemic has created significant public health concerns, as well as significant volatility, uncertainty, and periods of economic disruption in most countries in which we operate. While we have taken numerous steps to respond to this changing environment, there can be no assurance that such steps will be successful or that our business, financial condition, and results of operations will not be materially and adversely affected by the consequences of the pandemic.

Throughout 2021, we saw fluctuations of government-mandated COVID-19-related restrictions on the physical movement and gathering of people in certain geographies, dependent upon the local extent and severity of COVID-19 infections and other factors. Those fluctuations have continued into 2022 as specific variants of the virus and concerns over the adoption and efficacy of mitigants, such as vaccines and other treatments, compel certain governments to again impose travel limitations, lockdowns and curfews, and other business and personal restrictions. Our approach to preventative and protective actions has remained similarly flexible and, based on the guidelines of local authorities and our own safety standards, we have re-opened certain offices and will continue to do so. Many of our customers, vendors, and data suppliers continue to operate under remote working or voluntary attendance arrangements, which may interfere with productivity. While our business continuity plans have permitted remote working arrangements without material interruption, prolonged periods of virtual collaboration may have an impact on innovation, productivity, and culture over time. When health and safety conditions allow, we are encouraging or requiring collaborative teams to begin returning to our offices on a regular schedule and employees have been cleared to resume travel for approved business purposes in jurisdictions permitting such travel. Our management is focused on mitigating the effects of the COVID-19 pandemic on our business, which has required and may continue to require a substantial investment of their time and may delay other strategic activities.

In the longer term, the adverse effects of the COVID-19 pandemic on the world's economies and financial markets may be significant, with unpredictable effects on the overall demand and pricing environment for our products and services. While 2021 saw growth in many financial markets, the speed and extent to which governments and central banks withdraw fiscal and monetary stimulus, and other national and global political conditions may undermine or reverse such growth. If that turns out to be the case, our asset management businesses could be affected by declines in assets under management and advisement resulting from any prolonged downturn in financial markets and a concomitant decline of broad-based investment activity, while our credit ratings business could suffer from a decline in new issuance activity resulting from a decline in the availability of credit. The financial performance of our customers, including those of our license and subscription businesses, could materially deteriorate, which could result in lower demand, cancellations, price reductions, or delays in implementation for our products and services.

Other macroeconomic trends reflecting consumer and business reactions to the COVID-19 pandemic could also have a lasting impact on our cost profile and long-term profitability. Given the nature of our business, global supply chain disruptions have had little impact on us but could impact the availability of certain IT infrastructure over time. Certain long-term effects of the efforts of monetary authorities and governments to ameliorate the impacts of the pandemic are potentially starting to become evident, including both price and wage inflation as well as increased competition for workers. We have noted these effects in our business related to the mobility of employees between jobs and the wage levels needed to hire or retain employees. While our annual bonus programs are designed to reward exceptional business performance and so a portion of our compensation expense is aligned with overall growth,

other components of compensation expense are relatively fixed which may impact profitability. The uncertainty surrounding the duration and the effects of the COVID-19 pandemic in the countries in which we operate could impede our business planning and coordination. In addition, the availability of credit could become constrained even to financially strong companies.

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

Our operations outside of the U.S. constitute a significant portion of our consolidated revenue. There are risks inherent in doing business outside the U.S., 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, including in relation to employment terms and conditions; 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 in some jurisdictions; and currency exchange rates and exchange controls.

In addition, new risks have arisen from the assertion by various national governments of greater control over the movements of people and information across national borders. Travel restrictions put in place in various countries in response to the continuing COVID-19 pandemic and administrative delays at government immigration offices could adversely affect our ability to attract and retain talent from other countries. In addition, China's government has backed various measures that could compromise the privacy and security of our proprietary information or information concerning our customers, including a ban on nonstate sanctioned virtual private networks and requirements that multinational firms acquire and use equipment from Chinese telecom suppliers, while recent court decisions in the EU have raised questions about the ability of multinational companies to process personally identifiable information of EU residents outside of the EU. These risks could hamper our ability to expand around the world, which may hurt our financial performance and ability to grow.

During 2021, we did not 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 monitor our financial performance on a global basis and may look to enter into derivatives from time to time to reduce or control risk for known exposures.

Risks Related to Ownership of Our Common Stock

Our indebtedness could adversely affect our cash flows and financial flexibility. Our variable rate indebtedness could subject us to interest rate risk, which could cause our debt service obligations to increase significantly.

For an overview of our current outstanding indebtedness, refer to Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources below. While our business has historically generated strong cash flow and interest rates on corporate indebtedness are at historically low levels, we cannot provide assurance that we will generate and maintain cash flows sufficient to permit us to service our indebtedness. Our ability to make payments on indebtedness and to fund planned capital expenditures depends on our ability to generate and access cash in the future, which, in turn, is subject to general economic, financial, competitive, regulatory and other factors, many of which are beyond our control. If we cannot refinance or otherwise pay our obligations as they mature and fund our liquidity needs, our business, financial condition, results of operations, cash flows, liquidity, ability to obtain financing and ability to compete in our industry could be materially adversely affected.

In addition, any borrowings under our current credit facility bear interest at fluctuating interest rates based on the London interbank offered rate (LIBOR) for deposits of U.S. dollars. In May 2021, the FCA (the authority that regulates LIBOR) announced that it intends to stop compelling banks to submit rates for the calculation of LIBOR for the U.S. dollar LIBOR tenors relevant to the company after June 30, 2023. The industry is in a period of transition and both Secured Overnight Financing Rate (SOFR) and Short-Term Bank Yield Index (BSBY) have emerged as potential alternatives to USD LIBOR. SOFR is a broad measure of the cost of borrowing overnight

collateralized by U.S. Treasury securities. BSBY represents the average cost at which large, global banks access USD unsecured wholesale funding, and has characteristics similar to USD LIBOR. We continue to monitor the relative merits of these options and expect to effect the necessary administrative changes in advance of June 2023. It is not possible to predict the effect of these changes on our borrowing costs over time or the availability to us of credit.

Furthermore, the terms of our debt agreements include restrictive covenants that limit, among other things, our and our subsidiaries' financial flexibility. If we are unable to comply with the restrictions and covenants in our debt agreements, there could be a default that, in some cases, if continuing, could result in the accelerated payment of our debt obligations or the termination of borrowing commitments on the part of the lenders under our Credit Agreement. Refer to Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources for a description of the restrictive covenants in our debt agreements.

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

As of December 31, 2021, Joe Mansueto, our Executive Chairman and Chairman of the Board, owned approximately 41.6% of our outstanding common stock. As a result, he has the practical 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. 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. For example, if the U.S. economy were to enter a prolonged inflationary period, increased compensation and other expenses could impact our operating results in the short term. Uncertainty regarding inflation could also impact our ability to forecast costs, which inform our longer-term budget and capital allocation decisions. 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 not always reflect the intrinsic value of our business and assets. 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 significant shareholders sell substantial amounts of our common stock, the market price of our common stock could fall. A significant reduction in ownership by Joe Mansueto or any other large shareholder could cause the market price of our common stock to fall. Our directors and officers may adopt written plans, known as Rule 10b5-1 plans, in which they may contract with a broker to sell shares on a periodic basis. 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 SEC regarding our periodic or current reports under the Exchange Act.

Item 2. Properties

As of February 11, 2022, we leased approximately 511,000 square feet of office space for our U.S. operations, with approximately half of the space for our corporate headquarters located in Chicago, Illinois. We also lease another 648,000 square feet of office space in 26 other countries around the world, including approximately 220,000 square feet in Mumbai, India and 80,000 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 incorporate by reference the information regarding legal proceedings set forth in Note 15 of the Notes to our Consolidated Financial Statements contained in Part II, Item 8 of this report.

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."

As of February 11, 2022, there were 728 shareholders of record of our common stock.

We paid four dividends during 2021. In the fourth quarter of 2021, we increased our quarterly cash dividend from 31.5 cents per share to 36 cents per share. While subsequent dividends will be subject to board approval, we expect to pay a regular quarterly dividend of 36 cents per share in 2022.

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, most recently approved by the board of directors on December 4, 2020, to repurchase up to \$400.0 million in shares of the company's outstanding common stock, effective January 1, 2021. This authorization will expire on December 31, 2023.

The following table presents information related to repurchases of common stock we made during the three months ended December 31, 2021:

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
October 1, 2021 - October 31, 2021	3,700	\$ 259.8	3,700	\$ 398,725,421
November 1, 2021 - November 30, 2021	—	—	—	398,725,421
December 1, 2021 - December 31, 2021	—	—	—	398,725,421
Total	3,700	\$ 259.8	3,700	

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 following table, 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 1, 2022:

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 1, 2022	Projected Beneficial Ownership (1)
Bevin Desmond Chief Talent and Culture Officer (2)	11/29/2021	10/31/2022	20,000	Shares to be sold under the plan on specified dates	—	20,231
Jason Dubinsky Chief Financial Officer	11/30/2021	6/1/2022	2,649(3)	Shares to be sold under the plan on specified dates	—	8,080(4)
Joe Mansueto Executive Chairman	11/19/2020	4/30/2022	1,600,000	Shares to be sold under the plan if the stock reaches specified prices	1,212,629	17,473,164
Caroline Tsay Director	3/8/2021	5/31/2022	835	Shares to be sold under the plan on specified dates.	466	3,993

During the fourth quarter of 2021, the previously disclosed Rule 10b5-1 plan for Steve Kaplan completed in accordance with its terms.

(1) This column reflects an estimate of the number of shares each identified director and executive officer 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, 2021 and includes shares of our common stock subject to options that were then exercisable or that will have become exercisable by March 1, 2022 and restricted stock units that will vest by March 1, 2022. The estimates do not reflect any changes to beneficial ownership that may have occurred since December 31, 2021. Each director and executive officer identified in the table may amend or terminate his or her Rule 10b5-1 sales plan and may adopt additional Rule 10b5-1 plans in the future.

(2) This plan is entered into by Bevin Desmond's spouse.

(3) The number of shares to be sold under this plan is estimated using a 40% withholding tax rate.

(4) The projected beneficial ownership is estimated based on the estimated number of shares to be sold under the Plan using a 40% withholding tax rate.

Item 6. [Reserved]

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

The discussion included in this section, as well as other under "Business—Our Strategy," "Business—Regulatory Trends Affecting Our Business" and sections of this report, 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:

- ▷ failing to maintain and protect our brand, independence, and reputation;
- ▷ liability related to cybersecurity and the protection of confidential information, including personal information about individuals;
- ▷ liability for any losses that result from an actual or claimed breach of our fiduciary duties or failure to comply with applicable securities laws;
- ▷ compliance failures, regulatory action, or changes in laws applicable to our credit ratings operations, or our investment advisory, ESG, and index businesses;
- ▷ failing to respond to technological change, keep pace with new technology developments, or adopt a successful technology strategy;
- ▷ the failure to recruit, develop, and retain qualified employees;
- ▷ inadequacy of our operational risk management and business continuity programs in the event of a material disruptive event, including an outage of our database, technology-based products and services or network facilities;
- ▷ failing to differentiate our products and services and continuously create innovative, proprietary, and insightful financial technology solutions;
- ▷ prolonged volatility or downturns affecting the financial sector, global financial markets, and global economy and its effect on our revenue from asset-based fees and credit ratings business;
- ▷ failing to maintain growth across our businesses in today's fragmented geopolitical, regulatory and cultural world;
- ▷ liability relating to the information and data we collect, store, use, create, and distribute or the reports that we publish or are produced by our software products;
- ▷ the failure of acquisitions and other investments to be efficiently integrated and produce the results we anticipate;
- ▷ the impact of the current COVID-19 pandemic and government actions in response thereto on our business, financial condition, and results of operations;
- ▷ challenges faced by our non-U.S. operations, including the concentration of data and development work at our offshore facilities in China and India;
- ▷ our indebtedness could adversely affect our cash flows and financial flexibility; and
- ▷ the failure to protect our intellectual property rights or claims of intellectual property infringement against us.

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

This section includes comparisons of certain 2021 financial information to the same information for 2020. Year-to-year comparisons of the 2020 financial information to the same information for 2019 can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of the company's Annual Report on Form 10-K for the fiscal year ended December 31, 2020.

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 prior year unless otherwise stated.

Understanding Our Company

Key Business Characteristics

We offer an extensive line of products and services for individual investors, financial advisors, asset managers, retirement plan providers and sponsors, and institutional investors and other participants in the private capital markets. 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, PitchBook, and Sustainalytics, 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, which represents subscription services available to customers and not a license under the accounting guidance, 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.

Our investment management products have 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 most 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. Firms 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).

We also generate transaction-based revenue, primarily from DBRS Morningstar and from the sale of advertising on our websites and sponsorship of our conferences. For the year ended December 31, 2021, 65.7% of the revenue generated by DBRS Morningstar came from one-time, transaction-based fees driven by ratings on newly-issued securities; the remainder can be classified as transaction-related, with annual fees tied to surveillance, credit research, or other services.

Deferred Revenue

We invoice some of our clients and collect cash in advance of providing services or fulfilling subscription services to our customers. Deferred revenue totaled \$413.8 million (of which \$377.4 million was classified as a current liability with an additional \$36.4 million included in other long-term liabilities) at the end of 2021. We expect to recognize this deferred revenue in future periods as we fulfill the service obligations under our license and subscription agreements.

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.

- ▷ *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 expenses, such as third-party data purchases and data lines as well as professional fees for third-party development activities.
- ▷ *Sales and marketing.* This category includes compensation expense for our sales teams, product managers, and marketing professionals. We also include the cost of advertising, digital marketing 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 mainly relate to capitalized software development costs, information technology equipment, and leasehold improvements. We amortize capitalized software development costs over their estimated economic life, generally three years. We depreciate property and equipment 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 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 twenty years.

International Operations

As of December 31, 2021, we had majority-owned operations in 28 countries outside of the U.S. and included their results of operations and financial condition in our consolidated financial statements. We also have investments outside of the U.S., and where we have significant influence, including MJKK, we apply the equity method of accounting.

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 the following 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) (including adjusted operating income);
- ▷ Operating margin (including operating margin); and
- ▷ Free cash flow.

Organic revenue, adjusted operating income, adjusted operating margin, and adjusted net income per share, and free cash flow are not measures of performance set forth under U.S. generally accepted accounting principles (GAAP).

We define organic revenue as consolidated revenue excluding acquisitions, divestitures, adoption of new accounting standards, 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 exclude revenue from businesses acquired or divested from organic revenue for a period of 12 months after we complete the acquisition or divestiture. Organic revenue is not equivalent to any measure required under GAAP and may not be comparable to similarly titled measures reported by other companies.

We define adjusted operating income as operating income excluding all M&A-related expenses and amortization. We define adjusted operating margin as operating margin excluding all M&A-related expenses and amortization. We present these measures because we believe they better reflect period-over-period comparisons and improves overall understanding of the underlying performance of the business absent the impact of M&A.

We define free cash flow as cash provided by or used for operating activities less capital expenditures. 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.

We calculate revenue renewal rates to evaluate how successful we've been in maintaining existing business for products and services that have revenue associated with periodic renewals. We use the annual 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. We also include variable-fee contracts in this calculation and use the actual revenue for the previous comparable fiscal period as the base rate for calculating the renewal percentage. The renewal rate excludes setup and customization fees and contract renewals that were pending as of January 31, 2022.

COVID-19 Update

We continue to closely monitor the impact of the COVID-19 pandemic on all aspects of our business and in the geographies in which we operate, including how it affects team members, customers, suppliers, and the global markets.

While the business environment in most of the jurisdictions in which we operate continues to move toward a state resembling pre-pandemic conditions, the long-term impact of the COVID-19 pandemic on our ongoing business, results of operations, and overall future financial performance continues to be difficult to reasonably estimate at this time. The threat of new variants of the virus and concerns over the adoption and efficacy of mitigants, such as vaccines and other treatments, continue to affect historical commercial and work patterns, although not with any significant impact on any of our sources of revenue during 2021.

Based on the guidelines of local authorities and our own safety standards, we have re-opened certain offices and will continue to do so. We continue to provide work flexibility for employees with a focus on health and safety while at the same time encouraging or requiring collaborative teams to begin returning to our offices on a regular schedule. Employees have been cleared to resume travel for approved business purposes in jurisdictions permitting such travel. Given the nature of our business, global supply chain disruptions have had little impact on the company, but could impact the availability of certain IT infrastructure over time. While 2021 saw growth in many financial markets, the speed and extent to which governments and central banks withdraw fiscal and monetary stimulus, and other national and global political conditions may undermine or reverse such growth. Certain long-term effects of the efforts of monetary authorities and governments to ameliorate the impacts of the pandemic are potentially starting to become evident, including both price and wage inflation as well as the competition for workers. We have noted these effects in our business related to the mobility of employees between jobs and the wage levels needed to hire or retain employees.

Accordingly, the situation surrounding the COVID-19 pandemic remains fluid. We continue to actively manage our response and have assessed potential impacts to our financial position and operating results related to our consolidated financial statements during 2021. We remain focused on maintaining a strong balance sheet and liquidity position. At December 31, 2021, our cash, cash equivalents, and investments totaled \$546.1 million and we had full availability of our \$300.0 million revolving credit facility.

Regulatory Trends Affecting Our Business

In addition to the industry developments described under “Business—Our Strategy”, there are several longer-term regulatory trends we consider relevant to our business, as outlined below.

General

With the continuing impact of the COVID-19 pandemic throughout 2021, businesses relied on remote working arrangements and increased their use of online and digital communications technologies. Demand by investors, regulators and other interested parties for firms to adopt environmental, social, and governance (ESG) related business and operational risk strategies persists. These developments will have long term impacts on our delivery of products and services, customer interactions, physical operations, technology systems, and dependencies on third parties. In this environment, regulators are expected to scrutinize the change management processes of regulated entities, like Morningstar, more closely to ensure they comply with laws and regulations and to assess whether they are based on sound internal governance principles and structures. Given more intense regulatory scrutiny and the novelty of some of the issues presented, the possibilities for inadvertent noncompliance with regulation have increased.

In addition, the trend towards increasingly fragmented regulatory activity as a period of global regulatory response and coordination has been replaced by different jurisdictions and regulators reasserting their full control of their own regulatory agendas is continuing. The causes of this trend are varied, including the current administration in the United States (U.S.) signaling stricter financial regulatory activity, the end of the transition period for the withdrawal of the United Kingdom (U.K.) from the European Union (EU) and the effect on trans-European financial services providers, the lack of federal legislation in the U.S. in important areas like data privacy and consumer protection that has resulted in various states implementing divergent regulatory requirements, and the rise of disruptive technologies worldwide that permit greater personalization of interactions between financial services providers and their various customer segments.

Even in its fragmented state, regulators globally have continued to focus on certain recurring themes, including access to financial services, the quality of advice and the value of the services provided, the protection of customer data and transparency around the uses of such data, the minimization of conflicts of interest, and improvements in corporate governance and risk management. Other themes have emerged globally, with increased attention to corporate ethics, in areas such as human rights and modern slavery, which impact not just financial service providers, like Morningstar, but all companies of a commensurate size.

Set forth below is a description of recent and prospective developments in regulation affecting each of our regulated lines of business as well as our business generally.

Credit Ratings

On January 4, 2021, the European Securities and Markets Authority (ESMA) withdrew the registrations of all U.K.-based credit rating agencies, including DBRS Ratings Limited. Accordingly, all ratings of DBRS Ratings Limited require the endorsement of its EU-based credit ratings affiliate, DBRS Ratings GmbH, for regulatory use in the EU. At present, the U.K. credit rating agency regulatory regime and the EU regime largely continue to mirror each other, which minimize any significant change in our overall operations. However, over time, either ESMA or the U.K. Financial Conduct Authority (FCA) may begin to make inconsistent modifications to those laws and regulations, which would increase the cost and complexity of regulatory compliance for our credit ratings business.

Investment Management

In the U.S., on December 22, 2020, the SEC adopted amendments to its investment adviser advertising and cash solicitation fee rules under the Advisers Act. The rule replaces the current advertising rule's broadly drawn limitations with principles-based provisions designed to accommodate the continual evolution and interplay of technology and advice and includes tailored requirements for certain types of advertisements. The amendments create a single rule that replaces the current advertising and cash solicitation rules. The final rule, which comes into effect on November 4, 2022, is designed to comprehensively and efficiently regulate investment advisers' marketing communications. Morningstar is reviewing its use of hypothetical performance information in its adviser software products to align with the updated requirements and generally working with its adviser customers to prepare for the new regime. Morningstar Investment Management is also working on changes to its policies and practices to comply with the new rule.

In the U.K. and Europe, Morningstar continues to navigate the equivalence regimes and domestic laws governing matters of access in financial services post-Brexit. Morningstar Investment Consulting France SAS received its authorization as a Markets in Financial Instruments Directive (MiFID) investment firm in early 2021. This initiative enables Morningstar Investment Management to continue provision of related services to EU-based clients, post Brexit. In addition, the Investment Firms Regulation and Directive in the EU and the equivalent Investment Firms Prudential Regime in the U.K. have had an impact on the regulatory requirements for Morningstar Investment Management Europe Limited and Morningstar Investment Consulting France SAS. We have taken steps to ensure these entities remain in compliance with these regulations' requirements in matters such as capital adequacy, liquid assets, risk management, regulatory reporting and remuneration.

Similarly, in other parts of the world, recent regulations and other guidance in jurisdictions, like Australia and New Zealand, have focused on investment management compliance practices, such as design and distribution obligations, conflicts of interest and fee disclosures. The increased complexity and extent of regulatory change globally is a challenge for both Morningstar and its clients and we continue to expend resources to remain in compliance.

Workplace Solutions

On October 30, 2020, the U.S. Department of Labor (DOL) adopted amendments to the "Investment duties" regulation under Title I of ERISA, to confirm that ERISA requires plan fiduciaries to select investments and investment courses of action based solely on financial considerations relevant to the risk-adjusted economic value of a particular investment or investment course of action. While this regulation had some adverse effects on demand for Morningstar's ESG-related retirement solutions, DOL has since changed course as we anticipated. DOL announced on March 10, 2021 the agency would not enforce the regulation. On October 14, 2021, DOL proposed a new rule that would encourage plan sponsors to consider ESG information when evaluating investments. We expect the revised rule will be finalized in 2022.

Other recent regulatory developments in the U.S. are likely to have a positive impact on our Workplace Solutions business. DOL finalized a new prohibited transaction exemption that expands the scope of fiduciary investment advice to include rollover recommendations and will start to enforce all its requirements after June 30, 2022. While we do not anticipate any of Morningstar's businesses will need to avail themselves of the exemption, Morningstar provides tools and other resources designed for financial institutions and investment professionals to provide clients analysis on rollover recommendations, which is now required for some advisors.

ESG

While the EU has generally taken the lead with respect to regulation of ESG products and services, other jurisdiction have also adopted or begun to work in this area. In July 2019, ESMA issued Guidelines on the disclosure of ESG factors in credit rating agency (CRA) press releases. Pursuant to the Guidelines, the CRAs are expected to indicate within EU credit ratings public press releases when ESG factors are a key driver behind a change to a credit rating or rating outlook. The Guidelines began to apply on March 30, 2020. DBRS Morningstar evaluates and incorporates ESG risks in the assessment of its credit ratings globally and provides transparency in its rating action press releases in situations where one or more ESG factor(s) are associated key rating drivers, as applicable.

The Sustainable Finance Disclosure Regulation came into effect in the EU on March 10, 2021. The regulation requires various investment market participants to implement policies and make certain disclosures with regards to sustainability risks and sustainability factors relevant to their investment activities. Portions of the regulation relating to climate change mitigation and adaptation came into effect in January 2022 with the full regulation expected to become effective in January 2023. We do not expect this disclosure requirement will have a material adverse effect on our business, operating results, or financial position.

In July 2020, an EU-wide taxonomy (or combined glossary and classification system) of environmentally sustainable activities, as well as new disclosure requirements for certain financial services firms and large public interest entities, was adopted. In July 2021, the European Commission released its EuGBS proposal that, among other things, would set up a system for registering and supervising companies that act as external reviewers for green bonds aligned with the EuGBS Regulation framework. If adopted, the EuGBS Regulation would contain a suite of requirements covering the governance of external reviewers, as well as general principles requiring the external reviewer to employ appropriate systems, resources and procedures and to monitor and evaluate at least annually, the adequacy and effectiveness of its systems and internal control mechanisms and arrangements. Sustainability currently offers external reviews of green bonds that we expect may be in scope for the EuGBS Regulation. We understand that ESMA's current timeline is to require registration of external reviewers in 2022-2023. We are currently undertaking an internal review of appropriate measures and an assessment of the need for additional resources that may be required to comply with such regulation. Furthermore, ESMA has proposed to the European Commission that legislation should be adopted regulating providers of ESG ratings and assessment tools, including by adopting a regulatory model similar to that in place with respect to credit rating agencies. Morningstar is familiar with this regulatory model on account of DBRS Morningstar.

Morningstar is additionally monitoring proposed legislation in the EU relevant to its ESG business activities. In June 2021, the FCA and the International Organization of Securities Commissions (IOSCO) published consultation papers on the proposed regulation of climate-related issuer disclosures and the governance policies, quality assurance and control programs, data collection procedures and methodologies, and fee payment models of ESG rating and data product providers. In November 2021, IOSCO published its related final report that include several recommendations addressed to regulators, ESG ratings and data product providers and users of ESG ratings and data products.

Regulators in other jurisdictions including Canada, China, India, Japan, and the UAE have also adopted or begun to work on frameworks related to ESG-disclosure and registration requirements applicable to ESG rating providers or green bond verifiers. While green bond issuances are on the rise in the U.S., there is no set framework or statutory definition in the U.S. for such financings.

Similarly, there has not yet been systemic consideration of the regulation of sustainable finance in the U.S. Morningstar continues to monitor these developments closely.

Indexes

The primary regulation concerning our index business is the EU Benchmarks Regulation, which seeks to ensure the use of benchmarks are free of conflicts of interest, are used appropriately, and reflect the actual market or economic reality they are intended to measure. With our acquisition of Moorgate Benchmarks, Morningstar's affiliates, Moorgate Benchmarks Limited and Moorgate Benchmarks GmbH, are permitted to act as an U.K. and EU benchmark administrator, respectively. As such, Morningstar is well positioned for continued cross-border provision of indexes within the combined EU/U.K. markets even after the associated benchmarks regulation transition period ends in 2023. The potential for U.S. authorities to introduce a regulatory regime specific to index providers remains uncertain.

Data Privacy and Cybersecurity

Data privacy regulation continues to proliferate, as numerous national and state jurisdictions are considering new data privacy regulations. The General Data Protection Regulation (GDPR) continues to be a major influence on the global privacy landscape. Many non-EU countries are following the EU's lead and implementing rules similar to GDPR in their jurisdictions to enable cross-border data exchange.

The expansion of international data transfer rules has caused Morningstar and other global companies to reconsider offshoring and compliance practices. In 2021, China, the EU, New Zealand, and the U.K. promulgated rules governing the transfer of personal data across international borders. EU cross-border transfer rules require companies to evaluate their ability to protect personal data transferred outside of the European Economic Area considering importing countries' laws and surveillance practices. In addition to increased compliance costs, these rules have increased the risk of regulatory enforcement and business disruption associated with processing personal data in certain countries.

In the U.S., the growing number of state privacy laws and the absence of a comprehensive federal privacy law have contributed to a challenging compliance environment. In 2021, Colorado and Virginia enacted comprehensive consumer privacy laws scheduled to become effective in 2023. Several other states have adopted or are considering the adoption of privacy regulations. Additionally, the California Privacy Rights Act, which expands upon the California Consumer Privacy Act, goes into effect on January 1, 2023. State privacy laws typically adopt similar themes as GDPR, limiting companies' ability to process certain categories of personal data and extending to customers the right to control their data. These laws may provide obligations inconsistent with other state or global privacy regulations and impose additional compliance costs. Since operations in the financial services industry require the processing of significant amounts of personally identifiable information, we believe the burdens of regulation, and possibly inconsistent regulation, will proliferate, particularly in the application of such laws and regulations to particular persons, categories of personal information, or types of transactions.

As a related matter, issues of cybersecurity as they relate to the identification and mitigation of system vulnerabilities also continue to grow in prominence and laws governing data breaches continue to proliferate globally. Financial regulators have also increased scrutiny on the data protection practices of the entities, such as Morningstar, that they oversee. Several countries including Singapore, Hong Kong, and Australia have shown increasing sensitivity regarding information security, outsourcing and the use of cloud-based services. In the U.S., the SEC has stated that is focused on cybersecurity issues involving four groups of entities: registered financial sector participants such as broker dealers and registered investment advisers; public companies; service providers that work with financial sector registrants but are not registered themselves; and the SEC itself. The SEC is focused on cybersecurity hygiene and preparedness, cyber incident reporting to the government, and in certain circumstances, disclosure to the public. This focus has the potential to impact not only Morningstar's regulated businesses, but also those of its customers who may potentially need to implement increasing scrutiny of their service providers and commercial counterparties.

Supplemental Operating Metrics (Unaudited)

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

(in millions)	Year ended December 31,			
	2021	2020	2021 Change	Organic Change (1)
Revenue by type				
License-based (2)	\$1,131.7	\$ 934.9	21.1%	15.4%
Asset-based (3)	264.9	223.8	18.4%	17.1%
Transaction-based (4)	302.7	230.8	31.2%	26.9%
Key product area revenue				
PitchBook	\$ 290.2	\$ 201.1	44.3%	44.3%
DBRS Morningstar (5)	271.2	207.3	30.8%	26.4%
Morningstar Data	243.5	215.1	13.2%	10.3%
Morningstar Direct	173.2	158.1	9.6%	7.5%
Investment Management (6)	125.5	118.3	6.1%	4.5%
Workplace Solutions	104.4	84.5	23.6%	23.6%
Morningstar Advisor Workstation	91.9	87.2	5.4%	4.8%

Select business metrics	As of December 31,		
	2021	2020	2021 Change
Morningstar Direct licenses	17,421	16,388	6.3%
PitchBook Platform licenses	73,940	52,288	41.4%
Advisor Workstation clients (U.S. and Canada)	232	244 (7)	(4.9)%
Morningstar.com Premium Membership subscriptions (U.S.)	115,541	113,320	2.0%

Assets under management and advisement (approximate) (\$bil) (8)	As of December 31,		
	2021	2020	2021 Change
Workplace Solutions			
Managed Accounts (9)	\$ 111.1	\$ 89.2	24.6%
Fiduciary Services	60.2	55.0	9.5%
Custom Models/CIT	41.6	36.0 (10)	15.6%
Workplace Solutions (total)	\$ 212.9	\$ 180.2	18.1%
Investment Management			
Morningstar Managed Portfolios	\$ 32.4	\$ 28.6	13.3%
Institutional Asset Management	11.8	11.2 (10)	5.4%
Asset Allocation Services	8.0	6.9	15.9%
Investment Management (total)	\$ 52.2	\$ 46.7	11.8%
Asset value linked to Morningstar Indexes (\$bil)	147.0	80.6	82.4%
Our employees (approximate)			
Worldwide headcount	9,556	7,979	19.8%
Average assets under management and advisement (\$bil)	\$ 249.4	\$ 211.6 (10)	17.9%

(1) Organic revenue excludes acquisitions, divestitures, adoption of new accounting standards, and the effect of foreign currency translations.

(2) License-based revenue includes PitchBook, Morningstar Data, Morningstar Direct, Morningstar Advisor Workstation, Sustainability, and other similar products.

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

(4) Transaction-based revenue includes DBRS Morningstar, Internet advertising, and Morningstar-sponsored conferences.

(5) For the years ended December 31, 2021 and 2020, DBRS Morningstar recurring revenue derived primarily from surveillance, research, and other transaction-related services was 34.3% and 40.1%, respectively.

(6) Investment Management revenue includes the contribution of the Morningstar Funds Trust, which records revenue as well as sub-advisory fees on a gross basis. For the full year 2021 and 2020, this contribution represented \$21.5 million and \$17.3 million, respectively.

(7) Revised to reflect updated enterprise client reporting for Advisor Workstation to include clients in Canada.

(8) The asset totals shown below (including assets we either manage directly or for which we provide consulting or subadvisory work) only include assets for which we receive variable fees based on basis-points of asset balances. 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.

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.

Aside from Morningstar Managed Portfolios, it's difficult for our Investment Management business 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.

(9) 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 movements.

(10) Revised to reclass CIT assets previously reported in Institutional Asset Management to Custom Models/CIT.

Consolidated Results

Key metrics (in millions)	2021	2020	Change
Revenue	\$ 1,699.3	\$ 1,389.5	22.3%
Operating income	257.0	215.2	19.4%
Operating margin	15.1%	15.5%	(0.4)pp
Cash provided by operating activities	\$ 449.9	\$ 384.3	17.1%
Capital expenditures	(101.8)	(76.7)	32.7%
Free cash flow	\$ 348.1	\$ 307.6	13.2%
Cash used for investing activities	\$ (167.7)	\$ (123.8)	35.5%
Cash used for financing activities	\$ (211.8)	\$ (182.2)	16.2%

pp—percentage points

Consolidated Revenue

(in millions)	2021	2020	Change
Consolidated revenue	\$ 1,699.3	\$ 1,389.5	22.3%

In 2021, our consolidated revenue rose \$309.8 million, or 22.3%. Foreign currency movements increased revenue by \$26.7 million in 2021.

We experienced strong revenue growth across all revenue types during 2021.

License-based revenue, which represents subscription services available to customers, increased 21.1% during 2021 driven by demand for license-based products, such as PitchBook, Sustainalytics, and Morningstar Data. Licensed-based organic revenue grew 15.4%. PitchBook revenue increased 44.3% during 2021, highlighting ongoing expansion of existing client relationships along with growth in new users. The number of PitchBook Platform licenses increased to 73,940 at the end of 2021, compared with 52,288 at the end of 2020. During 2021, significant investments in PitchBook's data, research, and product capabilities enhanced the workflows of PitchBook's core clients, expanded private markets coverage in the European region, and launched new functionality for alternative asset investors. Sustainalytics revenue grew 168.1%, or 44.4% on an organic basis, to \$78.9 million on strong demand from both investor and corporate clients. Morningstar Data revenue grew 13.2% as a result of expansion of data use cases, ongoing demand for data to support regulatory needs, and growing demand for fund-level sustainability data as core client segments respond to increasing investor interest in ESG.

Asset-based revenue increased 18.4% during 2021, primarily from Workplace Solutions, Morningstar Indexes, and Investment Management. Workplace Solutions revenue growth of 23.6% was bolstered by higher market performance and higher assets under management in Morningstar Retirement Manager from both new and existing plans. Morningstar Indexes revenue increased 59.3%, driven by higher index data licensing sales and strong asset flows and market growth for investable products linked to Morningstar Indexes. Investment Management revenue grew 6.1% in 2021, as stronger year-over-year inflows and market performance more than offset the negative impact of previously-disclosed client losses. Average assets under management and advisement (calculated based on available average quarterly or monthly data) were approximately \$249.4 billion in 2021, compared with \$211.6 billion in 2020.

Transaction-based revenue increased 31.2% during 2021, primarily driven by the contribution of DBRS Morningstar. DBRS Morningstar revenue grew 30.8%, primarily from robust commercial and residential mortgage-backed securities (CMBS and RMBS) issuance following muted 2020 volumes. Revenue growth from fundamental ratings accelerated throughout 2021 as DBRS Morningstar continued to successfully expand its presence in the U.S. and European corporate middle markets alongside outsized issuance in Canadian non-bank financials. Annual fees tied to surveillance, research, and other services represented 34.3% of credit ratings revenue.

Organic revenue

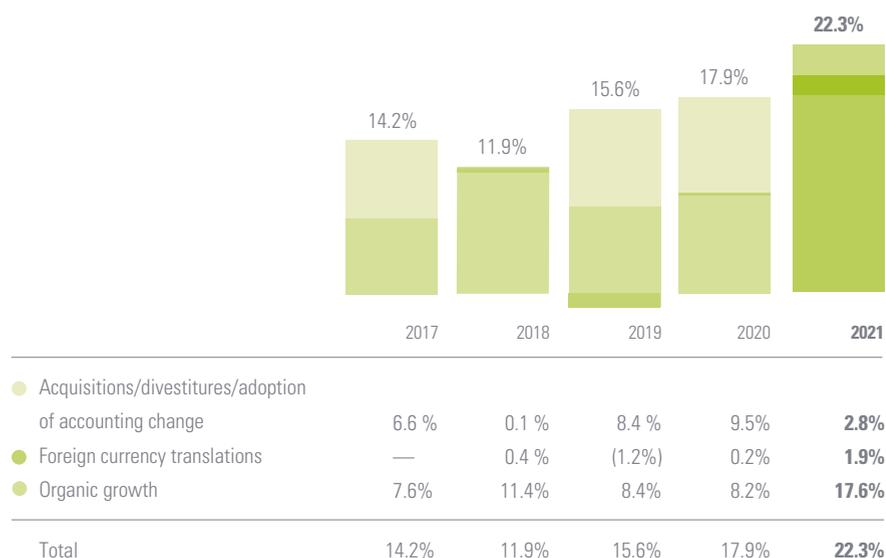
Organic revenue (revenue excluding acquisitions, divestitures, adoption of new accounting standards, and the effect of foreign currency translations) is considered a non-GAAP financial measure. The definition of organic revenue we use may not be the same as similarly titled measures used by other companies.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

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 exclude revenue from acquired businesses from our organic revenue growth calculation for a period of 12 months after we complete the acquisition. For divestitures, we exclude revenue in the prior period for which there is no comparable revenue in the current period.

We began including Sustainalytics revenue in our organic revenue calculation in the third quarter of 2021. As such, organic revenue for the year-ended December 31, 2021 only includes Sustainalytics revenue for the last six months of 2021.

Excluding revenue from acquisitions and the impact of foreign currency translations, organic revenue increased 17.6% in 2021. PitchBook, DBRS Morningstar, Morningstar Data, Workplace Solutions, and Sustainalytics were the main drivers of the increase in organic revenue during 2021.

Contributors to Revenue Growth



The tables below reconcile consolidated revenue with organic revenue:

(in millions)	2021	2020	Change
Consolidated revenue	\$ 1,699.3	\$ 1,389.5	22.3%
Less: acquisitions	(37.9)	—	NMF
Effect of foreign currency translations	(26.7)	—	NMF
Organic revenue	\$ 1,634.7	\$ 1,389.5	17.6%

NMF—Not meaningful

Revenue by geographical area

(in millions)	Year ended December 31		
	2021	2020	Change
United States	\$ 1,184.3	\$ 970.8	22.0%
Asia	41.1	33.6	22.3%
Australia	56.9	45.6	24.8%
Canada	112.9	101.5	11.2%
Continental Europe	159.1	113.8	39.8%
United Kingdom	135.7	117.5	15.5%
Other	9.3	6.7	38.8%
Total International	515.0	418.7	23.0%
Consolidated revenue	\$ 1,699.3	\$ 1,389.5	22.3%

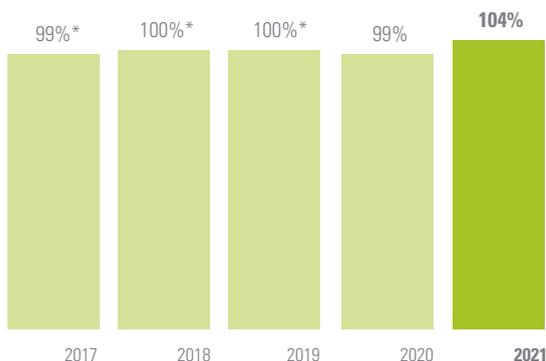
International revenue comprised approximately 30% of our consolidated revenue in both 2021 and 2020. Approximately 57% of international revenue is generated from Continental Europe and the U.K.

Revenue from international operations increased \$96.3 million, or 23.0%, in 2021. Over half of the increase in 2021 is due to our acquisition of Sustainalytics, which has a revenue base in Europe, and DBRS Morningstar, which has a significant revenue base in Canada and Europe. Acquisitions and foreign currency translations had a favorable impact of \$27.0 million and \$26.7 million, respectively, on international revenue in 2021.

Revenue Renewal Rates

As discussed in *How We Evaluate Our Business*, we calculate revenue renewal rates to help measure how successful we've been in maintaining existing business for products and services that have renewable revenue. The figures for license-based products includes the effect of price changes; increasing client bases upon contract renewal; changes to the contract value upon renewal (such as increased users); and changes in the value of variable-fee contracts. These factors, therefore, can result in a renewal rate percentage greater than 100%.

Revenue Renewal Rates for License-Based Products and Services



*Between 2017-2019, rates reflect updated revenue renewal rate calculation for license-based products and services.

Our revenue renewal rate calculation includes only those products that we consider to be license-based. These are primarily weighted toward PitchBook, Morningstar Data, Morningstar Direct, and Morningstar Advisor Workstation, but also includes other license-based products and services across Morningstar. For these license-based products and services, we estimate that our annual renewal rate was approximately 104% in 2021 versus 99%, with the year-over-year increase largely driven by PitchBook. Sustainalytics' revenue renewal rate is excluded from our calculation because fiscal year 2021 included only six months of organic revenue contribution.

Consolidated Operating Expense

(in millions)	2021	2020	Change
Cost of revenue	\$ 698.4	\$ 556.4	25.5%
<i>% of revenue</i>	41.1%	40.0%	1.1 pp
Sales and marketing	274.8	206.4	33.1%
<i>% of revenue</i>	16.2%	14.9%	1.3 pp
General and administrative	318.4	272.0	17.1%
<i>% of revenue</i>	18.7%	19.6%	(0.9) pp
Depreciation and amortization	150.7	139.5	8.0%
<i>% of revenue</i>	8.9%	10.0%	(1.1) pp
Total operating expense	\$1,442.3	\$1,174.3	22.8%
<i>% of revenue</i>	84.9%	84.5%	0.4 pp

In 2021, operating expense increased \$268.0 million, or 22.8%. Higher compensation expense, sales commissions, professional fees, and advertising and marketing costs were the key contributors to operating expense growth during 2021. Foreign currency translations had an unfavorable impact of \$22.6 million on operating expense in 2021.

Compensation expense (which primarily consists of salaries, bonus, and other company-sponsored benefits) increased \$177.4 million in 2021. Higher salary and bonus expense, which reflect increased headcount, merit raises, and higher bonus accruals driven by the company's strong financial performance, were the primary drivers of increased compensation expense during 2021.

Sales commissions also grew \$23.3 million largely due to strong PitchBook sales performance and additional headcount under sales commission plans throughout the organization. Professional fees increased \$18.2 million during 2021 related to ongoing M&A integration products and third-party contractors assisting with software development and technology improvements. Advertising and marketing costs increased \$10.6 million in 2021 due to an increase in paid-search advertising and branded partnership campaigns at PitchBook, as well as the return to hybrid and in-person Morningstar conferences.

An increase of \$16.1 million in capitalized software development related to accelerated product development efforts for our key product areas also reduced operating expense during 2021.

We had 9,556 employees worldwide at the end of 2021, compared with 7,979 at the end of 2020, which reflects further investments across many areas including data collection and analysis, product and software development, and sales and service to support our growth objectives.

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 \$142.0 million, or 25.5%, in 2021. Higher compensation expense of \$124.0 million was the largest contributor to the increase, largely reflecting additional salary and bonus expense. Professional fees increased \$9.4 million during 2021 related to ongoing M&A integration projects and third-party contractors assisting with software development and technology improvements. Growth in mutual fund operating costs of \$4.6 million also contributed to the unfavorable variance in this category, mainly due to fees paid to sub-advisors and other costs related to the Morningstar Funds Trust. These increases were partially mitigated by higher capitalized software expense of \$16.1 million.

Continuous focus on the development of our major software platforms for our key product areas, in addition to bringing new products and capabilities to market, resulted in an increase in capitalized software development over the prior year period, which in turn reduced operating expense. In 2021, we capitalized \$79.0 million in costs associated with software development activities, mainly related to enhanced capabilities in our products, internal infrastructure, and software compared with \$62.9 million in 2020.

Sales and marketing

Sales and marketing expense increased \$68.4 million, or 33.1%, in 2021, reflecting a \$33.8 million increase in compensation expense. Sales commission expense was higher by \$20.6 million largely due to strong PitchBook sales performance and additional headcount under sales commission plans throughout the organization. Advertising and marketing costs increased \$10.6 million due to an increase in paid search advertising for PitchBook and Morningstar.com.

General and administrative

General and administrative expense increased \$46.4 million, or 17.1%, during 2021. Compensation expense increased \$19.6 million. Professional fees increased \$8.4 million related to ongoing M&A integration projects and third-party contractors assisting with software development and technology improvements.

Depreciation and amortization

Depreciation and amortization increased \$11.2 million, or 8.0%, in 2021 primarily due to depreciation expense.

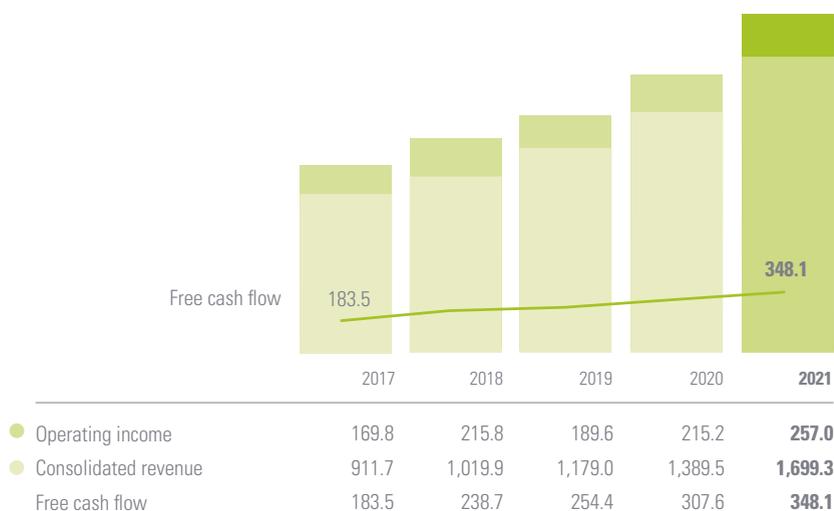
Depreciation expense increased \$6.9 million in 2021, driven mainly by depreciation expense related to capitalized software development incurred over the past several years.

Consolidated Operating Income and Operating Margin

(in millions)	2021	2020	Change
Operating income	\$ 257.0	\$ 215.2	19.4%
Operating margin	15.1%	15.5%	(0.4) pp

Consolidated operating income increased \$41.8 million in 2021, reflecting an increase in operating expense of \$268.0 million, which was more than offset by an increase in revenue of \$309.8 million. Operating margin was 15.1% in 2021, a decrease of 0.4 percentage points compared with 2020.

Key Metrics (\$mil)



In 2021, we reported adjusted operating income of \$363.4 million, which excludes intangible amortization expense and M&A-related expenses (including M&A-related earn-outs). Adjusted operating income is a non-GAAP financial measure; the table below shows a reconciliation to the most directly comparable GAAP financial measure.

(in millions)	2021	2020	Change
Operating income	\$ 257.0	\$ 215.2	19.4%
Add: intangible amortization expense	62.0	58.8	5.4%
Add: M&A-related expenses	17.4	14.9	16.8%
Add: M&A-related earn-outs	27.0	27.8	(2.9)%
Adjusted operating income	\$ 363.4	\$ 316.7	14.7%

In 2021, we reported an adjusted operating margin of 21.3%, which excludes intangible amortization expense and M&A-related expenses (including M&A-related earn-outs). Adjusted operating margin is a non-GAAP financial measure; the table below shows a reconciliation to the most directly comparable GAAP financial measure.

	2021	2020	Change
Operating margin	15.1%	15.5%	(0.4) pp
Add: intangible amortization expense	3.6%	4.2%	(0.6) pp
Add: M&A-related expenses	1.0%	1.1%	(0.1) pp
Add: M&A-related earn-outs	1.6%	2.0%	(0.4) pp
Adjusted operating margin	21.3%	22.8%	(1.5) pp

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

Non-Operating Income (Expense), Net

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

(in millions)	2021	2020
Interest income	\$ 1.7	\$ 1.6
Interest expense	(10.4)	(11.1)
Realized gains on sale of investments, reclassified from other comprehensive income	5.0	2.1
Realized gains on sale of equity method investments	0.9	30.0
Holding gain on previously held equity interest	—	50.9
Other expense, net	(3.7)	(5.7)
Non-operating income (expense), net	\$ (6.5)	\$ 67.8

Interest income reflects interest from our investment portfolio. Interest expense primarily relates to the outstanding principal balance under our Credit Agreement and the \$350.0 million aggregate principal amount of the 2.32% senior notes due October 26, 2030 (2030 Notes).

The gain on sale of equity method investments in 2020 relates to the sale of our equity ownership in two of our equity method investments during the fourth quarter of 2020.

The holding gain on our previously held equity interest relates to the purchase of the remaining interest in Sustainalytics in July 2020.

Other expense, net primarily includes foreign currency losses.

Equity in Net Income of Unconsolidated Entities

(in millions)	2021	2020
Equity in net income of unconsolidated entities	\$ 5.4	\$ 0.3

Equity in net income of unconsolidated entities primarily reflects income and losses from certain of our unconsolidated entities.

We describe our investments in unconsolidated entities in more detail in Note 9 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)	2021	2020
Income before income taxes and equity in net income (loss) of unconsolidated entities	\$ 250.5	\$ 283.0
Equity in net income (loss) of unconsolidated entities	5.4	0.3
Total	\$ 255.9	\$ 283.3
Income tax expense	\$ 62.6	\$ 59.7
Effective tax rate	24.5%	21.1%

Our effective tax rate in 2021 was 24.5%, an increase of 3.4 percentage points, compared with 21.1% in 2020. The increase was primarily attributable to minimum taxes and non-deductible expenses.

Liquidity and Capital Resources

As of December 31, 2021, we had cash, cash equivalents, and investments of \$546.1 million, up \$81.9 million from the end of 2020. The increase reflects higher cash provided by operating activities of \$449.9 million offset by \$101.8 million of capital expenditures, \$90.0 million of net repayments of long-term debt, dividends paid of \$54.2 million, \$34.4 million for the payment of acquisition-related earn-outs included in financing activities, \$29.8 million for purchases of equity method investments, and \$24.8 million for acquisitions, net of cash acquired in investing activities.

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



Cash provided by operating activities is our main source of cash. In 2021, cash provided by operating activities was \$449.9 million, reflecting \$386.3 million of net income, adjusted for non-cash items and \$63.6 million in positive changes from our net operating assets and liabilities. Cash provided by operating activities increased \$65.6 million, or 17.1%, in 2021, primarily due to higher cash earnings.

On July 2, 2019, we entered into a senior credit agreement (the Credit Agreement). The Credit Agreement provides the company with a five-year multi-currency credit facility with an initial borrowing capacity of up to \$750.0 million, including a \$300.0 million revolving credit facility and a term loan facility of \$450.0 million. We had an outstanding principal balance of \$11.0 million on the term facility and borrowing availability on the revolving credit facility of \$300.0 million as of December 31, 2021. See Note 3 of the Notes to our Consolidated Financial Statements for additional information on our Credit Agreement.

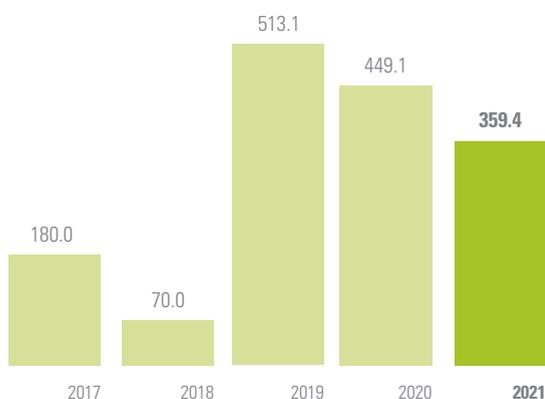
On June 30, 2020, we entered into a senior credit agreement that provides us with a \$50.0 million 364-day senior revolving credit facility. The 364-Day Revolving Credit Facility expired on June 29, 2021 and we chose not to renew the facility upon expiration.

On October 26, 2020, we completed the issuance and sale of the 2030 Notes, in a private placement exempt from the registration requirements of the Securities Act of 1933, as amended. Proceeds were primarily used to pay off a portion of the company's outstanding debt under its Credit Agreement. Interest on the 2030 Notes will be paid semi-annually on each October 30 and April 30

during the term of the 2030 Notes and at maturity, with the first interest payment date occurring on April 30, 2021. As of December 31, 2021, our total outstanding debt, net of issuance costs, under the 2030 Notes was \$348.4 million. See Note 3 of the Notes to our Consolidated Financial Statements for additional information on our 2030 Notes.

Each of the Credit Agreement and the 2030 Notes include customary representations, warranties, and covenants, including financial covenants, that require us to maintain specified ratios of consolidated earnings before interest, taxes, depreciation, and amortization (EBITDA) to consolidated interest charges and consolidated funded indebtedness to consolidated EBITDA, which are tested on a quarterly basis. We were in compliance with these financial covenants as of December 31, 2021.

Debt (\$mil)



We believe our available cash balances and investments, along with cash generated from operations and our Credit Agreement, will be sufficient to meet our operating and cash needs for at least the next 12 months. We are focused on maintaining a strong balance sheet and liquidity position. We hold our cash reserves in cash equivalents and investments and maintain a conservative investment policy. We invest most of our investment balance 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 57% of our cash, cash equivalents, and investments as of December 31, 2021 was held by our operations outside the U.S., down slightly from about 60% as of December 31, 2020. We generally consider our U.S. directly-owned foreign subsidiary earnings to be permanently reinvested.

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

In December 2020, the board of directors approved a new share repurchase program that authorizes the company to repurchase up to \$400.0 million in shares of the company's outstanding common stock, effective January 1, 2021. The authorization expires on December 31, 2023. As of December 31, 2021, we repurchased a total of 4,900 shares for \$1.3 million under this authorization.

In 2021, we also paid dividends of \$54.2 million. Subsequent dividends will be subject to board approval and we expect to make regular quarterly dividend payments of 36 cents per share in 2022.

We expect to continue making capital expenditures in 2022, primarily for computer hardware and software provided by third parties, internally developed software, and leasehold improvements for new and existing office locations. We continue to adopt more public cloud and software-as-a-service applications for new initiatives and are in the process of migrating relevant parts of our data centers to the public cloud over the next several years. During this migration, we expect to run certain applications and infrastructure in parallel. These actions will continue to have some transitional effects on our level of capital expenditures and operating expenses.

We also expect to use a portion of our cash and investments balances in the first quarter of 2022 to make annual bonus payments of approximately \$141.5 million related to the 2021 bonus program compared to \$85.9 million in 2020.

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. Also, the free cash flow definition we use may not be comparable to similarly titled measures used by other companies.

(in millions)	2021	2020	Change
Cash provided by operating activities	\$ 449.9	\$ 384.3	17.1%
Capital expenditures	(101.8)	(76.7)	32.7%
Free cash flow	\$ 348.1	\$ 307.6	13.2%

We generated free cash flow of \$348.1 million in 2021, an increase of \$40.5 million compared with 2020. The change reflects a \$65.6 million increase in cash provided by operating activities as well as a \$25.1 million increase in capital expenditures. Cash provided by operating activities increased primarily due to higher earnings and the timing of working capital. Capital expenditures increased due to higher capitalized software development. Excluding \$16.6 million of M&A-related earn-out payments, operating cash and free cash flow would have grown by 21.4% and 18.6%, respectively.

Acquisitions

We paid a total of \$774.5 million, less cash acquired, related to acquisitions over the past three years. We describe these acquisitions in Note 8 of the Notes to our Consolidated Financial Statements.

We paid a total of \$38.0 million related to additional investments in unconsolidated entities over the past three years. We describe these investments in Note 9 of the Notes to our Consolidated Financial Statements.

Divestitures

We had no divestitures in 2021, 2020, or 2019.

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 continually evaluate our estimates. 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

Most of our revenue comes from the sale of subscriptions 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. Our license-based revenue represents subscription services available to customers and not a license under the accounting guidance. 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 identifying the transaction price in a contract. For contracts that combine multiple products and services or other performance obligations, we make judgments regarding the value of each obligation in the arrangement based on selling prices of the items as if sold separately. We recognize revenue as we satisfy our performance obligations under the terms of the contracts with our customers. 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 collection of the consideration to which we are entitled 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 customer-by-customer basis.

Deferred revenue is the amount collected in advance for subscriptions, licenses, or services that has not yet been recognized as revenue. Deferred revenue totaled \$413.8 million at the end of 2021 (of which \$377.4 million was classified as a current liability with an additional \$36.4 million included in other long-term liabilities). We expect to recognize this deferred revenue in future periods as we fulfill our service obligations under our subscription and service agreements.

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 applicable agreements and the timing of fulfilling our service obligations. To the extent that there are material differences between our determination of deferred revenue and its expected realization and actual results, our financial condition or results of operations may be affected.

Acquisitions, Goodwill, and Other Intangible Assets

We generally acquire businesses which are accounted for as business combinations. 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.

To account for each business combination, we utilize the acquisition method of accounting which requires the following steps (1) identifying the acquirer, (2) determining the acquisition date, (3) recognizing and measuring identifiable assets acquired and liabilities assumed and (4) recognizing and measuring goodwill or a gain from a bargain purchase.

Regardless of whether an acquisition is considered to be a business combination or an asset acquisition, allocating the purchase price to the acquired assets and liabilities involves management judgment. 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 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 in certain acquisitions, noncompete agreements.
- ▷ Estimate the fair value of these intangible assets: We may 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 by applying the reproduction cost method or replacement cost method; the market approach, which values the asset through an analysis of sales and offerings of comparable assets which can be adjusted to reflect differences between the investment or asset being valued and the comparable investments or assets, such as historical financial condition and performance, expected economic benefits, time and terms of sale, utility, and physical characteristics, 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 utilizing inputs such as estimated future cash flows based on forecasted revenue growth rates and EBITDA margins, estimated attritions rate and weighted average cost of capital and discount rate assumptions.
- ▷ 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.

We recognize the fair value of any contingent payments at the date of acquisition as part of the consideration transferred to acquire a business. Contingent payments are recognized at fair value at the date of acquisition using a Monte Carlo simulation, which requires the use of management assumptions and inputs, such as projected financial information related to revenue growth and expected margin percentage, among other valuation related items. The liability associated with contingent consideration is remeasured to fair value at each reporting period subsequent to the date of acquisition considering factors that may impact the timing and amount of contingent payments until the term of the agreement has expired or the contingency is resolved. Any changes in the fair value measurement will be recorded in our Consolidated Statements of Income. In evaluating the characterization of contingent and deferred payments, we analyze relevant factors, including the nature of the payment, continuing employment requirements, incremental payments to employees of the acquired business, and timing and rationale underlying the transaction, to determine whether the payments should be accounted for as additional purchase consideration or post-combination related services.

We believe the accounting estimates related to purchase price allocations, subsequent goodwill impairment testing, and contingent payments 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. The significance of this policy varies from period to period depending upon the volume of applicable acquisition transactions occurring.

Recently Issued Accounting Pronouncements

Refer to Note 17 of the Notes to our Consolidated Financial Statements for recently adopted accounting pronouncements and recently issued accounting pronouncements not yet adopted as of December 31, 2021.

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, 2021, our cash, cash equivalents, and investments balance was \$546.1 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. Based on December 31, 2021 estimated LIBOR rates, we estimate a 100 basis-point change in the LIBOR rate would have a \$0.1 million impact on an annualized basis.

We are subject to risk from fluctuations in foreign currencies from our operations outside of the U.S. 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, 2021:

(in millions, except foreign currency rates)	Australian Dollar	British Pound	Canadian Dollar	Euro	Other Foreign Currencies
Foreign currency rate in U.S. dollars as of December 31, 2021	0.7263	1.3514	0.7876	1.1344	n/a
Foreign denominated percentage of revenue	3.3%	8.0%	6.6%	6.7%	5.7%
Foreign denominated percentage of operating income (loss)	2.7%	(3.1)%	4.6%	5.2%	(29.8)%
Estimated effect of a 10% adverse currency fluctuation on revenue	\$ (5.4)	\$ (13.3)	\$ (11.1)	\$ (10.9)	\$ (9.5)
Estimated effect of a 10% adverse currency fluctuation on operating income (loss)	\$ (0.7)	\$ 0.8	\$ (1.1)	\$ (1.3)	\$ 7.8

The table below shows our net investment exposure in foreign currencies as of December 31, 2021:

(in millions)	Australian Dollar	British Pound	Canadian Dollar	Euro	Other Foreign Currencies
Assets, net of unconsolidated entities	\$ 81.2	\$ 365.1	\$ 443.3	\$ 237.8	\$ 240.4
Less: liabilities	34.3	87.3	208.9	215.7	28.2
Net currency position	\$ 46.9	\$ 277.8	\$ 234.4	\$ 22.1	\$ 212.2
Estimated effect of a 10% adverse currency fluctuation on equity	\$ (4.7)	\$ (27.8)	\$ (23.4)	\$ (2.2)	\$ (21.2)

Item 8. Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Morningstar, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Morningstar, Inc. and subsidiaries (the Company) as of December 31, 2021 and December 31, 2020, 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, 2021, and the related notes and financial statement schedule II (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and December 31, 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 25, 2022 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Evaluation of sufficiency of audit evidence over revenue

As discussed in Notes 2 and 5 to the consolidated financial statements, the Company has recorded \$1,699.3 million in revenues, of which \$1,131.7 million was related to licensed-based products, \$264.9 million was related to asset-based products, and \$302.7 million was related to transaction-based products, for the year ended December 31, 2021. These disaggregated portions of revenue contain multiple product revenue streams. The Company's process to account for and recognize revenue differs between certain revenue streams.

We identified the evaluation of the sufficiency of audit evidence over revenue as a critical audit matter. Evaluating the sufficiency of audit evidence obtained required especially subjective auditor judgment due to the multiple product revenue streams and the use of multiple processes to account for and recognize revenue. This included determining the revenue streams where procedures were performed and the nature and extent of audit evidence obtained over each revenue stream.

The following are the primary procedures we performed to address this critical audit matter. We used auditor judgment to determine the nature and extent of procedures to be performed, including the determination of the revenue streams over which those procedures were performed. For product revenue streams where procedures were performed, we:

- ▷ evaluated the design and tested the operating effectiveness of certain internal controls over the Company's revenue recognition processes
- ▷ evaluated the Company's revenue recognition accounting policies
- ▷ selected revenue transactions and assessed recorded amounts by comparing them for consistency with underlying documentation, including the customer contract
- ▷ evaluated certain revenue transactions for consistency with the Company's accounting policies, as applicable, including timing of revenue recognition

In addition, we evaluated the sufficiency of audit evidence obtained by assessing the results of the procedures performed, including the appropriateness of the nature and extent of audit effort over revenue.

/s/ KPMG LLP

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

Chicago, Illinois
February 25, 2022

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors

Morningstar, Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited Morningstar, Inc. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, 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, 2021, and the related notes and financial statement schedule II (collectively, the consolidated financial statements), and our report dated February 25, 2022 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. 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 of internal control over financial reporting 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.

Definition and Limitations of Internal Control Over Financial Reporting

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.

/s/ KPMG LLP

Chicago, Illinois
February 25, 2022

Morningstar, Inc. and Subsidiaries Consolidated Statements of Income

Year ended December 31 (in millions except per share amounts)	2021	2020	2019
Revenue	\$ 1,699.3	\$ 1,389.5	\$ 1,179.0
Operating expense:			
Cost of revenue	698.4	556.4	483.1
Sales and marketing	274.8	206.4	177.9
General and administrative	318.4	272.0	210.7
Depreciation and amortization	150.7	139.5	117.7
Total operating expense	1,442.3	1,174.3	989.4
Operating income	257.0	215.2	189.6
Non-operating income (expense):			
Interest expense, net	(8.7)	(9.5)	(8.7)
Realized gains on sale of investments, reclassified from other comprehensive income	5.0	2.1	1.2
Realized gains on sale of equity method investments	0.9	30.0	19.5
Holding gain on previously held equity interest	—	50.9	—
Other expense, net	(3.7)	(5.7)	(3.1)
Non-operating income (expense), net	(6.5)	67.8	8.9
Income before income taxes and equity in net income (loss) of unconsolidated entities	250.5	283.0	198.5
Equity in net income (loss) of unconsolidated entities	5.4	0.3	(0.9)
Income tax expense	62.6	59.7	45.6
Consolidated net income	\$ 193.3	\$ 223.6	\$ 152.0
Net income per share:			
Basic	\$ 4.50	\$ 5.22	\$ 3.56
Diluted	\$ 4.45	\$ 5.18	\$ 3.52
Dividends per common share:			
Dividends declared per common share	\$ 1.31	\$ 1.22	\$ 1.14
Dividends paid per common share	\$ 1.26	\$ 1.20	\$ 1.12
Weighted average shares outstanding:			
Basic	43.0	42.9	42.7
Diluted	43.4	43.2	43.2

See notes to consolidated financial statements.

Morningstar, Inc. and Subsidiaries

Consolidated Statements of Comprehensive Income

Year ended December 31 (in millions)	2021	2020	2019
Consolidated net income	\$ 193.3	\$ 223.6	\$ 152.0
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment	(15.1)	37.3	11.5
Unrealized gains on securities:			
Unrealized holding gain on available for sale investments	5.7	2.9	3.8
Reclassification of gains included in net income	(3.9)	(1.6)	(0.9)
Other comprehensive income (loss), net	(13.3)	38.6	14.4
Comprehensive income	\$ 180.0	\$ 262.2	\$ 166.4

See notes to consolidated financial statements.

Morningstar, Inc. and Subsidiaries Consolidated Balance Sheets

As of December 31 (in millions except share amounts)

	2021	2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 483.8	\$ 422.5
Investments	62.3	41.7
Accounts receivable, less allowance for credit losses of \$4.5 million and \$4.2 million, respectively	268.9	205.1
Income tax receivable	8.9	2.2
Deferred commissions	31.2	21.1
Prepaid expenses	30.6	31.7
Other current assets	1.9	5.7
Total current assets	887.6	730.0
Goodwill	1,207.0	1,205.0
Intangible assets, net	328.2	380.1
Property, equipment, and capitalized software, net	171.8	155.1
Operating lease assets	149.2	147.7
Investments in unconsolidated entities	63.3	32.6
Deferred tax asset, net	12.8	12.6
Deferred commissions	31.1	18.5
Other assets	11.7	14.4
Total assets	\$ 2,862.7	\$ 2,696.0
Liabilities and equity		
Current liabilities:		
Deferred revenue	\$ 377.4	\$ 306.8
Accrued compensation	273.7	169.2
Accounts payable and accrued liabilities	76.5	64.5
Operating lease liabilities	36.4	39.9
Contingent consideration liability	17.3	35.0
Other current liabilities	2.2	11.1
Total current liabilities	783.5	626.5
Operating lease liabilities	135.7	137.7
Accrued compensation	16.3	35.1
Deferred tax liabilities, net	101.7	108.9
Long-term debt	359.4	449.1
Deferred revenue	36.4	33.5
Other long-term liabilities	13.8	33.8
Total liabilities	\$ 1,446.8	\$ 1,424.6
Equity:		
Morningstar, Inc. shareholders' equity:		
Common stock, no par value, 200,000,000 shares authorized, of which 43,136,273 and 42,898,158 shares were outstanding as of December 31, 2021 and December 31, 2020, respectively	\$ —	\$ —
Treasury stock at cost, 11,124,021 and 11,135,446 shares as of December 31, 2021 and December 31, 2020 respectively	(764.3)	(767.3)
Additional paid-in capital	689.0	671.3
Retained earnings	1,526.5	1,389.4
Accumulated other comprehensive loss:		
Currency translation adjustment	(40.8)	(25.7)
Unrealized gain on available-for-sale investments	5.5	3.7
Total accumulated other comprehensive loss	(35.3)	(22.0)
Total equity	1,415.9	1,271.4
Total liabilities and equity	\$ 2,862.7	\$ 2,696.0

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		Treasury Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	
	Shares Outstanding	Par Value					
Balance as of December 31, 2018	42,624,118	\$ —	\$ (726.8)	\$ 621.7	\$ 1,114.8	\$ (75.0)	\$ 934.7
Net income		—	—	—	152.0	—	152.0
Other comprehensive income (loss), net:							
Unrealized gain on available-for-sale investments, net of tax		—	—	—	—	3.8	3.8
Reclassification of adjustments for gains included in net income, net of tax		—	—	—	—	(0.9)	(0.9)
Foreign currency translation adjustment, net		—	—	—	—	11.5	11.5
Other comprehensive income (loss), net		—	—	—	—	14.4	14.4
Issuance of common stock related to stock-option exercises and vesting of restricted stock units, net of shares withheld for taxes on settlements of restricted stock units	266,176	—	2.7	(17.9)	—	—	(15.2)
Reclassification of awards previously liability-classified that were converted to equity		—	—	6.8	—	—	6.8
Stock-based compensation—restricted stock units		—	—	20.4	—	—	20.4
Stock-based compensation—performance share awards		—	—	20.6	—	—	20.6
Stock-based compensation—market stock units		—	—	3.4	—	—	3.4
Common shares repurchased	(41,935)	—	(4.6)	—	—	—	(4.6)
Dividends declared (\$1.14 per share)		—	—	—	(48.9)	—	(48.9)
Balance as of December 31, 2019	42,848,359	—	(728.7)	655.0	1,217.9	(60.6)	1,083.6
Net income		—	—	—	223.6	—	223.6
Other comprehensive income (loss), net:							
Unrealized gain on available-for-sale investments, net of tax		—	—	—	—	2.9	2.9
Reclassification of adjustments for gains included in net income, net of tax		—	—	—	—	(1.6)	(1.6)
Foreign currency translation adjustment, net		—	—	—	—	37.3	37.3
Other comprehensive income (loss), net		—	—	—	—	38.6	38.6

Morningstar, Inc. and Subsidiaries Consolidated Statements of Equity

(in millions, except share amounts)	Morningstar, Inc. Shareholders' Equity						
	Common Stock		Treasury Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Equity
	Shares Outstanding	Par Value					
Issuance of common stock related to stock-option exercises and vesting of restricted stock units, net of shares withheld for taxes on settlements of restricted stock units	364,724	—	3.3	(26.4)	—	—	(23.1)
Reclassification of awards previously liability-classified that were converted to equity	—	—	—	6.1	—	—	6.1
Stock-based compensation—restricted stock units	—	—	—	22.2	—	—	22.2
Stock-based compensation—performance share awards	—	—	—	10.2	—	—	10.2
Stock-based compensation—market stock units	—	—	—	4.2	—	—	4.2
Common shares repurchased	(314,925)	—	(41.9)	—	—	—	(41.9)
Dividends declared (\$1.22 per share)	—	—	—	—	(52.1)	—	(52.1)
Balance as of December 31, 2020	42,898,158	—	(767.3)	671.3	1,389.4	(22.0)	1,271.4
Net income	—	—	—	—	193.3	—	193.3
Other comprehensive income (loss), net:							
Unrealized gain on available-for-sale investments, net of tax	—	—	—	—	—	5.7	5.7
Reclassification of adjustments for gains included in net income, net of tax	—	—	—	—	—	(3.9)	(3.9)
Foreign currency translation adjustment, net	—	—	—	—	—	(15.1)	(15.1)
Other comprehensive income (loss), net	—	—	—	—	—	(13.3)	(13.3)
Issuance of common stock related to stock-option exercises and vesting of restricted stock units, net of shares withheld for taxes on settlements of restricted stock units	243,015	—	4.3	(33.0)	—	—	(28.7)
Reclassification of awards previously liability-classified that were converted to equity	—	—	—	8.8	—	—	8.8
Stock-based compensation—restricted stock units	—	—	—	25.8	—	—	25.8
Stock-based compensation—performance share awards	—	—	—	10.6	—	—	10.6
Stock-based compensation—market stock units	—	—	—	5.5	—	—	5.5
Common shares repurchased	(4,900)	—	(1.3)	—	—	—	(1.3)
Dividends declared (\$1.31 per share)	—	—	—	—	(56.2)	—	(56.2)
Balance as of December 31, 2021	43,136,273	\$ —	\$ (764.3)	\$ 689.0	\$ 1,526.5	\$ (35.3)	\$ 1,415.9

See notes to consolidated financial statements.

Morningstar, Inc. and Subsidiaries Consolidated Statements of Cash Flows

Year ended December 31 (in millions)	2021	2020	2019
Operating activities			
Consolidated net income	\$ 193.3	\$ 223.6	\$ 152.0
Adjustments to reconcile consolidated net income to net cash flows from operating activities:			
Depreciation and amortization	150.7	139.5	117.7
Deferred income taxes	(12.1)	(6.7)	(6.0)
Stock-based compensation expense	41.9	36.6	44.4
Provision for bad debt	1.9	2.8	2.3
Equity in net (income) loss of unconsolidated entities	(5.4)	(0.3)	0.9
Gain on sale of equity method investments	(0.9)	(30.0)	(19.5)
Holding gain on previously held equity interest	—	(50.9)	—
Acquisition earn-out accrual	17.8	27.8	—
Other, net	(0.9)	3.0	1.1
Changes in operating assets and liabilities			
Accounts receivable	(67.9)	(9.2)	11.3
Accounts payable and accrued liabilities	7.1	(9.5)	3.2
Accrued compensation and deferred commissions	58.0	18.2	17.1
Income taxes, current	(6.1)	8.0	(11.6)
Deferred revenue	78.2	29.5	28.1
Other assets and liabilities	(5.7)	1.9	(6.6)
Cash provided by operating activities	449.9	384.3	334.4
Investing activities			
Purchases of investment securities	(71.1)	(56.4)	(36.2)
Proceeds from maturities and sales of investment securities	58.8	46.9	35.8
Capital expenditures	(101.8)	(76.7)	(80.0)
Acquisitions, net of cash acquired	(24.8)	(67.8)	(681.9)
Proceeds from sale of equity method investments, net	1.1	35.2	17.6
Purchases of equity- and cost-method investments	(29.8)	(6.7)	(1.5)
Other, net	(0.1)	1.7	(0.1)
Cash used for investing activities	(167.7)	(123.8)	(746.3)
Financing activities			
Common shares repurchased	(1.3)	(41.9)	(4.9)
Dividends paid	(54.2)	(51.4)	(47.8)
Proceeds from revolving credit facility	10.0	60.0	610.0
Repayment of revolving credit facility	(10.0)	(130.0)	(160.0)
Proceeds from 2030 Notes	—	350.0	—
Repayment of term facility	(90.0)	(343.4)	(5.6)
Proceeds from stock-option exercises	0.2	1.9	0.2
Employee taxes withheld for restricted stock units	(29.0)	(25.1)	(15.2)
Payment of acquisition-related earn-outs	(34.4)	—	—
Other, net	(3.1)	(2.3)	(3.0)
Cash provided by (used for) financing activities	(211.8)	(182.2)	373.7
Effect of exchange rate changes on cash and cash equivalents	(9.1)	10.1	3.0
Net increase (decrease) in cash and cash equivalents	61.3	88.4	(35.2)
Cash and cash equivalents—beginning of period	422.5	334.1	369.3
Cash and cash equivalents—end of period	\$ 483.8	\$ 422.5	\$ 334.1
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	\$ 80.9	\$ 58.2	\$ 63.3
Cash paid for interest	\$ 10.4	\$ 11.1	\$ 11.0
Supplemental information of non-cash investing and financing activities:			
Unrealized gain (loss) on available-for-sale investments	\$ 2.1	\$ 1.8	\$ 3.9

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) provide independent investment research for investors around the world. We offer an extensive line of products and services for individual and institutional investors in public and private capital markets, financial advisors, asset managers, retirement plan providers and sponsors, and issuers of securities. We have operations in 29 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 intercompany accounts and transactions.

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 U.S. that are considered variable interest entities. For most of these variable interest entities, we do not have a variable interest. 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 U.S. (GAAP) 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.

Cash and Cash Equivalents. Cash and cash equivalents consist 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 debt securities in accordance with FASB ASC 320, *Investments—Debt Securities* (FASB ASC 320). We classify our debt securities 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 investments as trading securities. 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 values 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 marketable debt securities. 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 values in our Consolidated Balance Sheets.

We account for our investments in equity securities in accordance with FASB ASC 321, *Investments—Equity Securities* (FASB ASC 321). We measure equity investments at fair value with the related realized and unrealized gains and losses recognized in our Consolidated Statements of Income. For equity investments without a readily determinable fair value, we measure these at cost less impairment and adjusting for observable price changes in orderly transactions. We will apply this measurement method to the investment until or if it becomes eligible to be measured at fair value, which is reassessed at each reporting period. We account for non-marketable equity investments through which we exercise significant influence, but do not have control over the investee, under the equity method.

Fair Value Measurements. 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.

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 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.

We provide additional information about our cash equivalents and investments that are subject to FASB ASC 820 in Note 7.

Business Combinations. When we acquire a business, we account for the business combination in accordance with FASB ASC 805, *Business Combinations* (FASB ASC 805). We recognize and measure the fair value of the acquired business and allocate the purchase price to the identifiable tangible and intangible assets acquired and liabilities assumed based upon their estimated fair values at the date of acquisition. The difference between the purchase price and the estimated fair value of the net assets acquired or the excess of the aggregate estimated fair values of assets acquired and liabilities assumed is recorded as goodwill. In determining the estimated fair values of assets acquired and liabilities assumed in a business combination, we use various recognized valuation methods, including discounted cash flow, Monte Carlo simulations, and relief from royalty. For a business combination achieved in stages, we remeasure our previously held equity interest immediately before the acquisition to the acquisition date fair value and recognize any gain in our Consolidated Statements of Income.

We recognize the fair value of any contingent payments at the date of acquisition as part of the consideration transferred to acquire a business. The liability associated with contingent consideration is remeasured to fair value at each reporting period subsequent to the date of acquisition considering factors that may impact the timing and amount of contingent payments until the term of the

agreement has expired or the contingency is resolved. Any changes in the fair value measurement will be recorded in our Consolidated Statements of Income. In evaluating the characterization of contingent and deferred payments, we analyze relevant factors, including the nature of the payment, continuing employment requirements, incremental payments to employees of the acquired business, and timing and rationale underlying the transaction, to determine whether the payments should be accounted for as additional purchase consideration or post-combination related services.

We expense direct costs related to the business combination, such as 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 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* (FASB ASC 740). 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 and did not record any impairment losses in 2021, 2020, and 2019.

Intangible Assets. We amortize intangible assets using the straight-line method over their estimated useful lives, which range from one to twenty 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 2021, 2020, and 2019.

Property, Equipment, and Depreciation. We state property and equipment at historical cost, net of accumulated depreciation in accordance with FASB ASC 360-10, *Property, Plant, and Equipment*. We depreciate property and equipment using the straight-line method based on the useful life of the asset, which ranges from three to seven years. We amortize leasehold improvements over the lease term or their useful lives, whichever is shorter. Long-lived assets that are held and used are reviewed 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.

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 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 capitalized developed software for the past three years:

(in millions)	2021	2020	2019
Capitalized developed software depreciation expense	\$ 59.9	\$ 53.9	\$ 61.1

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

(in millions)	2021	2020	2019
Capitalized software development costs	\$ 74.0	\$ 60.3	\$ 64.8

Leases. We account for our right-of-use assets and operating lease liabilities in accordance with FASB ASC 842, *Leases* (FASB ASC 842). We determine if a contract is or contains a lease at the inception of the contract. For identified operating leases, we recognize a lease liability and right-of-use asset on the consolidated balance sheet. The right-of-use asset represents our right to use an underlying asset for the lease term, and the operating lease liability represents the company's obligation to make lease payments.

Our lease agreements consist primarily of real estate leases for office space and non-real estate leases for office equipment. In cases where an agreement contains both a lease and non-lease component, we do not allocate consideration to both components, but account for each as a single lease component by class of underlying asset. There are few instances of short-term agreements in our lease portfolio, which are typically arranged as needed and paid on a month-to-month basis. These leases are not recognized on the Consolidated Balance Sheet, but monthly lease expense is recognized on the Consolidated Statements of Income.

Right-of-use assets and operating lease liabilities are measured using the present value of future lease payments of the lease term at the commencement date. Right-of-use assets also include initial direct costs incurred by the company, net of pre-payments and lease incentives. In the absence of an explicit rate in the lease agreement, the discount rate used to calculate present value is equal to the company's incremental borrowing rate. Operating lease expense is recognized on a straight-line basis over the life of the lease and is included in general and administrative expenses on the Consolidated Statements of Income.

Revenue Recognition. We recognize revenue in accordance with ASC Topic 606, *Revenue from Contracts with Customers* (ASC Topic 606). The company retained similar recognition and measurement upon adoption of ASC Topic 606 as under accounting standards in effect in periods prior to the adoption.

Under ASC Topic 606, we recognize revenue by applying the following five-step model to each of our customer arrangements:

1. Identify the customer contract;
2. Identify the performance obligations in the contract;
3. Determine the transaction price;
4. Allocate the transaction price to the performance obligations; and
5. Recognize revenue when (or as) performance obligations are satisfied.

Revenues are recognized when (or as) performance obligations are satisfied by transferring a promised product or service to the customer. Products or services are transferred when (or as) the customer obtains control of the product or service. The transaction price for a customer arrangement is the amount we expect to be entitled to in exchange for transferring the promised product or service. The transaction price may include fixed amounts, variable amounts, or both. When the right to payment exceeds revenue recognized the result is an increase to deferred revenue. When a customer's license-based contract is signed, the customer's service

is activated immediately. License-based arrangements, our largest source of revenue from customers, generally is billed for the entire term, or billed annually (if the contract term is longer than one year). Customers are typically given payment terms of thirty to sixty days, although some customers pay immediately.

Revenue from contracts with customers is derived from license-based arrangements, asset-based arrangements, and transaction-based arrangements.

License-based revenue, which represents subscription services available to customers and not a license under the accounting guidance, is generated through subscription contracts with our customers of Morningstar Data, Morningstar Direct, Morningstar Advisor Workstation, Morningstar Enterprise Components, PitchBook Data, Sustainalytics, and other similar products. Our performance obligations under these contracts are typically satisfied over time, as the customer has access to the service during the term of the subscription license and the level of service is consistent during the contract period. Each individual day within the contract period is viewed to be a service and the entirety of the service subscription term is determined to be a series combined into a single performance obligation and recognized over-time and on a straight-line basis, typically over terms of 1 to 3 years.

Asset-based revenue is generated through contracts with our customers of Morningstar Investment Management, Workplace Solutions, and Morningstar Indexes. Our performance obligations under these contracts are a daily asset management performance obligation, which is determined to be a daily service and thus satisfied over time as the customer receives continuous access to a service for the contract term. We recognize revenue daily over the contract term based on the value of assets under management and a tiered fee agreed to with the customer. Asset-based arrangements typically have a term of 1 to 3 years. The fees from such arrangements represent variable consideration, and the customer does not make separate purchasing decisions that result in additional performance obligations. Significant changes in the underlying fund assets, or significant disruptions in the market, are evaluated to determine if revisions to estimates of earned asset-based fees for the current quarter are needed. An estimate of the average daily portfolio balance is a key input in determining revenue for a given period. Estimates are based on the most recently reported quarter, and, as a result, it is unlikely a significant reversal of revenue would occur.

Transaction-based revenue is generated through contracts with our customers for DBRS Morningstar products and services, Internet advertising on Morningstar.com, and Morningstar-sponsored conferences. Our performance obligations for DBRS Morningstar include the issuance of the rating and may include surveillance services for a period of time as agreed with the customer. We allocate the transaction price to the deliverables based on their relative selling price, which is generally determined by the price we charge when the same deliverable is sold separately. Our performance obligation for the issuance of the rating is satisfied when the rating is issued, which is when we recognize the related revenue. Our performance obligations for surveillance services are satisfied over time, as the customer has access to the service during the surveillance period and the level of service is consistent during the contract period. Therefore, we recognize revenue for this performance obligation on a straight-line basis. Our performance obligations for Internet advertising and Morningstar-sponsored conferences are satisfied as the service is delivered; therefore, we recognize revenue when the performance obligation is satisfied (as the customer's advertisements are displayed and at the completion of the Morningstar-sponsored conference).

Our contracts with customers may include multiple performance obligations. For most of these arrangements, we generally allocate revenue to each performance obligation based on its estimated standalone selling price. We generally determine standalone selling prices based on prices charged to customers when the same performance obligation is sold separately.

Our contracts with customers may include third-party involvement in providing goods or services to the customer. The inclusion of third-party content does not result in separate performance obligations because it is not delivered separately from the other service offerings. In these arrangements, the customer has contracted to receive a single, integrated and bundled solution with third-party and Morningstar content delivered via Morningstar's subscription services. Revenue and related costs of revenue from third-party content is presented on a gross basis within the consolidated financial statements.

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.

Sales Commissions. We capitalize sales commissions, which are considered directly attributable to obtaining a customer contract under ASC Topic 606 and ASC 340-40, *Other Assets and Deferred Costs—Contracts with Customers*. Such costs are capitalized by developing estimates using a portfolio approach that aggregates these costs by legal entity within their geographical regions. Capitalized sales commissions are amortized using the straight-line method over a period that is consistent with the transfer of the products or services to the customer to which the sales commission relates. The period of transfer for each portfolio is the shorter of the weighted-average customer life, or the economic life of the underlying technology that delivers the products or services. As of December 31, 2021, the period of transfer was determined to be approximately two to three years. Discretionary amounts which are added to sales commission payments are expensed as incurred, as they are not considered to be directly attributable to obtaining a customer contract.

Stock-Based Compensation Expense. We account for our stock-based compensation expense in accordance with FASB ASC 718, *Compensation—Stock Compensation* (FASB ASC 718). Our stock-based compensation expense reflects grants of restricted stock units, performance share awards, market stock units, and stock options. We measure the fair value of our restricted stock units, restricted stock, and performance share awards on the grant date based on the closing market price of Morningstar's common stock on the day prior to the grant. For market stock units, we estimate the fair value of the awards using a Monte Carlo valuation model. For stock options, we estimate the fair value of our stock options on the date of grant using the 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.

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, which 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

Debt

The following table summarizes our total debt and long-term debt as of December 31, 2021 and 2020.

(in millions)	As of December 31, 2021	As of December 31, 2020
Term Facility, net of unamortized debt issuance costs of \$0.0 million and \$0.1 million, respectively	\$ 11.0	\$ 100.8
2.32% Senior Notes due October 26, 2030, net of unamortized debt issuance costs of \$1.6 million and \$1.7 million, respectively	348.4	348.3
Long-term debt	\$ 359.4	\$ 449.1

Credit Agreement

On July 2, 2019, the company entered into a senior credit agreement (the Credit Agreement). The Credit Agreement provides the company with a five-year multi-currency credit facility with an initial borrowing capacity of up to \$750.0 million, including a \$300.0 million revolving credit facility (the Revolving Credit Facility) and a term loan facility of \$450.0 million (the Term Facility). The Credit Agreement also provides for the issuance of up to \$50.0 million of letters of credit and a \$100.0 million sub-limit for a swingline facility under the Revolving Credit Facility. The Credit Agreement will expire on July 2, 2024. As of December 31, 2021, our total outstanding debt under the Credit Agreement was \$11.0 million with borrowing availability of \$300.0 million under the Revolving Credit Facility.

The interest rate applicable to any loan under the Credit Agreement is, at our option, either: (i) the applicable LIBOR plus an applicable margin for such loans, which ranges between 1.00% and 1.50%, based on our consolidated leverage ratio or (ii) the lender's base rate plus the applicable margin for such loans, which ranges between 0.00% and 0.50%, based on our consolidated leverage ratio.

The proceeds of the Term Facility and initial borrowings under the Revolving Credit Facility were used to finance the acquisition of DBRS. The proceeds of future borrowings under the Revolving Credit Facility may be used for working capital, capital expenditures or any other lawful corporate purpose.

364-Day Revolving Credit Facility

On June 30, 2020, we entered into a 364-day revolving credit facility (364-Day Revolving Credit Facility) providing for borrowings in an aggregate principal amount of up to \$50.0 million. The 364-Day Revolving Credit Facility expired on June 29, 2021 and we chose not to renew the facility upon expiration.

Private Placement Debt Offering

On October 26, 2020, we completed the issuance and sale of \$350.0 million aggregate principal amount of 2.32% senior notes due October 26, 2030 (the 2030 Notes), in a private placement exempt from the registration requirements of the Securities Act of 1933, as amended. Proceeds were primarily used to pay off a portion of the company's outstanding debt under the Credit Agreement. Interest on the 2030 Notes will be paid semi-annually on each October 30 and April 30 during the term of the 2030 Notes and at maturity, with the first interest payment date occurring on April 30, 2021. As of December 31, 2021, our total outstanding debt, net of issuance costs, under the 2030 Notes was \$348.4 million.

Compliance with Covenants

Each of the Credit Agreement and the 2030 Notes include customary representations, warranties, and covenants, including financial covenants, that require us to maintain specified ratios of consolidated earnings before interest, taxes, depreciation, and amortization (EBITDA) to consolidated interest charges and consolidated funded indebtedness to consolidated EBITDA, which are tested on a quarterly basis. We were in compliance with these financial covenants as of December 31, 2021.

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 net income per share:

(in millions, except per share amounts)	2021	2020	2019
Basic net income per share:			
Consolidated net income	\$ 193.3	\$ 223.6	\$ 152.0
Weighted average common shares outstanding	43.0	42.9	42.7
Basic net income per share	\$ 4.50	\$ 5.22	\$ 3.56
Diluted net income per share:			
Consolidated net income	\$ 193.3	\$ 223.6	\$ 152.0
Weighted average common shares outstanding	43.0	42.9	42.7
Net effect of dilutive stock options and restricted stock units	0.4	0.3	0.5
Weighted average common shares outstanding for computing diluted income per share	43.4	43.2	43.2
Diluted net income per share	\$ 4.45	\$ 5.18	\$ 3.52

During the periods presented, the number of anti-dilutive restricted stock units, performance share awards, or market stock units excluded from our calculation of diluted earnings per share was immaterial.

5. Revenue

Disaggregation of Revenue

The following table presents our revenue disaggregated by revenue type. Sales and usage-based taxes are excluded from revenue.

(in millions)	Year ended December 31		
	2021	2020	2019
License-based	\$ 1,131.7	\$ 934.9	\$ 812.7
Asset-based	264.9	223.8	211.6
Transaction-based	302.7	230.8	154.7
Consolidated revenue	\$ 1,699.3	\$ 1,389.5	\$ 1,179.0

License-based performance obligations are generally satisfied over time as the customer has access to the product or service during the term of the subscription license and the level of service is consistent during the contract period. License-based agreements typically have a term of 1 to 3 years and are accounted for as subscription services available to customers and not as a license under the accounting guidance. License-based revenue is generated from the sale of PitchBook, Morningstar Data, Morningstar Direct, Morningstar Advisor Workstation, Sustainalytics, and other similar products.

Asset-based performance obligations are satisfied over time as the customer receives continuous access to a service for the term of the agreement. Asset-based arrangements typically have a term of 1 to 3 years. Asset-based fees represent variable consideration, and the customer does not make separate purchasing decisions that result in additional performance obligations. The timing of client asset reporting and the structure of certain contracts can result in a one-quarter lag between market movements and the impact on earned revenue. Significant changes in the underlying fund assets and significant disruptions in the market are evaluated to determine whether estimates of earned asset-based fees need to be revised for the current quarter. An estimate of variable consideration is included in the initial transaction price only to the extent it is probable that a significant reversal in the amount of the revenue recognized will not occur. Estimates of asset-based fees are based on the most recently completed quarter and, as a result, it is unlikely a significant reversal of revenue would occur. Asset-based revenue is generated by Investment Management, Workplace Solutions, and Morningstar Indexes.

Transaction-based performance obligations are satisfied when the product or service is completed or delivered. Transaction-based revenue is generated by DBRS Morningstar, Internet advertising, and Morningstar-sponsored conferences. DBRS Morningstar revenue includes revenue from surveillance services, which is recognized over time, as the customer has access to the service during the surveillance period.

Contract liabilities

Our contract liabilities represent deferred revenue. We record contract liabilities when cash payments are received or due in advance of our performance, including amounts which may be refundable. The contract liabilities balance as of December 31, 2021 had a net increase of \$73.5 million, primarily driven by cash payments received or payable in advance of satisfying our performance obligations. We recognized \$296.2 million of revenue in 2021 that was included in the contract liabilities balance as of December 31, 2020.

We expect to recognize revenue related to our contract liabilities for 2022 and subsequent years as follows:

(in millions)	As of December 31, 2021
2022	\$ 679.5
2023	160.4
2024	49.3
2025	17.5
2026	9.9
Thereafter	30.1
Total	\$ 946.7

The aggregate amount of revenue we expect to recognize for 2022 and subsequent years is higher than our contract liability balance of \$413.8 million as of December 31, 2021. The difference represents the value of future obligations for signed contracts where we have not yet begun to satisfy the performance obligations or have partially satisfied the performance obligations.

The table above does not include variable consideration for unsatisfied performance obligations related to certain of our license-based, asset-based, and transaction-based contracts as of December 31, 2021. We are applying the optional exemption available under ASC Topic 606, as the variable consideration relates to these unsatisfied performance obligations being fulfilled as a series. The performance obligations related to these contracts are expected to be satisfied over the next 1 to 3 years as services are provided to the client. For license-based contracts, the consideration received for services performed is based on the number of future users, which is not known until the services are performed. The variable consideration for this revenue can be affected by the number of user licenses, which cannot be reasonably estimated. For asset-based contracts, the consideration received for services performed is based on future asset values, which are not known until the services are performed. The variable consideration for this revenue can be affected by changes in the underlying value of fund assets due to client redemptions, additional investments, or movements in the market. For transaction-based contracts for Internet advertising, the consideration received for services performed is based on the number of impressions, which is not known until the impressions are created. The variable consideration for this revenue can be affected by the timing and quantity of impressions in any given period and cannot be reasonably estimated.

As of December 31, 2021, the table above also does not include revenue for unsatisfied performance obligations related to certain of our license-based and transaction-based contracts with durations of one year or less since we are applying the optional exemption under ASC Topic 606. For certain license-based contracts, the remaining performance obligation is expected to be less than one year based on the corresponding subscription terms or the existence of cancellation terms that may be exercised causing the contract term to be less than one year from December 31, 2021. For transaction-based contracts, such as new credit rating issuances and Morningstar-sponsored conferences, the related performance obligations are expected to be satisfied within the next 12 months.

Contract Assets

Our contract assets represent accounts receivable, less allowance for credit losses, and deferred commissions.

The following table summarizes our contract assets balance:

(in millions)	As of December 31	
	2021	2020
Accounts receivable, less allowance for credit losses	\$ 268.9	\$ 205.1
Deferred commissions	62.3	39.6
Total contract assets	\$ 331.2	\$ 244.7

6. 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, long-lived assets, which includes property, equipment, and capitalized software, net, and operating lease assets, by geographical area:

Revenue by geographical area

(in millions)	Year ended December 31		
	2021	2020	2019
United States	\$ 1,184.3	\$ 970.8	\$ 866.4
Asia	41.1	33.6	27.9
Australia	56.9	45.6	39.5
Canada	112.9	101.5	56.9
Continental Europe	159.1	113.8	88.0
United Kingdom	135.7	117.5	93.9
Other	9.3	6.7	6.4
Total International	515.0	418.7	312.6
Consolidated revenue	\$ 1,699.3	\$ 1,389.5	\$ 1,179.0

Property, equipment, and capitalized software, net by geographical area

(in millions)	As of December 31	
	2021	2020
United States	\$ 139.3	\$ 127.0
Asia	8.8	7.5
Australia	3.1	3.7
Canada	3.8	2.9
Continental Europe	10.1	6.2
United Kingdom	6.4	7.3
Other	0.3	0.5
Total International	32.5	28.1
Consolidated property, equipment, and capitalized software, net	\$ 171.8	\$ 155.1

Operating lease assets by geographical area

(in millions)	As of December 31	
	2021	2020
United States	\$ 82.7	\$ 89.2
Asia	24.1	12.6
Australia	4.6	5.2
Canada	7.1	7.4
Continental Europe	15.8	17.0
United Kingdom	14.4	15.6
Other	0.5	0.7
Total International	66.5	58.5
Consolidated operating lease assets	\$ 149.2	\$ 147.7

The long-lived assets by geographical area table does not include deferred commissions, non-current as the balance is not material.

7. Investments and Fair Value Measurements

We classify our investments into two categories: equity investments and debt securities. We further classify our debt securities into available-for-sale, held-to-maturity, and trading securities. 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. Except for the convertible note described below, all investments in our investment portfolio have valuations based on quoted prices in active markets for identical assets or liabilities that we have the ability to access, and, therefore, are classified as Level 1 within the fair value hierarchy. We classify our investment portfolio as shown below:

(in millions)	As of December 31	
	2021	2020
Equity investments	\$ 46.8	\$ 39.6
Available-for-sale	12.3	0.9
Held-to-maturity	3.2	1.2
Trading securities	—	—
Total	\$ 62.3	\$ 41.7

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

(in millions)	As of December 31, 2021				As of December 31, 2020			
	Cost	Unrealized Gain	Unrealized Loss	Fair Value	Cost	Unrealized Gain	Unrealized Loss	Fair Value
Equity investments:								
Marketable equity investments, exchange traded funds, and mutual funds	\$ 39.6	\$ 8.2	\$ (1.0)	\$ 46.8	\$ 34.6	\$ 5.0	\$ —	\$ 39.6
Available-for-sale:								
Marketable debt securities	5.5	—	—	5.5	0.9	—	—	0.9
Convertible note	5.0	1.8	—	6.8	—	—	—	—
Held-to-maturity:								
Certificates of deposit	3.2	—	—	3.2	1.2	—	—	1.2
Total	\$ 53.3	\$ 10.0	\$ (1.0)	\$ 62.3	\$ 36.7	\$ 5.0	\$ —	\$ 41.7

As of December 31, 2021 and 2020, debt securities 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 held-to-maturity based on their contractual maturities as of December 31, 2021 and 2020.

(in millions)	As of December 31, 2021		As of December 31, 2020	
	Cost	Fair Value	Cost	Fair Value
Held-to-maturity:				
Due in one year or less	\$ 3.2	\$ 3.2	\$ 1.2	\$ 1.2
Due in one to three years	—	—	—	—
Total	\$ 3.2	\$ 3.2	\$ 1.2	\$ 1.2

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

(in millions)	2021	2020	2019
Realized gains	\$ 5.0	\$ 2.1	\$ 1.2
Realized losses	—	—	—
Realized gains, net	\$ 5.0	\$ 2.1	\$ 1.2

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

The following table shows the net unrealized (losses) gains on the convertible note and trading securities as recorded in our Consolidated Statements of Income:

(in millions)	2021	2020	2019
Unrealized (losses) gains, net	\$ 1.8	\$ (0.4)	\$ 0.6

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

(in millions)	Fair Value as of December 31, 2021	Level Within the Fair Value Hierarchy as of December 31, 2021		
		Level 1	Level 2	Level 3
Financial assets:				
Marketable equity investments, exchange-traded funds, and mutual funds	\$ 46.8	\$ 46.8	\$ —	\$ —
Marketable debt securities	5.5	5.5	—	—
Convertible note	6.8	—	—	6.8
Cash equivalents	0.6	0.6	—	—
Financial liabilities:				
Contingent consideration	17.3	—	—	17.3
Total	\$ 77.0	\$ 52.9	\$ —	\$ 24.1

(in millions)	Fair Value as of December 31, 2020	Level Within the Fair Value Hierarchy as of December 31, 2020		
		Level 1	Level 2	Level 3
Financial assets:				
Marketable equity investments, exchange-traded funds, and mutual funds	\$ 39.6	\$ 39.6	\$ —	\$ —
Marketable debt securities	0.9	0.9	—	—
Cash equivalents	0.8	0.8	—	—
Financial liabilities:				
Contingent consideration	53.7	—	—	53.7
Total	\$ 95.0	\$ 41.3	\$ —	\$ 53.7

We measure the fair value of money market funds, mutual funds, marketable equity securities, marketable debt 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 as of December 31, 2021 and 2020.

As of December 31, 2021, financial assets and liabilities that are classified as Level 3 within the fair value hierarchy include a contingent consideration liability of \$17.3 million and a convertible note recorded as an available-for-sale investment of \$6.8 million.

As of December 31, 2021, the contingent consideration liability reflects potential future payments that are contingent upon the achievement of certain revenue metrics related to our acquisition of Sustainalytics that will be paid on June 30, 2022. This additional purchase consideration, for which the amount is contingent, was recognized at fair value at the date of acquisition using a Monte Carlo simulation, which requires the use of management assumptions and inputs, such as projected financial information related to revenue growth and expected margin percentage, among other valuation related items, and is remeasured each reporting period until the contingency is resolved with any changes in fair value recorded in current period earnings. At December 31, 2021, the fair value of the contingent consideration liability was impacted by foreign currency translations and not by adjustments to key assumptions used in our fair value estimates compared to the assumptions used in the acquisition date fair value estimates. In the second quarter of 2021, we made the second cash payment of \$47.5 million related to our acquisition of Sustainalytics, which resulted in a decrease of \$34.4 million to the contingent consideration liability balance. The payment was based on the achievement of certain revenue metrics for the year ended December 31, 2020.

The convertible note purchased in the second quarter of 2021 will be remeasured at fair value each reporting period until it is converted, with any gains or losses recorded in our Consolidated Statements of Income.

8. Acquisitions, Goodwill, and Other Intangible Assets

2021 Acquisitions

Planned Acquisition of Wealth Management Platform Provider Praemium's U.K. and International Business

On December 21, 2021, we announced we reached an agreement to acquire 100% of Praemium Limited's operations in the United Kingdom, Jersey, Hong Kong, and Dubai (Praemium). Across its U.K. and international business, Praemium offers proprietary SaaS-based technology and services that allow fee-based advisers to outsource key elements of the advice workflow. The end-to-end solution from Praemium will add to the company's existing data, fund profiles, portfolio analytics, and investment management capabilities available to advisers.

The transaction consideration includes a cash payment at closing of approximately £35 million, subject to completion adjustments. The closing of the transaction remains subject to regulatory approval from the Financial Conduct Authority in the United Kingdom and the Jersey Financial Services Commission in Jersey, and other customary conditions. We expect the transaction to be completed during the second or third quarter of 2022.

Moorgate Benchmarks

On September 3, 2021, we acquired Moorgate Benchmarks (Moorgate), a privately held European-based global provider of index design, calculation, and administration. We began consolidating the financial results of Moorgate in our consolidated financial statements on September 3, 2021.

The transaction has been accounted for as a business combination 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. We finalized the purchase price allocation related to our acquisition of Moorgate during the fourth quarter of 2021 and did not record any significant adjustments compared to the preliminary estimates at the date of acquisition.

The allocation of the estimated fair values of the assets acquired and liabilities assumed includes \$14.9 million of goodwill and \$13.4 million of acquired intangible assets, as follows:

	(in millions)	Weighted average useful life (years)
Technology-based assets	\$ 12.1	7
Customer-related assets	1.3	5
Total intangible assets	\$ 13.4	

We recognized a net deferred tax liability of \$3.2 million primarily because the amortization expense related to certain intangible assets is not deductible for income tax purposes.

2020 Acquisitions

Hueler Analytics

On January 31, 2020, we acquired Hueler Analytics' Stable Value Fund Comparative Universe Data and Stable Value Index (Hueler Analytics). We began consolidating the financial results of Hueler Analytics in our consolidated financial statements on January 31, 2020.

Plan Plus Global

On April 3, 2020, we acquired PlanPlus Global, a financial-planning, risk-profiling, and portfolio tracking software firm. The acquisition expands our financial-planning capabilities for advisors. We began consolidating the financial results of PlanPlus Global in our consolidated financial statements on April 3, 2020.

Increased Ownership Interest in Sustainalytics Holding B.V. (Sustainalytics)

On July 2, 2020, we completed the acquisition of the remaining 60% interest in Sustainalytics, a globally recognized leader in environmental, social, and governance (ESG) ratings and research, for an initial cash payment of \$61.2 million. The acquisition was accounted for as a business combination with July 2, 2020 as the date of acquisition, and the company was determined to be the acquirer. Accordingly, we began consolidating the financial results of Sustainalytics in our consolidated financial statements on July 2, 2020. We previously held an approximately 40% ownership interest in Sustainalytics, which had an estimated fair value of \$75.4 million at the date of the acquisition and a book value of \$24.5 million immediately prior to the acquisition and resulted in a holding gain of \$50.9 million.

The transaction was accounted for as a business combination 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.

We finalized the purchase price allocation related to our acquisition of Sustainalytics during 2021 and did not record any significant adjustments compared to the preliminary estimates at the date of acquisition. Subsequent measurement changes for certain contingent liabilities were recognized in the company's earnings.

Consideration related to the acquisition consisted of an initial cash payment of \$61.2 million and contingent payments with an acquisition date fair value of \$75.2 million, a portion of which is treated as additional purchase consideration and the remainder, which is sometimes referred to as an earn-out, is accounted for and described as compensation expense for purpose of the following discussion and disclosure. The acquisition date fair values of the additional purchase consideration and compensation were \$47.4 million and \$27.8 million, respectively. The contingent payments are due on June 30, 2021 and 2022, and each payment is determined based on a multiple of Sustainalytics' revenues for the years ended December 31, 2020 and 2021, respectively, which are also the measurement periods for determining the final payments. In the second quarter of 2021, we made the second cash payment of \$47.5 million, which resulted in a decrease of \$34.4 million to the contingent consideration liability balance. The payment was based on the achievement of certain revenue metrics for the year ended December 31, 2020.

We used a Monte Carlo simulation to arrive at the estimated fair values of the contingent payments at the acquisition date. At subsequent balance sheet dates, the additional purchase consideration, including contingent payments, will continue to be measured at fair value and is classified as "Contingent consideration liability" on our Consolidated Balance Sheet as of December 31, 2021 and as "Contingent consideration liability" and "Other long-term liabilities" on our Consolidated Balance Sheet as of December 31, 2020. The compensation component is measured based on probability weighted future benefits expected to be paid, and is reflected in "Current liabilities—Accrued compensation" on our Consolidated Balance Sheet as of December 31, 2021 and in "Current liabilities—Accrued compensation" and "Accrued Compensation" on our Consolidated Balance Sheet as of December 31, 2020. At December 31, 2021 and 2020, the fair value of the contingent consideration liability was impacted by foreign currency translations and not by adjustments to key assumptions used in our fair value estimates compared to the assumptions used in the acquisition date fair value estimates. As of December 31, 2021, the compensation component of the final payment was determined using final recorded revenue consistent with the measurement period which ended at December 31, 2021.

The book value of our 40% ownership interest immediately prior to the acquisition date was \$24.5 million, and we recorded a \$50.9 million non-cash holding gain for the difference between the fair value and the book value of our previously held equity interest. The acquisition of the additional 60% interest was considered an acquisition achieved in stages and resulted in the remeasurement of the previously held equity interest to fair value. The company determined the fair value of the previously held equity interest using a discounted cash flow analysis (an income approach) based on projected cash flows for Sustainalytics combined with other valuation approaches and considerations to estimate total purchase consideration, which was divided by fully diluted outstanding shares to determine the fair value per share. The fair value per share was then applied to the shares of Sustainalytics held by the company to derive the acquisition date fair value of the previously held equity interest. The gain is classified as "Holding gain on previously held equity interest" in our Consolidated Statement of Income for the year ended December 31, 2020.

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

	(in millions)
Fair value of consideration transferred	\$ 108.6
Fair value of the previously held equity interest	75.4
Cash and cash equivalents	\$ 9.8
Accounts receivable	6.2
Intangible assets, net	79.5
Operating lease assets	5.2
Other current and non-current assets	7.4
Deferred revenue	(21.2)
Operating lease liability	(5.2)
Deferred tax liability, net	(16.9)
Other current and non-current liabilities	(15.5)
Total fair value of net assets acquired	\$ 49.3
Goodwill	\$ 134.7

At July 2, 2020, accounts receivable acquired were recorded at gross contractual amounts receivable, which approximates fair value. At December 31, 2020, substantially all amounts were collected.

The allocation of the estimated fair values of the assets acquired and liabilities assumed includes \$79.5 million of acquired intangible assets, as follows:

	(in millions)	Weighted Average Useful Life (years)
Customer-related assets	\$ 22.9	20
Technology-based assets	46.7	10
Intellectual property	9.9	10
Total intangible assets	\$ 79.5	

Goodwill of \$134.7 million represents the excess over the fair value of the net tangible and intangible assets acquired. Goodwill is not deductible for income tax purposes.

We recognized a net deferred tax liability of \$16.9 million primarily because the amortization expense related to certain intangible assets is not deductible for income tax purposes.

2019 Acquisitions

AdviserLogic

On December 1, 2019, we acquired AdviserLogic, a cloud-based financial planning software platform for financial advisors in Australia. We began consolidating the financial results of AdviserLogic in our Consolidated Financial Statements on December 1, 2019.

DBRS

On July 2, 2019, we acquired 100% of the voting equity interests of DBRS for total cash consideration of \$682.1 million. DBRS delivers comprehensive credit rating services and ongoing surveillance to customers in various market sectors across Canada, the

U.S., and Europe. The combination of DBRS with Morningstar Credit Ratings' business (collectively, DBRS Morningstar) expands global asset class coverage and provides investors with fixed-income analysis and research through the combined platform.

We began consolidating the financial results of this acquisition in our Consolidated Financial Statements on July 2, 2019. DBRS Morningstar contributed \$127.6 million of revenue and \$123.5 million of operating expense during the year ended December 31, 2019. We incurred transaction-related costs of \$6.5 million during the year ended December 31, 2019.

We accounted for this transaction using the acquisition method of accounting and Morningstar was the accounting acquirer.

We finalized the purchase price allocation related to our acquisition of DBRS during 2020 and did not record any significant adjustments compared with our preliminary estimates at the date of acquisition.

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 consideration transferred	\$ 682.1
Cash and cash equivalents	\$ 8.5
Accounts receivable	28.8
Property, equipment, and capitalized software, net	12.8
Intangible assets, net	284.1
Goodwill	473.3
Operating lease assets	33.3
Other current and non-current assets	5.7
Deferred revenue	(43.2)
Deferred tax liability, net	(66.6)
Operating lease liabilities	(35.0)
Other current and non-current liabilities	(19.6)
Total fair value of DBRS	\$ 682.1

Accounts receivable acquired were recorded at gross contractual amounts receivable, which approximates fair value.

The allocation of the estimated fair values of the assets acquired and liabilities assumed includes \$284.1 million of acquired intangible assets, as follows:

	(in millions)	Weighted Average Useful Life (years)
Customer-related assets	\$ 219.1	10
Technology-based assets	29.4	5
Intellectual property (trademarks and trade names)	35.6	7
Total intangible assets	\$ 284.1	

We recognized a net deferred tax liability of \$66.6 million mainly because the amortization expense related to certain intangible assets is not deductible for income tax purposes.

Goodwill of \$473.3 million represents the excess over the fair value of the net tangible and intangible assets acquired. Goodwill is not deductible for income tax purposes.

The following unaudited pro forma information presents a summary of our Consolidated Statements of Income for the year ended December 31, 2019 and 2018, as if we had completed the acquisition as of January 1, 2018.

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 or expected synergies of DBRS Morningstar 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, depreciation expense due to changes in estimated remaining useful lives of long-lived assets, reduction in revenue as a result of the fair value adjustments to deferred revenue, and interest expense incurred on the long-term debt.

Unaudited Pro Forma Financial Information (in millions)	2019	2018
Revenue	\$ 1,259.2	\$ 1,184.5
Operating income	190.3	223.6
Net income	148.2	179.7
Basic net income per share	\$ 3.47	\$ 4.22
Diluted net income per share	\$ 3.43	\$ 4.18

Other acquisition activity during 2019 was not material.

Goodwill

The following table shows the changes in our goodwill balances from January 1, 2020 to December 31, 2021:

	(in millions)
Balance as of January 1, 2020	\$ 1,039.1
Acquisition of Sustainalytics	134.7
Other, primarily foreign currency translation	31.2
Balance as of December 31, 2020	\$ 1,205.0
Acquisition of Moorgate	14.9
Other, primarily foreign currency translation	(12.9)
Balance as of December 31, 2021	\$ 1,207.0

We did not record any impairment losses in 2021, 2020, or 2019 as the estimated fair value of our reporting unit exceeded its carrying value and we did not note any indicators of impairment. We perform our annual impairment testing during the fourth quarter of each year.

Intangible Assets

The following table summarizes our intangible assets:

(in millions)	As of December 31, 2021				As of December 31, 2020			
	Gross	Accumulated Amortization	Net	Weighted Average Useful Life (years)	Gross	Accumulated Amortization	Net	Weighted Average Useful Life (years)
Customer-related assets	\$ 413.7	\$ (192.8)	\$ 220.9	11	\$ 415.6	\$ (163.7)	\$ 251.9	11
Technology-based assets	232.3	(157.7)	74.6	7	223.2	(135.2)	88.0	7
Intellectual property & other	83.0	(50.3)	32.7	8	83.6	(43.4)	40.2	8
Total intangible assets	\$ 729.0	\$ (400.8)	\$ 328.2	10	\$ 722.4	\$ (342.3)	\$ 380.1	10

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

(in millions)	2021	2020	2019
Amortization expense	\$ 62.0	\$ 58.8	\$ 36.5

We did not record any impairment losses involving intangible assets in 2021, 2020, or 2019.

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

Based on acquisitions and divestitures completed through December 31, 2021, we expect intangible amortization expense for 2022 and subsequent years to be as follows:

	(in millions)
2022	\$ 54.7
2023	50.9
2024	44.7
2025	38.2
2026	34.5
Thereafter	105.2
Total	\$ 328.2

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

9. Investments in Unconsolidated Entities

Our investments in unconsolidated entities consist primarily of the following:

(in millions)	As of December 31,	
	2021	2020
Equity method investments	\$ 31.4	\$ 7.4
Investment in MJKK	18.7	18.9
Cost method investments	13.2	6.3
Total investments in unconsolidated entities	\$ 63.3	\$ 32.6

Morningstar Japan K.K. Morningstar Japan K.K. (MJKK) develops and markets financial information products and services customized for the Japanese market. MJKK's shares are traded on the Tokyo Stock Exchange under the ticker 4765. 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,	
	2021	2020
Morningstar's approximate ownership of MJKK	22.1%	22.4%
Approximate market value of Morningstar's ownership in MJKK:		
Japanese yen (¥ in millions)	¥ 12,781.0	¥ 9,221.9
Equivalent U.S. dollars (\$ in millions)	\$ 111.1	\$ 89.4

10. Property, Equipment, and Capitalized Software, net

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

(in millions)	As of December 31,	
	2021	2020
Capitalized software	\$ 464.5	\$ 390.2
Capitalized equipment	85.7	74.6
Furniture and fixtures	36.9	35.6
Leasehold improvements	100.7	96.0
Telephone equipment	2.2	2.4
Construction in progress	11.0	8.6
Property, equipment, and capitalized software, at cost	701.0	607.4
Less accumulated depreciation	(529.2)	(452.3)
Property, equipment, and capitalized software, net	\$ 171.8	\$ 155.1

The following table summarizes our depreciation expense:

(in millions)	2021	2020	2019
Depreciation expense	\$ 87.0	\$ 80.1	\$ 81.2

11. Leases

We lease office space and certain equipment under various operating and finance leases, with most of our lease portfolio consisting of operating leases for office space.

We determine whether an arrangement is, or includes, an embedded lease at contract inception. Operating lease assets and lease liabilities are recognized at the commencement date and initially measured using the present value of lease payments over the defined lease term. Lease expense is recognized on a straight-line basis over the lease term. For finance leases, we also recognize a finance lease asset and finance lease liability at inception, with lease expense recognized as interest expense and amortization.

A contract is or contains an embedded lease if the contract meets all of the below criteria:

- ▷ there is an identified asset
- ▷ we obtain substantially all of the economic benefits of the asset
- ▷ we have the right to direct the use of the asset

For initial measurement of the present value of lease payments and for subsequent measurement of lease modifications, we are required to use the rate implicit in the lease, if available. However, as most of our leases do not provide an implicit rate, we use our incremental borrowing rate, which is a collateralized rate. To apply the incremental borrowing rate, we used a portfolio approach and grouped leases based on similar lease terms in a manner whereby we reasonably expect that the application does not differ materially from a lease-by-lease approach.

Our leases have remaining lease terms of approximately 1 year to 12 years, which may include the option to extend the lease when it is reasonably certain we will exercise that option. We do not have lease agreements with residual value guarantees, sale leaseback terms, or material restrictive covenants.

Leases with an initial term of 12 months or less are not recognized on the balance sheet. We recognize lease expense for these leases on a straight-line basis over the lease term.

The following table summarizes our operating lease assets and lease liabilities:

Leases (in millions)	Balance Sheet Classification	As of December 31, 2021	As of December 31, 2020
Assets			
Operating	Operating lease assets	\$ 149.2	\$ 147.7
Liabilities			
Operating	Operating lease liabilities, current	\$ 36.4	\$ 39.9
Operating	Operating lease liabilities, non-current	135.7	137.7
Total lease liabilities		\$ 172.1	\$ 177.6

Our operating lease expense for the years ended December 31, 2021, 2020, and 2019 was \$42.5 million, \$42.4 million, and \$33.9 million, respectively. Charges related to our operating leases that are variable and, therefore, not included in the measurement of the lease liabilities were \$16.2 million and \$14.9 million for the years ended December 31, 2021 and 2020, respectively. We made operating lease payments of \$47.4 million and \$45.3 million during the years ended December 31, 2021 and 2020, respectively.

The following table shows our minimum future rental commitments due in each of the next five years and thereafter for operating leases:

Minimum Future Lease Commitments (in millions)	
2022	\$ 41.5
2023	39.2
2024	28.0
2025	22.3
2026	18.8
Thereafter	40.9
Total minimum lease commitments	
Adjustment for discount to present value	18.6
Total	\$ 172.1

The following table summarizes our weighted-average lease terms and weighted-average discount rates for our operating leases:

	As of December 31, 2021
Weighted-average remaining lease term (in years)	6.0
Weighted-average discount rate	3.3%

12. Stock-Based Compensation

Stock-Based Compensation Plans

Our shareholders approved the Morningstar Amended and Restated 2011 Stock Incentive Plan (the 2021 Plan) on May 14, 2021 and authorized an additional 1,050,000 shares for issuance under the 2021 Plan. As of that date, we stopped granting awards under the Morningstar 2011 Stock Incentive Plan (the 2011 Plan). The 2021 Plan amended and restated the 2011 Plan, which itself had amended and restated the 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 2021 Plan provides for a variety of equity-based awards, including, among other things, restricted stock units, restricted stock, performance share awards, market stock units, and stock options. Under the 2011 Plan, we primarily granted restricted stock units, stock options, and market share unit awards. We granted restricted stock units, restricted stock, and stock options under the 2004 Plan.

All officers, other employees, non-employee directors, and consultants or other independent contractors of the company and its subsidiaries and persons expected to become the same are eligible to receive awards under the 2021 Plan.

Shares delivered under the 2021 Plan may be authorized but unissued shares, or authorized but issued shares that we reacquired and held as treasury shares or otherwise, or any combination of the foregoing. The 2021 Plan no longer permits the replenishment of its share reserve with shares withheld by the company to pay the exercise price of an option or to pay tax withholdings on any award. Further, the 2021 Plan prohibits the replenishment of the share reserve with shares that are not issued as a result of the net settlement of a stock option or stock appreciation right (SAR) or shares that are repurchased on the open market using proceeds from the exercise of a stock option.

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

	As of December 31
(in millions)	2021
Shares available for future grants	3.2

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:

	Year ended December 31		
(in millions)	2021	2020	2019
Restricted stock units	\$ 25.8	\$ 22.2	\$ 20.4
Performance share awards	10.6	10.2	20.6
Market stock units	5.5	4.2	3.4
Total stock-based compensation expense	\$ 41.9	\$ 36.6	\$ 44.4
Income tax benefit related to the stock-based compensation expense	\$ 8.9	\$ 6.7	\$ 10.0

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

	Year ended December 31		
(in millions)	2021	2020	2019
Cost of revenue	\$ 16.5	\$ 13.5	\$ 12.9
Sales and marketing	4.4	4.6	5.6
General and administrative	21.0	18.5	25.9
Total stock-based compensation expense	\$ 41.9	\$ 36.6	\$ 44.4

The following table summarizes the amount of unrecognized stock-based compensation expense as of December 31, 2021 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	\$ 54.0	34
Market stock units	9.8	26
Total unrecognized stock-based compensation expense	\$ 63.8	33

In accordance with FASB ASC 718, we estimate forfeitures of employee stock-based awards and recognize compensation cost only for those awards expected to vest.

Restricted Stock Units

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

We measure the fair value of our RSUs on the grant date 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)	Total	Weighted Average Grant Date Value per RSU
RSUs Outstanding—December 31, 2018	527,465	\$ 89.53
Granted	233,618	135.67
Vested	(269,917)	95.67
Forfeited	(31,721)	100.71
RSUs Outstanding—December 31, 2019	459,445	\$ 108.61
Granted	245,078	153.01
Vested	(240,297)	108.94
Forfeited	(27,459)	119.22
RSUs Outstanding—December 31, 2020	436,767	\$ 132.68
Granted	187,916	246.85
Vested	(229,063)	141.04
Forfeited	(23,910)	166.99
RSUs Outstanding—December 31, 2021	371,710	\$ 183.04

Market Stock Units

Beginning in May 2017, executive officers, other than Joe Mansueto, and certain other employees, were granted market stock units (MSUs). These MSUs represent the right to receive a target number of shares that will vest at the end of a three-year performance period depending on the company's total shareholder return over that three-year period. The MSUs that were granted in 2019, 2020, and 2021 to the executive officers and certain other employees also have a feature that will provide an increased number of shares that can be earned in 2022, 2023, and 2024, respectively, if certain revenue metrics are exceeded or other performance goals are met as determined at the discretion of the board of directors.

We measure the fair value of our MSUs on the grant date using a Monte Carlo valuation model. We amortize that value to stock-based compensation expense ratably over the vesting period.

We used the following assumptions to estimate the fair value of our MSUs:

Grant Date	Assumptions for Monte Carlo Valuation Model		
	Expected volatility	Dividend yield	Risk-free interest rate
May 15, 2018	17.4%	0.89%	2.70%
November 15, 2018	19.6%	0.83%	2.92%
May 15, 2019	20.3%	0.84%	2.17%
November 15, 2019	21.0%	0.72%	1.59%
May 15, 2020	25.4%	0.83%	0.20%
November 15, 2020	26.9%	0.58%	0.23%
May 15, 2021	28.0%	0.51%	0.33%
November 15, 2021	26.9%	0.40%	0.85%

The table below shows MSUs granted and market stock units outstanding as of December 31, 2021:

	As of December 31, 2021
MSUs granted during 2021	31,114
Weighted average fair value per award	\$ 181.49
Number of MSUs outstanding	108,322
Unamortized expense, based on current performance levels (in millions)	\$ 9.8

PitchBook Bonus Plan

In connection with our acquisition of PitchBook, we adopted a management bonus sub-plan under the 2011 Plan (or any successor Morningstar plan including the 2021 Plan) for certain employees of PitchBook (the PitchBook Plan). We renewed the PitchBook Plan for the 2020-2022 period. Pursuant to the terms of this renewal, awards having an aggregate target value equal to \$30.0 million will be available for issuance with annual grants of \$7.5 million for 2020, \$7.5 million in 2021, and \$15.0 million in 2022.

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 will 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.

The table below shows target performance share awards granted and shares that will be issued based on final performance levels for performance share awards granted as of December 31, 2021:

	As of December 31, 2021
Target performance share awards granted	35,201
Weighted average fair value per award	\$ 213.04
Number of shares that will be issued based on final 2021 performance levels	48,395
Unamortized expense, based on current performance levels (in millions)	\$ —

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.

The last time the company granted stock options was in May 2011, when we granted 86,106 stock options under the 2004 Plan. We estimated the fair value of the options on the grant date using the 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 table summarizes stock option activity in the past three years for our various stock option grants:

Option Grants	2021		2020		2019	
	Underlying Shares	Weighted Average Exercise Price	Underlying Shares	Weighted Average Exercise Price	Underlying Shares	Weighted Average Exercise Price
Options outstanding—beginning of year	3,600	\$ 57.28	37,269	\$ 57.28	40,685	\$ 57.28
Granted	—	—	—	—	—	—
Canceled	—	—	—	—	—	—
Exercised	(3,600)	57.28	(33,669)	57.28	(3,416)	57.28
Options outstanding—end of year	—	\$ 57.28	3,600	\$ 57.28	37,269	\$ 57.28
Options exercisable—end of year	—	\$ 57.28	3,600	\$ 57.28	37,269	\$ 57.28

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)	2021	2020	2019
Intrinsic value of options exercised	\$ 0.7	\$ 3.9	\$ 0.4

13. Defined-Contribution Plan

We sponsor a defined-contribution 401(k) plan, which allows our U.S.-based employees to voluntarily contribute pretax dollars up to a maximum amount allowable by the U.S. Internal Revenue Service. In 2021, 2020, and 2019, we made matching contributions to our 401(k) plan 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)	2021	2020	2019
401(k) matching contributions	\$ 16.2	\$14.5	\$12.0

14. 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, 2021, 2020, and 2019:

(in millions)	2021	2020	2019
Income before income taxes and equity in net income (loss) of unconsolidated entities	\$ 250.5	\$ 283.0	\$ 198.5
Equity in net income (loss) of unconsolidated entities	5.4	0.3	(0.9)
Total	\$ 255.9	\$ 283.3	\$ 197.6
Income tax expense	\$ 62.6	\$ 59.7	\$ 45.6
Effective tax rate	24.5%	21.1%	23.1%

Our effective tax rate for the year end December 31, 2021 was 24.5%, an increase of 3.4 percentage points, compared with 21.1% in the prior year. The increase was primarily attributable to minimum taxes and non-deductible expenses.

Our effective tax rate for the year ended December 31, 2020 was 21.1%, a decrease of 2.0 percentage points, compared with 23.1% in 2019. The decrease was primarily driven by the non-taxable holding gain on our previously held equity interest in Sustainalytics offset by the acquisition earn-out that was not deductible for tax purposes.

The amount of accumulated undistributed earnings of our foreign subsidiaries was approximately \$232.3 million as of December 31, 2021. In February 2019, we repatriated approximately \$45.8 million of foreign earnings to the U.S. Otherwise, we generally consider our U.S. directly-owned foreign subsidiary earnings to be permanently reinvested. We have not recorded deferred income taxes on the \$232.3 million primarily because most of these earnings were previously subject to the one-time deemed mandatory repatriation tax under the Tax Cuts and Jobs Act of 2017 (Tax Reform Act). We maintain a deferred tax liability for foreign withholding taxes on certain foreign affiliate parent companies that are not indefinitely reinvested.

The following table reconciles our income tax expense at the U.S. federal income tax rate to income tax expense as recorded:

(in millions, except percentages)	2021		2020		2019	
	Amount	%	Amount	%	Amount	%
Income tax expense at U.S. federal rate	\$ 53.7	21.0%	\$ 59.5	21.0%	\$ 41.5	21.0%
State income taxes, net of federal income tax benefit	10.7	4.2	9.5	3.4	7.5	3.8
Stock-based compensation activity	(7.2)	(2.8)	(4.9)	(1.7)	(2.2)	(1.1)
Equity in net income of unconsolidated subsidiaries (including holding gains upon acquisition)	0.2	0.1	(13.8)	(4.9)	0.3	0.2
Acquisition earn-out	5.1	2.0	7.6	2.7	—	—
Net change in valuation allowance related to non-U.S. deferred tax assets, primarily net operating losses	0.1	—	2.7	1.0	(2.1)	(1.1)
Difference between U.S. federal statutory and foreign tax rates	(2.6)	(1.0)	(0.1)	—	1.1	0.6
Change in unrecognized tax benefits	(0.2)	(0.1)	1.2	0.4	(0.9)	(0.5)
Credits and incentives	(2.1)	(0.8)	(2.2)	(0.8)	(2.2)	(1.1)
Foreign tax provisions (GILTI, FDII, and BEAT)(1)	(0.7)	(0.3)	(2.7)	(1.0)	(1.4)	(0.7)
Non-deductible expenses and other, net	5.6	2.2	2.9	1.0	4.0	2.0
Total income tax expense	\$ 62.6	24.5%	\$ 59.7	21.1%	\$ 45.6	23.1%

(1) The Tax Reform Act established the Global Intangible Low-Tax Income (GILTI) provision, which taxes U.S. allocated expenses and certain income from foreign operations; the Foreign-Derived Intangible Income (FDII) provision, which allows a deduction against certain types of U.S. taxable income resulting in a lower effective U.S. tax rate on such income; and the Base Erosion Anti-Abuse Tax (BEAT), which is a minimum tax based on cross-border service payments by U.S. entities.

The following table shows the components of our income tax expense:

(in millions)	Year ended December 31		
	2021	2020	2019
Current tax expense:			
U.S.			
Federal	\$ 38.3	\$ 31.5	\$ 28.3
State	13.6	11.7	9.4
Non-U.S.	23.0	23.0	14.0
Current tax expense	74.9	66.2	51.7
Deferred tax expense (benefit):			
U.S.			
Federal	(2.8)	1.2	0.2
State	(0.3)	0.4	—
Non-U.S.	(9.2)	(8.1)	(6.3)
Deferred tax expense, net	(12.3)	(6.5)	(6.1)
Income tax expense	\$ 62.6	\$ 59.7	\$ 45.6

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		
	2021	2020	2019
U.S.	\$ 218.3	\$ 197.4	\$ 159.7
Non-U.S.	32.2	85.6	38.8
Income before income taxes and equity in net income (loss) of unconsolidated entities	\$ 250.5	\$ 283.0	\$ 198.5

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,	
	2021	2020
Deferred tax assets:		
Stock-based compensation expense	\$ 3.7	\$ 2.9
Accrued liabilities	24.8	20.6
Deferred revenue	7.9	6.7
Net operating loss carryforwards—U.S.	0.3	0.1
Net operating loss carryforwards—Non-U.S.	8.1	7.9
Capitalized expenses	1.3	—
Deferred royalty revenue	0.2	0.2
Allowance for doubtful accounts	1.5	1.4
Lease liabilities	29.7	32.8
Other	0.7	0.7
Total deferred tax assets	78.2	73.3
Deferred tax liabilities:		
Acquired intangible assets	(84.7)	(93.9)
Property, equipment, and capitalized software	(30.8)	(25.1)
Lease right-of-use assets	(23.4)	(25.9)
Unrealized exchange gains, net	(1.4)	(1.3)
Prepaid expenses	(16.5)	(12.1)
Investments in unconsolidated entities	(5.3)	(6.0)
Withholding tax—foreign dividends	(0.4)	(3.0)
Total deferred tax liabilities	(162.5)	(167.3)
Net deferred tax liability before valuation allowance	(84.3)	(94.0)
Valuation allowance	(4.6)	(2.3)
Deferred tax liability, net	\$ (88.9)	\$ (96.3)

The deferred tax assets and liabilities are presented in our Consolidated Balance Sheets as follows:

(in millions)	As of December 31,	
	2021	2020
Deferred tax asset, net	\$ 12.8	\$ 12.6
Deferred tax liability, net	(101.7)	(108.9)
Deferred tax liability, net	\$ (88.9)	\$ (96.3)

The following table summarizes our U.S. net operating loss (NOL) carryforwards:

(in millions)	As of December 31,			
	2021		2020	
	Expiration Dates		Expiration Dates	
U.S. federal NOLs subject to expiration dates	\$ 0.3	2023	\$ 0.6	2023
U.S. federal NOLs with no expiration dates	0.9	—	—	—
Total	\$ 1.2		\$ 0.6	

The net increase in the U.S. federal NOL carryforwards as of December 31, 2021 compared with 2020 primarily reflects NOLs acquired in the Sustainalytics acquisition. We have not recorded a valuation allowance against the U.S. federal NOLs of \$1.2 million because we expect the benefit of the U.S. federal NOLs to be fully utilized.

The following table summarizes our NOL carryforwards for our non-U.S. operations:

(in millions)	As of December 31,	
	2021	2020
Non-U.S. NOLs subject to expiration dates from 2022 through 2041	\$ 10.2	\$ 21.7
Non-U.S. NOLs with no expiration date	21.6	11.6
Total	\$ 31.8	\$ 33.3
Non-U.S. NOLs not subject to valuation allowances	\$ 14.2	\$ 24.5

The decrease in non-U.S. NOL carryforwards as of December 31, 2021 compared with the same period in 2020 primarily reflects the utilization of NOLs in 2021.

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 recorded a valuation allowance against approximately \$17.6 million of the non-U.S. NOLs, reflecting the likelihood that the benefit of these NOLs will not be realized.

Unrecognized Tax Benefits

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 2016 to the present.

We are currently under audit by federal, state, and local tax authorities in the U.S. as well as tax authorities in certain non-U.S. jurisdictions. It is likely that the examination phase of some of these federal, state, local, and non-U.S. audits will conclude in 2022. It is not possible to estimate the effect of current audits on previously recorded unrecognized tax benefits.

As of December 31, 2021, our Consolidated Balance Sheet included a current liability of \$7.2 million and a non-current liability of \$5.2 million for unrecognized tax benefits. As of December 31, 2020, our Consolidated Balance Sheet included a current liability of \$7.6 million and a non-current liability of \$5.1 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)	2021	2020
Gross unrecognized tax benefits—beginning of the year	\$ 11.8	\$ 12.6
Increases as a result of tax positions taken during a prior-year period	0.2	0.5
Decreases as a result of tax positions taken during a prior-year period	(0.2)	(2.5)
Increases as a result of tax positions taken during the current period	1.1	1.3
Decreases relating to settlements with tax authorities	—	—
Reductions as a result of lapse of the applicable statute of limitations	(1.5)	(0.1)
Gross unrecognized tax benefits—end of the year	\$ 11.4	\$ 11.8

In 2021, we recorded a net increase of \$1.2 million of gross unrecognized tax benefits before settlements and lapses of statutes of limitations, of which \$1.2 million increased our income tax expense by \$1.1 million.

In addition, we reduced our unrecognized tax benefits by \$1.5 million for lapses of statutes of limitations, of which \$1.5 million decreased our income tax expense by \$1.4 million.

As of December 31, 2021, we had \$11.4 million of gross unrecognized tax benefits, which if recognized, would decrease our income tax expense by \$11.2 million and reduce our effective income tax rate.

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,	
	2021	2020
Liabilities for interest and penalties	\$ 1.4	\$ 1.4

There was no meaningful change in our liabilities for penalties and interest, net of any tax benefits in 2021. Changes are recorded to income tax expense in our Consolidated Statements of Income.

15. Contingencies

We record accrued liabilities for litigation, regulatory, and other business matters when those matters represent loss contingencies that are both probable and estimable. In these cases, there may be an exposure to loss in excess of any amounts accrued. When a loss contingency is not both probable and estimable, we do not establish an accrued liability. As litigation, regulatory, or other business matters develop, we evaluate on an ongoing basis whether such matters present a loss contingency that is probable and estimable.

Data Audits and Reviews

In our global data business, we include in our products, or directly redistribute to our customers, data and information licensed from third-party vendors. Our compliance with the terms of these licenses is reviewed internally and is also subject to audit by the third-party vendors. At any given time, we may be undergoing several such internal reviews and third-party vendor audits and the results and findings may indicate that we may be required to make a payment for prior data usage. Due to a lack of available information and data, as well as potential variations of any audit or internal review findings, we generally are not able to reasonably estimate a possible loss, or range of losses, for these matters. In situations where more information or specific areas subject to audit are available, we may be able to estimate a potential range of losses. While we cannot predict the outcome of these processes, we do not anticipate they will have a material adverse effect on our business, operating results, or financial position. Our financial results as of December 31, 2021 include an immaterial accrual related to certain in-progress audits and reviews.

Credit Ratings Matters

On February 16, 2021, the SEC filed a civil action in the United States District Court for the Southern District of New York against Morningstar Credit Ratings, LLC (MCR). MCR was formerly registered with the SEC as a Nationally Recognized Statistical Ratings Organization (NRSRO), but effective in December 2019, it withdrew its NRSRO registration. MCR no longer operates as a credit rating agency. The SEC's complaint relates to MCR's former commercial mortgage-backed securities ratings methodology during the period from 2015 to March 2017, and it alleges violations of certain filing and internal control requirements that applied to MCR when it was an NRSRO. On April 19, 2021, MCR filed a motion with the Court to dismiss the complaint. On January 5, 2022, the Court issued its written decision dismissing one of the three counts of the SEC's complaint, as well the SEC's request for a permanent injunction against MCR. MCR has filed its answer to the complaint, and discovery is currently scheduled to be completed by July 2022. Our financial results as of December 31, 2021 include an immaterial accrual related to this matter. At this time, we do not believe the outcome in this matter will have a material adverse effect on our business, operating results, or financial position.

On July 28, 2021, DBRS, Inc. (DBRS) reached an agreement in principle with the staff of the SEC to settle an investigation relating to certain of its policies and procedures used in connection with its credit ratings on five U.S. Collateralized Loan Obligation combination notes that were assigned between 2016 and 2019. The SEC announced its approval of the settlement on September 13, 2021. The settlement involved a censure, a cease-and-desist order, certain undertakings by DBRS, and a civil money penalty of \$1.0 million, which was paid in the third quarter of 2021. DBRS continues to work on complying with certain undertakings agreed to by it contained in the order. Compliance with these undertakings is expected to be completed within the period required by the order.

Given the nature of their credit ratings activities, DBRS and its credit rating affiliates are subject to legal and tax proceedings, governmental, regulatory and legislative investigations, subpoenas and other inquiries, and claims and litigation by governmental and private parties that are based on ratings assigned by these entities or that are otherwise incidental to their business. DBRS and its credit ratings affiliates are subject to periodic reviews, inspections, examinations and investigations by regulators in the U.S. and other jurisdictions, any of which may result in claims, legal proceedings, assessments, fines, penalties, disgorgement, or restrictions on business activities. While it is difficult to predict the outcome of any particular investigation or 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.

Other Matters

We are involved from time to time in regulatory investigations, examinations, and legal proceedings that arise in the normal course of our business. While it is difficult to predict the outcome of any particular investigation or 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.

16. Share Repurchase Program

In December 2020, the board of directors approved a new share repurchase program that authorizes the company to repurchase up to \$400.0 million in shares of the company's outstanding common stock, effective January 1, 2021. The authorization expires on December 31, 2023. Under this authorization, 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, 2021, we repurchased a total of 4,900 shares for \$1.3 million under this authorization, leaving \$398.7 million available for future repurchases.

17. Recent Accounting Pronouncements

Recently adopted accounting pronouncements

Current Expected Credit Losses: On June 16, 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (ASU No. 2016-13), which requires that expected credit losses relating to financial assets measured on an amortized cost basis and available-for-sale debt securities be recorded through an allowance for credit losses. ASU No. 2016-13 limits the amount of credit losses to be recognized for available-for-sale debt securities to the amount by which carrying value exceeds fair value and requires the reversal of previously recognized credit losses if fair value increases. On April 25, 2019, the FASB issued ASU No. 2019-04, *Codification Improvements* (ASU No. 2019-04), which clarifies certain aspects of accounting for credit losses. On May 15, 2019, the FASB issued ASU No. 2019-05, *Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief* (ASU No. 2019-05), which allows entities to elect the fair value option on certain financial instruments. The new standard became effective for us on January 1, 2020 and was applied prospectively. As a result of the adoption of these standards, we made changes to our processes for the assessment of the adequacy of our allowance for credit losses on certain types of financial instruments, including accounts receivable. The adoption of ASU No. 2016-13, ASU No. 2019-04, and ASU No. 2019-05 did not have a material impact on the consolidated financial statements, related disclosures, or results of operations.

Cloud Computing: On August 29, 2018, the FASB issued ASU No. 2018-15, *Customer's Accounting for Fees Paid in a Cloud Computing Arrangement* (ASU No. 2018-15), which helps entities evaluate the accounting for fees paid by a customer in a cloud computing arrangement (CCA) by providing guidance for determining when an arrangement includes a software license and when an arrangement is solely a hosted CCA service. The company adopted this guidance prospectively beginning on January 1, 2020. Upon adoption, fees paid in a CCA will be evaluated for capitalization as a prepaid asset and expensed within the results of operations in the same financial statement line item as software license fees instead of depreciation and amortization expense. The adoption of ASU No. 2018-15 did not have a material impact on the consolidated financial statements, related disclosures, or results of operations.

Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement: On August 28, 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement* (ASU No. 2018-13), which eliminates, adds, and modifies certain disclosure requirements around items such as transfers between Level 1 and 2, policy of timing of transfers, and valuation process for Level 3. The new standard became effective for us on January 1, 2020. Except for limited additions to related disclosures, the adoption of ASU No. 2018-13 did not have a material impact on our consolidated financial statements.

Income Taxes: On December 18, 2019, the FASB issued ASU No. 2019-12, *Simplifying the Accounting for Income Taxes* (ASU No. 2019-12), which is intended to simplify the accounting for income taxes by removing certain exceptions to the general principles of ASC 740, *Income Taxes*, and providing for simplification in several other areas. The new standard became effective for us on January 1, 2021. The adoption of ASU No. 2019-12 did not have a material impact on our consolidated financial statements, related disclosures, or results of operations.

Recently issued accounting pronouncements not yet adopted

Reference Rate Reform: On March 12, 2020, the FASB issued ASU No. 2020-04: *Facilitation of the Effects of Reference Rate Reform on Financial Reporting* (Topic 848) (ASU No. 2020-04), which provides temporary optional expedients and exceptions for applying generally accepted accounting principles to contract modifications resulting from reference rate reform initiatives. The intention of the standard is to ease the potential accounting and financial reporting burden associated with transitioning away from the expiring London Interbank Offered Rate (LIBOR) and other interbank offered rates to alternative benchmark rates. The amendments in this update are applicable to contract modifications that replace a reference LIBOR rate beginning on March 12, 2020 through December 31, 2022. The optional expedients apply to our Credit Agreement and allow the company to account for modifications due to reference rate reform by prospectively adjusting the effective interest rate on the Credit Agreement. As of December 31, 2021, we have not modified the Credit Agreement related to reference rate reform but expect to modify the Credit Agreement before the end of 2022. We plan to apply the optional practical expedients and exceptions to modifications of the Credit Agreement affected by reference rate reform and are evaluating the effect on our consolidated financial statements, related disclosures, and results of operations.

Business Combinations: On October 28, 2021, the FASB issued ASU No. 2021-08, *Business Combinations: Accounting for Contract Assets and Contract Liabilities from Contracts with Customers* (Topic 805) (ASU No. 2021-08), which requires contract assets and contract liabilities (i.e., deferred revenue) acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, *Revenue from Contracts with Customers*. Generally, the new standard will result in the acquirer recognizing contract assets and contract liabilities at the same amounts recorded by the acquiree. Under current US GAAP, contract assets and contract liabilities acquired in a business combination are recorded by the acquirer at fair value. ASU No. 2021-08 creates an exception to the general recognition and measurement principles of ASC 805, *Business Combinations*. The new standard is effective for us on January 1, 2023. Early adoption is permitted, including in an interim period, for any period for which financial statements have not yet been issued. Entities should apply the new guidance on a prospective basis to all business

combinations with an acquisition date on or after the effective date. We have not made a decision on early adoption and are evaluating the effect that ASU No. 2021-08 will have on our consolidated financial statements, related disclosures, and results of operations.

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 completed 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, 2021. 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. Based on that evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2021.

KPMG LLP, an independent registered public accounting firm, issued its report on the effectiveness of our internal control over financial reporting, which is included in Part II, Item 8 of this report under the caption "Financial Statements and Supplementary Data" and incorporated herein by reference.

(c) Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the fiscal quarter ended December 31, 2021 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 report that was not reported.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

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 Delinquent Section 16(a) Reports in the definitive proxy statement for our 2022 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 area of our corporate website at <https://shareholders.morningstar.com> in the Governance section. 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, 2021, 2020, and 2019

Consolidated Statements of Comprehensive Income—Years ended December 31, 2021, 2020, and 2019

Consolidated Balance Sheets—December 31, 2021 and 2020

Consolidated Statements of Equity—Years ended December 31, 2021, 2020, and 2019

Consolidated Statements of Cash Flows—Years ended December 31, 2021, 2020, and 2019

Notes to Consolidated Financial Statements

2. Financial Statement Schedules

Report of Independent Registered Public Accounting Firm

The report of KPMG LLP dated February 25, 2022 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, 2021, December 31, 2020, and December 31, 2019.

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 Translations	Balance at End of Year
Allowance for doubtful accounts: Year ended December 31,				
2021	\$ 4.2	\$ 1.9	\$ (1.6)	\$ 4.5
2020	4.1	2.8	(2.7)	4.2
2019	4.0	2.4	(2.3)	4.1

3. Exhibits

Exhibit	Description
2.1	Agreement and Plan of Merger, dated May 28, 2019, by and among Morningstar, Alpine Merger Co., Ratings Acquisition Corp and Shareholder Representative Services LLC is incorporated by reference to Exhibit 2.1 to our Current Report on Form 8-K that we filed with the SEC on June 3, 2019.
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).
3.2	By-laws of Morningstar, as in effect on February 27, 2018, are incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K that we filed with the SEC on February 28, 2018.
4.1	Specimen Common Stock Certificate is incorporated by reference to Exhibit 4.1 to the Registration Statement.
4.2	Description of Morningstar's Securities is incorporated by reference to Exhibit 4.2 to our Annual Report on Form 10-K for the year ended December 31, 2019.
10.1*	Form of Indemnification Agreement is incorporated by reference to Exhibit 10.1 to the Registration Statement.
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.
10.3*	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.
10.4*	Morningstar Amended and Restated 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 20, 2021.
10.5*	Form of Morningstar 2011 Stock Incentive Plan Restricted Stock Unit 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).
10.6*	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).
10.7*	Form of Morningstar 2011 Stock Incentive Plan CEO Restricted Stock Unit Award Agreement for award made on January 3, 2017 is incorporated by reference to Exhibit 10.11 to our Annual Report on Form 10-K for the year ended December 31, 2016.
10.8*	Form of Morningstar 2011 Stock Incentive Plan Market Stock Unit Award Agreement for awards made on and after November 15, 2017 and prior to May 15, 2019 is incorporated by reference to Exhibit 10.12 to our Annual Report on Form 10-K for the year ended December 31, 2017 (the 2017 10-K).
10.9*	Form of Morningstar 2011 Stock Incentive Plan Restricted Stock Unit Award Agreement for awards made on and after November 15, 2017 and prior to May 15, 2019 is incorporated by reference to Exhibit 10.13 to the 2017 10-K.
10.10*	Form of Morningstar 2011 Stock Incentive Plan CFO Restricted Stock Unit Award Agreement for award made on November 15, 2017 is incorporated by reference to Exhibit 10.14 to the 2017 10-K.
10.11*	Form of Morningstar 2011 Stock Incentive Plan Restricted Stock Unit Award Agreement for awards made on and after May 15, 2019 and prior to May 15, 2020 is incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2019.
10.12*	Form of Morningstar 2011 Stock Incentive Plan Market Stock Unit Award Agreement for awards made on and after May 15, 2019 and prior to May 15, 2020 is incorporated by reference to Exhibit 10.2 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2019.
10.13*	Form of Morningstar 2011 Stock Incentive Plan Market Stock Unit with Revenue Kicker Award Agreement for awards made on and after May 15, 2019 and prior to May 15, 2020 is incorporated by reference to Exhibit 10.3 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2019.
10.14*	Form of Morningstar 2011 Stock Incentive Plan Market Stock Unit Award Agreement for awards made on and after May 15, 2020 and prior to May 15, 2021 is incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020.
10.15*	Form of Morningstar 2011 Stock Incentive Plan Market Stock Unit with Performance Kicker Award Agreement for awards made on and after May 15, 2020 and prior to May 15, 2021 is incorporated by reference to Exhibit 10.2 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020.
10.16*	Form of Morningstar Amended and Restated 2011 Stock Incentive Plan Restricted Stock Unit Award Agreement for awards made on and after May 15, 2021 is incorporated by reference to Exhibit 10.2 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021.

Exhibit	Description
10.17*	Form of Morningstar Amended and Restated 2011 Stock Incentive Plan Director Restricted Stock Unit Award Agreement for awards made on and after May 15, 2021 is incorporated by reference to Exhibit 10.3 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021.
10.18*	Form of Morningstar Amended and Restated 2011 Stock Incentive Plan Market Stock Unit Award Agreement for awards made on and after May 15, 2021 is incorporated by reference to Exhibit 10.4 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021.
10.19*	Form of Morningstar Amended and Restated 2011 Stock Incentive Plan Market Stock Unit with Performance Kicker Award Agreement for awards made on and after May 15, 2021 is incorporated by reference to Exhibit 10.5 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021.
10.20*	Form of Morningstar Amended and Restated 2011 Stock Incentive Plan CEO Restricted Stock Unit Award Agreement for awards made on and after May 15, 2021 is incorporated by reference to Exhibit 10.6 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021.
10.21	Credit Agreement dated as of July 2, 2019 among Morningstar, certain subsidiaries of Morningstar, 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 July 3, 2019.
10.22	Amendment No.1 to Credit Agreement dated as of August 13, 2019 among Morningstar, certain subsidiaries of Morningstar, and Bank of America, N.A. is incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2019.
10.23	Credit Agreement dated as June 30, 2020 among Morningstar, certain subsidiaries of Morningstar., and lenders Bank of America, N.A. and JPMorgan Chase Bank, N.A. is incorporated by reference to our Current Report on Form 8-K filed with the SEC on July 6, 2020.
10.24	Note Purchase Agreement, dated as of October 26, 2020, among Morningstar and each of the purchasers signatory thereto is incorporated by reference to our Current Report on Form 8-K filed with the SEC on October 26, 2020.
21.1†	Subsidiaries of Morningstar.
23.1†	Consent of KPMG LLP.
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.
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.
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.
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.
101†	The following financial information from Morningstar's Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on February 25, 2022, formatted in Inline XBRL: (i) Cover Page, (ii) Consolidated Statements of Income, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Balance Sheets, (v) Consolidated Statements of Equity, (vi) Consolidated Statements of Cash Flows and (vii) the Notes to Consolidated Financial Statements.
104†	Cover Page Interactive Data File (the cover page XBRL tags are embedded in the Inline XBRL document).

* 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

None.

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 25, 2022.

Morningstar, Inc.

By: /s/ Kunal Kapoor

Kunal Kapoor

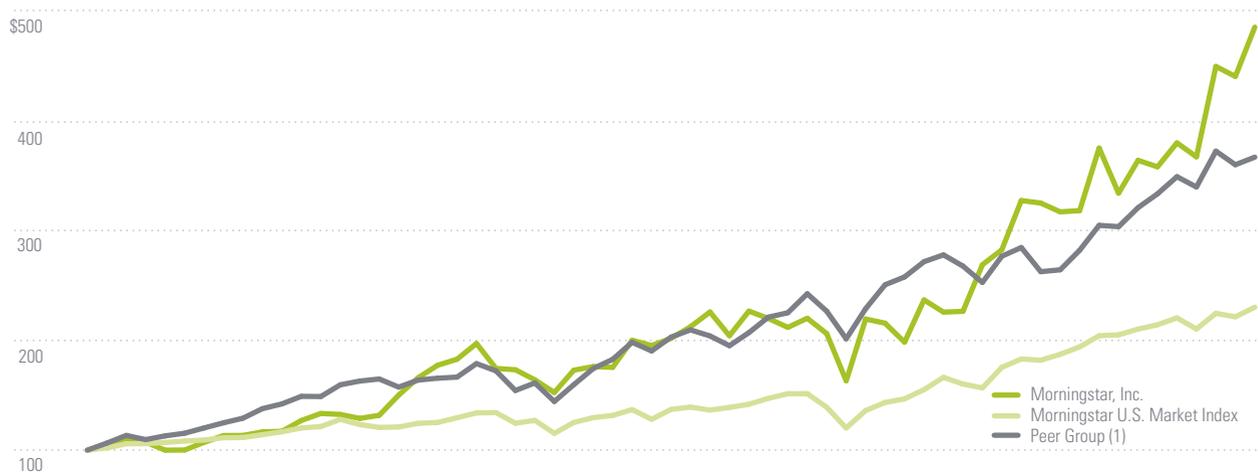
Title: Chief Executive Officer

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 25, 2022
/s/ Jason Dubinsky Jason Dubinsky	Chief Financial Officer (principal financial officer)	February 25, 2022
/s/ Kimberly McGarry Kimberly McGarry	Chief Accounting Officer (principal accounting officer)	February 25, 2022
/s/ Joe Mansueto Joe Mansueto	Executive Chairman and Chairman of the Board	February 25, 2022
/s/ Robin Diamonte Robin Diamonte	Director	February 25, 2022
/s/ Cheryl Francis Cheryl Francis	Director	February 25, 2022
/s/ Stephen Joynt Stephen Joynt	Director	February 25, 2022
/s/ Steven Kaplan Steven Kaplan	Director	February 25, 2022
/s/ Gail Landis Gail Landis	Director	February 25, 2022
/s/ Bill Lyons Bill Lyons	Director	February 25, 2022
/s/ Doniel Sutton Doniel Sutton	Director	February 25, 2022
/s/ Caroline Tsay Caroline Tsay	Director	February 25, 2022

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 December 31, 2015, 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.



	As of December 31					
	2016	2017	2018	2019	2020	2021
— \$100.00		\$133.40	\$152.50	\$211.80	\$327.30	\$485.20
— \$100.00		\$121.50	\$115.30	\$151.40	\$183.00	\$230.20
— \$100.00		\$148.80	\$144.30	\$225.10	\$284.50	\$366.80

(1) Our peer group consists of the following companies: Envestnet Inc., FactSet Research System Inc., Moody's Corporation, MSCI Inc., SEI Investments Company, and S&P Global 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 NAVEX Global, 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. Central on Friday, May 13, 2022.

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 selected questions on our website and in Form 8-Ks furnished to the SEC on a regular basis. If you have a question about our business, please send it to investors@morningstar.com.

Board of Directors

- ▲ Robin Diamonte
Chief Investment Officer of
Raytheon Technologies Corp.
- Cheryl Francis
Co-Chair, Corporate Leadership
Center

Steve Joynt
Former Chief Executive Officer,
DBRS, Inc.
- ▲■ Steve Kaplan
Neubauer Family Distinguished
Service Professor of
Entrepreneurship and Finance,
University of Chicago Booth
School of Business

Kunal Kapoor
Chief Executive Officer,
Morningstar, Inc.
- ▲ Gail Landis
Founding Partner of Evercore
Asset Management, LLC
- ▲■ William Lyons
Former President and Chief
Executive Officer, American
Century Companies, Inc.

Joe Mansueto
Executive Chairman and Chairman
of the Board, Morningstar, Inc.
- Daniel Sutton
Chief People Officer, Fastly, Inc.
- ▲ Caroline Tsay
Chief Executive Officer, Compute
Software, Inc.

Executive Officers

Bevin Desmond
Head of Talent and Culture

Jason Dubinsky
Chief Financial Officer

Danny Dunn
Chief Revenue Officer

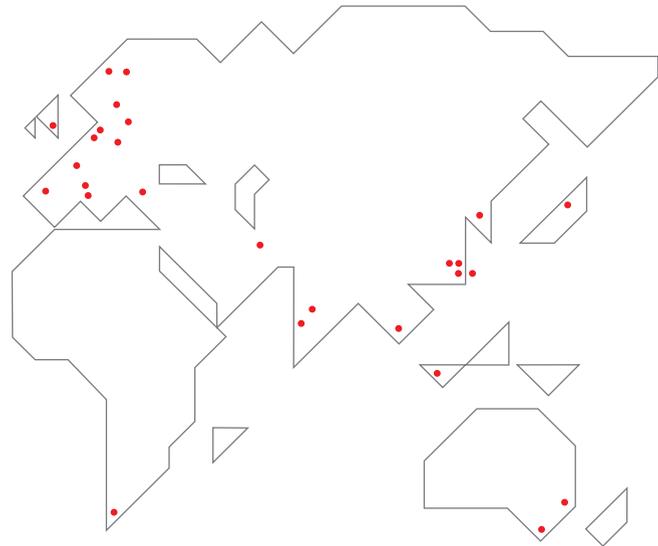
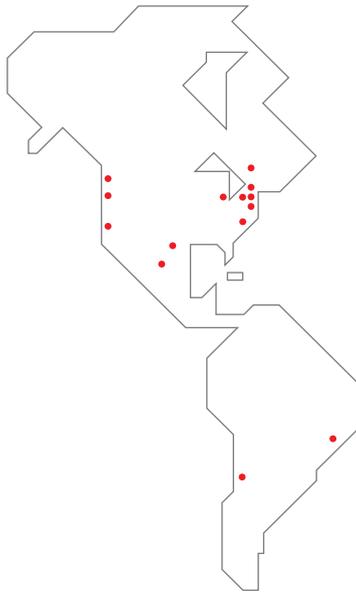
Kunal Kapoor
Chief Executive Officer

Joe Mansueto
Executive Chairman and
Chairman of the Board

● Member of audit committee

■ Member of compensation committee

▲ Member of nominating and corporate governance committee



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