

**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, 2023

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)

36-3297908

(I.R.S. Employer
Identification Number)

**22 West Washington Street
Chicago , Illinois
60602**

(Address of Principal Executive Offices) (Zip Code)

(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. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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, 2023 was \$ 5.1 billion. As of February 16, 2024, there were 42,728,182 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 2024 Annual Meeting of Shareholders, which will be filed not later than 120 days after the registrant's fiscal year ended December 31, 2023, are incorporated into Part III of this Form 10-K.

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Part I

Item 1. Business

Our Mission

Our mission is to empower investor success and 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 they can make better-informed decisions and realize success on their own terms.

Our Business

Morningstar, Inc. is a leading global provider of independent investment insights. 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 a wide range of market participants, including individual and institutional investors in public and private capital markets, financial advisors and wealth managers, asset managers, retirement plan providers and sponsors, and issuers of fixed-income securities. We also apply our investing expertise to managing assets for clients who prefer to employ the expertise of professional portfolio management teams. Since our founding in 1984, we've expanded our presence in global markets where investors need an independent view they can trust.

We structure our business to help investors in three key areas. First, we support individuals, financial advisors and wealth managers, asset managers, and institutions who make their own investment decisions. Through our Morningstar Data and Analytics and PitchBook segments and our Morningstar Sustainalytics products, our customers have access to a wide selection of investment data, fundamental equity research, manager research, private capital markets research, environmental, social, and governance (ESG) ratings, fund ratings, and indexes directly on our proprietary desktop or web-based software platforms, or through direct data feeds, direct shares, streaming capabilities and application programming interfaces (APIs). Major product areas and products within our Morningstar Data and Analytics segment include Morningstar Data, Morningstar Direct, Morningstar Advisor Workstation, and Morningstar Research, while the PitchBook segment includes the PitchBook Platform and data as well as Leveraged Commentary & Data (LCD).

Second, through our Morningstar Wealth and Morningstar Retirement segments, we provide investment management services and advisor tools and platforms. Morningstar Wealth's managed portfolio offerings help advisors deliver investor-friendly products based on our valuation-driven, fundamentals-based approach to investing, applying Morningstar's expertise in asset allocation, investment selection, and portfolio construction. Meanwhile Morningstar Wealth's practice and portfolio management software allows advisors to continually demonstrate their value to clients, from aggregating client accounts to provide visibility into holdings and creating an initial investment proposal, to reporting portfolio performance and providing automated rebalancing. Through Morningstar Retirement, we help retirement plan sponsors and retirement specialist advisors build high-quality savings programs for employees. Morningstar Wealth includes Investment Management, Morningstar.com, and Morningstar Office. In addition, we provide investable solutions to build portfolios based on unique Morningstar intellectual property through our Morningstar Indexes products. Investors also use our indexes as benchmarks, to create investable products based off our proprietary research, or to construct portfolios using customized indexes.

Finally, through our Morningstar Credit segment, Morningstar DBRS provides independent credit ratings services for financial institutions, corporate and sovereign entities, and structured finance products and instruments.

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 mission of empowering investor success. We believe that focus on 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 Data, Research, and Ratings

Morningstar's trusted data, research, and ratings underpin everything we do across our business. Our data covers a wide range of investment offerings, including managed investment products, publicly listed companies, private companies, fixed-income securities, private credit, and bank loans.

We focus our data, research, and ratings 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. In 2023, we united our two forward-looking managed investment ratings—the Morningstar Analyst Rating and the Morningstar Quantitative Ratings for funds—into a single rating: the Morningstar Medalist Rating. Decades of experience blending human and machine-driven research and analysis already underpinned our qualitative and quantitative ratings approaches. Combining them into a one ratings system reflects our confidence in the efficacy and quality of the combination at scale. The combination leaves underlying methodologies for analyst and quantitative ratings unchanged but simplifies how we present our ratings to investors and makes it easier to analyze, select, and monitor managed investments. The Medalist Rating covers more than 179,000 mutual funds, exchange-traded funds (ETFs), separately managed accounts, and model portfolios and more than 412,000 share classes worldwide. This 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 their Morningstar category peers. We also publish 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 to make investment decisions.

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

As of December 31, 2023, we had more than 130 manager research analysts and other researchers globally, including teams in North America, Europe, Australia, and Asia.

Public company and private market 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 1,600 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 Morningstar 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, price transactions, assess risks and identify notable company sets in the private capital markets. As of December 31, 2023, the team provides coverage of the private equity, venture capital, real assets, leveraged loan, high-yield bond, 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, 2023, we had 128 public equity researchers and 35 private markets researchers 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 59,000 publicly traded companies across Morningstar's solutions and cover 3.8 million privately-held companies through the PitchBook Platform.

Credit ratings

Morningstar DBRS provides global credit ratings as the world's fourth largest credit rating agency. We rate more than 4,000 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.

As of December 31, 2023, we had 549 credit rating analysts and analytical support staff based in the United States (U.S.), Canada, Europe, and India.

ESG ratings

Morningstar Sustainalytics' ESG Risk Ratings empower investors by providing them with the tools to assess financially material ESG risks that could affect the long-term performance of their investments at the security, fund, and portfolio levels. The ratings introduce a single measurement unit to assess ESG risks across 20 different material ESG issues (MEIs). Unlike other ESG ratings that are based on a relative, best-in-class approach, Morningstar Sustainalytics' ESG Risk Ratings are designed to provide 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, 2023, we rated more than 19,000 companies worldwide, and offered more than 13,700 ESG Risk Ratings free to the public so that any investor can benefit from our research.

As of December 31, 2023, we employed over 750 ESG research and data analysts based in the U.S., Canada, Europe, and Asia.

Our Segments and Products

We operate our business through five reportable segments: Morningstar Data and Analytics, PitchBook, Morningstar Wealth, Morningstar Credit, and Morningstar Retirement. All remaining operating segments and business activities that are not significant enough to require separate reportable segment disclosure are referred to as, and included in, Corporate and All Other in our Consolidated Financial Statements.

Morningstar Data and Analytics

Morningstar Data and Analytics provides investors comprehensive data, research and insights, and investment analysis to empower investment decision-making. Morningstar Data and Analytics includes Morningstar Data, Morningstar Direct, Morningstar Advisor Workstation, Direct Web Services, Morningstar Research Distribution, and Morningstar Publishing System. These products provide seamless access to Morningstar's managed investment, public equities, and fixed-income data, with a focus on making the work of portfolio managers, product developers, marketers, advisors, and analysts more efficient and effective. Morningstar Data, Morningstar Direct and Morningstar Advisor Workstation are the largest product areas in this segment.

Morningstar Data's licensed data gives asset managers, redistributors, and wealth managers independent, comprehensive, and timely data and research they can use to empower investor success. Our offering spans managed investments (including mutual funds, ETFs, separate accounts, collective investment trusts, and model portfolios), equities, and fixed income securities and is available globally.

We are well-known for enriching raw data on managed investments 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 sets, 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.

Clients license Morningstar Data to build transparent products and services that investors, from those just starting out to sophisticated and high net worth individuals, can understand and use to reach their investing goals. Morningstar Data is used to serve retail investors and their intermediaries, supporting 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 has increased as clients build digital solutions, prepare for regulatory requirements, and incorporate automation, artificial intelligence (AI), machine learning, and other forms of data analytics into their workflows. We're committed to covering our clients' whole portfolios and offering the data they need to make informed investment decisions.

Our goal is to offer clients data that is available quickly and in the format most appropriate for their workflows. Our data feeds enable our clients to discover the data that they need, and to schedule delivery in S3, FTP, CSV, XML, JSON, Text, and TSV output formats. We provide access to Morningstar Data utilizing an application programming interface (API) format to download and process large data files. The Morningstar Data team applies emerging methods in AI to regression, classification, deep learning, natural language processing, and optical character recognition to extract data from structured and unstructured content. The Morningstar 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 Morningstar 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.

Pricing is based on the number of investment vehicles, 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."

In 2023, Morningstar Data's largest markets were North America and Europe.

Our main global competitors for mutual fund data include FE fundinfo and LSEG (Refinitiv). We also compete against smaller players that focus on local or regional information.

For market and equity data, we primarily compete with Bloomberg, FactSet, ICE Data Services, LSEG (Refinitiv), and S&P Global.

We estimate that the annual revenue renewal rate for Morningstar Data was approximately 104% in both 2023 and 2022.

Morningstar Direct is an investment-analysis and reporting platform that delivers rich data and analytics across asset classes and streamlines the creation and distribution of collateral to client-facing groups and internal teams. Built on Morningstar's global database of registered and non-registered securities and data from third-party providers, the platform helps equity and multi-asset strategy asset managers with market research, product positioning, competitive analysis, and distribution strategies. Wealth managers predominately use the tool to assist with manager research, fund selection, and the construction, monitoring, and distribution of model portfolios.

In 2023, we laid the groundwork for the future of Morningstar Direct with several important releases. Direct Lens is a new experience inside Morningstar Direct that unifies our portfolio capabilities in a clear and intuitive interface, so users spend less time searching for the right tools and more time analyzing data. Self-service data feeds in Morningstar Direct give users a new way to get the data they want, when they need it, in the format they need. And the Morningstar Data Python package gives data scientists, data strategists, and quantitative analysts access to our data in favorite coding environments, so they can combine our data with proprietary or third-party data to explore new frontiers of data science. During the year, we also expanded the datapoints, calculations, and portfolio-level data in Morningstar Direct, enriching our data coverage across fixed income, ETFs, ESG, model portfolios, and alternatives to reflect investors' more complex and dynamic strategies.

Morningstar Direct is a desktop application that is installed locally on users' computers. The Morningstar Direct desktop application connects over the internet to databases and application servers hosted primarily in Morningstar data centers, with some use of cloud (AWS) infrastructure. A large portion of Morningstar Direct's features and functionality are delivered using modern web components and frameworks delivered within the legacy application.

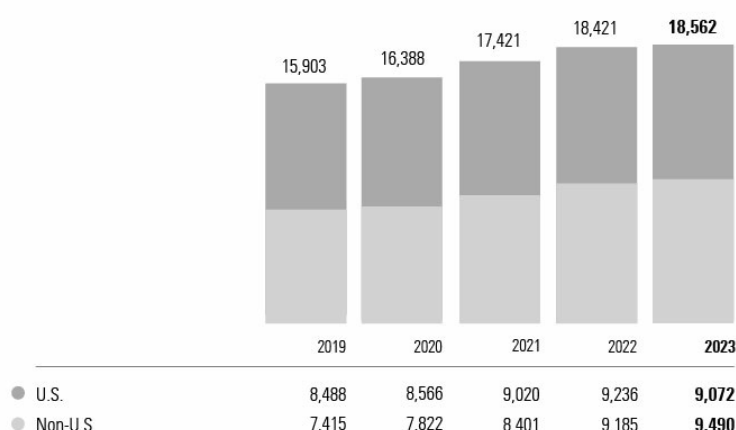
Pricing for Morningstar Direct is based on the number of licenses purchased. We have simplified our licensing model to eliminate charges for add-on features to maximize our customer experience and allow users to extract more value from our products.

Morningstar Direct's primary markets are North America and Europe.

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

We estimate that our annual revenue renewal rate for Morningstar Direct in 2023 was approximately 101% versus 99% in 2022.

Morningstar Direct Licenses



Morningstar Advisor Workstation is a connected suite of tools spanning proposal creation, investment research, investment planning, and more designed to help our clients provide great advice to their clients. It is powered by Morningstar's data, research, investor profiling tools, and robust portfolio analytics.

The software is typically sold through an enterprise contract and is primarily for retail advisors because of its strong ties and integration with home-office applications and processes and a library of Financial Industry Regulatory Authority (FINRA) reviewed reports that meet compliance needs. It allows advisors to build and maintain a client portfolio database that can be fully connected with the home-office firm's back-office technology and resources. This helps advisors present and illustrate their portfolio investment strategies, show the value of their advice, and meet existing and emerging regulatory requirements, all at scale.

In 2023, we continued to enhance Morningstar Advisor Workstation. We launched the Investment Planning Experience, a new workflow which helps advisors meet demand for more personalized advice for investors. We also introduced Enterprise Analytics, which offers firms deeper visibility and insights into firm wide advisor activity, including better visibility into compliance risk from proposal generation. The compliance dashboard supports firm monitoring activities by sharing insights into how proposals align to firm compliance policies for key regulations such as Regulation Best Interest in the U.S. and the Client Focused Reforms in Canada.

We also continued to build out the App Hub ecosystem, a two-sided digital marketplace initially introduced in 2022 where clients can access third-party applications that connect into the platform. Enhancements to the ecosystem included making several new app providers available to advisors, including Asset-Map and iCapital. With access to a growing marketplace of advisor-tech and advisor-services applications, our clients can build on their subscription of Morningstar Advisor Workstation with additional tools designed to help them create better and differentiated advice.

Pricing for Morningstar Advisor Workstation for our enterprise clients varies based on the number of users, the number of research databases licensed, and level of functionality deployed. We charge fixed annual fees per licensed user for a base configuration of Advisor Workstation, but pricing varies significantly based on the scope of the license. We also provide a three-tiered pricing model for individual subscribers who are not affiliated with an active enterprise client.

Morningstar Advisor Workstation is offered in the U.S. and Canada.

Competitors for Morningstar Advisor Workstation include Broadridge, CapIntel, Orion, Riskalyze, and YCharts. 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 2023 was approximately 93% versus 89% in 2022.

PitchBook

PitchBook provides investors with access to a broad collection of data and research covering the private capital markets, including venture capital, private equity, private credit and bank loans, and merger and acquisition (M&A) activities. Investors can also access Morningstar's data and research on public equities. The PitchBook segment is primarily comprised of the PitchBook Platform, but also includes direct data (which is also included in the PitchBook product area as reported in 2023), as well as buy-side equity data and LCD.

The **PitchBook** Platform is an all-in-one web-hosted solution 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 PitchBook for a central, easy-to-use platform that provides access to the broadest collection of data and research covering the private capital markets as well as Morningstar's data and research on public equities. In addition to the PitchBook Platform, PitchBook also offers a mobile application, customer relationship management (CRM) integrations, Excel and PowerPoint plug-ins, data feeds, and flexible, à la carte data solutions that allow clients to access a variety of data points on demand.

To accommodate our clients' diverse needs, the platform offers data and analytical tools including company profiles for both private and public companies, advanced search functionality, and other features that help to inform discovery and research, and optimize workflow by surfacing relevant information and insights. Our clients source deals, raise capital, build buyer lists, benchmark funds, and network with the PitchBook Platform.

The 2022 acquisition of LCD added leveraged loan and high-yield bond data, news, and analysis to PitchBook's capabilities. During 2023, PitchBook substantially completed the integration of LCD's core data offering and LCD research and news onto the PitchBook Platform, adding significantly to PitchBook's existing debt transaction, issuer, and borrower coverage and positioning it as a one-stop shop for private finance transaction data, news, and research. PitchBook's integration of LCD data introduced 53,000 debt financing rounds, 92,000 loan and bond facilities underneath those financing rounds, and 15,000 issuers, in addition to PitchBook's existing database of more than 400,000 private credit transactions. During 2023, the PitchBook Platform's private credit coverage was expanded to include data on an additional 9,800 credit events, 2,200 unique loan transactions and 330 unique collateralized loan obligations. We also launched the Credit Pitch newsletter, which had a subscriber base of more than 240,000 as of December 2023.

In 2023, PitchBook continued to expand the reach of its public and private equity data and introduced new capabilities to inform investor strategies and provide context on market shifts and the expansion and contraction of verticals. Key enhancements included the introduction of a new clinical trials dataset to evaluate biotech and pharma companies, and the VC Exit Predictor, a proprietary tool and scoring methodology to predict exit outcomes for VC-backed companies. At the same time, PitchBook continued to enhance its core datasets across global venture capital, private equity, and M&A, with a focus on the expanding number of companies, deals and funds under coverage in the Middle East, Africa, Latin America and Asia-Pacific regions as it added approximately 80,000 deals in these regions. Finally, to support deal execution and valuation workflows, PitchBook enhanced its public equity datasets and capabilities with the addition of more detailed industry metrics and improved timeliness and quality of information on public company profiles.

Additionally, PitchBook invested in new capabilities and data sets to help limited partners (LPs) make better allocation decisions using our comprehensive and transparent fund data. These include a new benchmark experience to streamline performance benchmarking workflows and the introduction of the Manager Scoring tool, a new methodology that helps limited partners discover and evaluate top performing private fund managers.

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

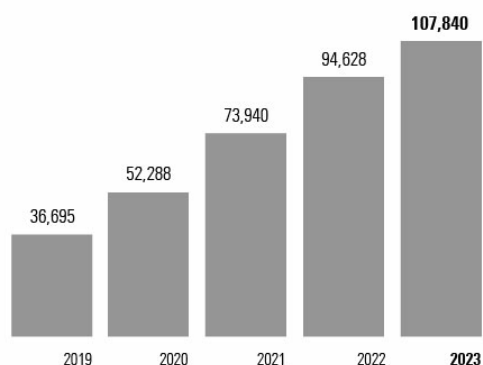
In 2023, PitchBook's largest markets were North America and Europe.

PitchBook's main competitors are CB Insights, Preqin, and S&P Global Market Intelligence as well as certain smaller, niche competitors.

In 2023, we estimate that our annual revenue renewal rate for the PitchBook Platform was approximately 112% versus 121% in 2022.

PitchBook had 107,840 licensed users worldwide as of December 31, 2023.

PitchBook Platform Licenses



Morningstar Wealth

Morningstar Wealth's mission is to empower both advisors and investors to succeed. Morningstar Wealth brings together Investment Management, which includes our model portfolios and wealth platforms; practice and portfolio management software for registered investment advisers (RIAs) (Morningstar Office); data aggregation and enrichment capabilities (ByAllAccounts); and our individual investor platform (Morningstar.com). Morningstar Wealth products are designed to streamline workflows, and help advisors deliver scalable and customized advice, with the ultimate goal of helping clients achieve their long-term financial goals. As of December 31, 2023, Morningstar Wealth assets under management and advisement (AUMA) totaled \$55.5 billion.

Investment Management's flagship offering is Morningstar® Managed Portfolios, 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, and Australia. We target like-minded advisors who hire us to manage a substantial portion of their client's assets in alignment with our principles of 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 2023, net flows exceeded \$2.8 billion across our Managed Portfolios.

Morningstar Managed Portfolios are available through two core distribution channels: the Morningstar Wealth Platforms, which offer fee-based discretionary asset management services, also known as a turnkey asset management program (TAMP) in the U.S.; 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 offer the Morningstar Wealth Platforms in the U.S. and in Europe, Middle East, and Africa (EMEA). We serve as a fund and model provider in our other international markets.

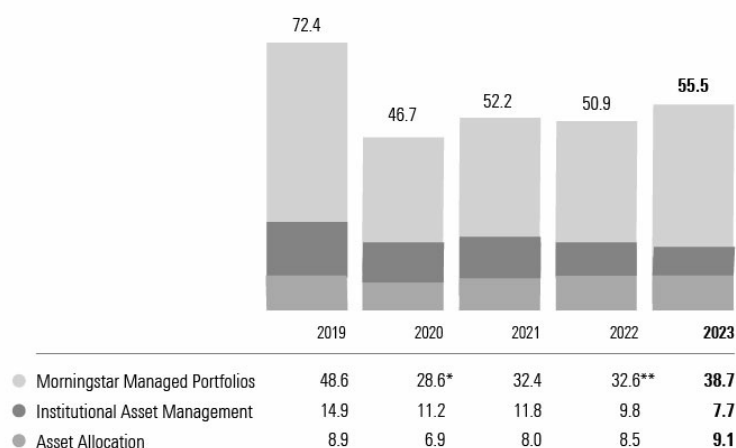
Our U.S. and EMEA wealth platforms are end-to-end digital investing experiences, designed to meet the unique needs of the local region and offering access to our model portfolios. Advisors working with our U.S. wealth platform also have access to a curated selection of third-party portfolios that have undergone a rigorous selection process, as well as our direct indexing capabilities, which allow advisors to personalize index portfolios to address their clients' individual preferences and tax management needs. Our proprietary wealth platforms offer 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 wealth platform allows U.S.-based advisors share fiduciary responsibility with us.

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, 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 U.S. Morningstar Wealth Platform and the Morningstar Wealth Platform itself, our primary competitors are AssetMark, Envestnet, Orion/Brinker Capital, and SEI Investments Company. Our primary strategist offering competitors are BlackRock, Russell, and Vanguard in the U.S., and we face competition from Financial Express and Tatton in EMEA, and Elston, Iress, Lonsec, Russell, and Zenith 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 advisers that provide investment strategies or models on these platforms.

**Investment Management
Assets Under Management/Advisement (\$bil)**



* In 2020, 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%.

** Includes \$4.4 billion of assets related to the acquisition of Praemium's U.K. and international business in the second quarter of 2022. Excluding Praemium, assets in Morningstar Managed Portfolios would have declined 13.0% compared with the prior year, reflecting the broad decline in global markets.

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 for Morningstar Investor, Morningstar Premium, and internet advertising sales. Morningstar Investor is the successor to Morningstar Premium in the U.S. and Australia.

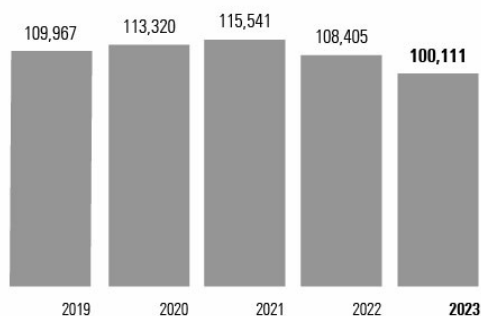
Our Morningstar Investor offering is focused on providing transparency into investment choices to enable investors to make informed decisions about their portfolios. Members have access to proprietary Morningstar research, ratings, data, and tools, including analyst reports, portfolio management tools (such as Portfolio X-Ray), and stock and fund screeners. We offer Investor and Premium memberships in Australia, Canada, Italy, the U.K., and the U.S. Unlike many consumer-facing websites, Morningstar.com sells advertising 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 2023, we continued to invest in the technology platform supporting Morningstar.com, with notable enhancements including data infrastructure and web performance upgrades. These allowed us to introduce new experiences such as our Asset Management Company pages and our revamped stock quote page with new portfolio exposure and customizable data point functionality. We also continued to develop our individual investor digital portfolio and research tools in Morningstar Investor, which are designed to make it easier for individuals to better understand what they own across their full portfolio, find new investment ideas, and make more informed investment decisions. We charge a monthly or annual subscription fee for Morningstar Investor and Morningstar Premium and an annual subscription fee for Morningstar Newsletters.

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 Seeking Alpha, The Motley Fool, and Zacks Investment Research, also compete with us for paid membership. In addition, free or "freemium" websites, such as Dow Jones/Marketwatch and Yahoo Finance, are also competitors for some customers. Kiplinger, TheStreet.com, and The Wall Street Journal all compete for the advertising dollars of entities wishing to reach an engaged audience of investors.

As of December 31, 2023, Morningstar.com had more than 100,000 paid Morningstar Investor members in the U.S. plus an additional roughly 12,500 Premium and Morningstar Investor members across other global markets.

Morningstar Investor Memberships (U.S.)*



* In 2022, Morningstar Investor was launched as the successor to Morningstar.com Premium.

Morningstar Credit

Morningstar Credit provides investors with credit ratings, research, data, and credit analytics solutions that we believe contribute to the transparency of international and domestic credit markets. Morningstar Credit includes Morningstar DBRS and Morningstar Credit data and credit analytics.

Morningstar DBRS is the fourth largest credit rating agency in the world, offering a wide range of credit rating services and products. Morningstar DBRS 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 Morningstar DBRS'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. Morningstar DBRS's credit rating methodologies are publicly available and support the objectivity and integrity of the credit rating process. Morningstar DBRS also offers a micro-website dedicated to ESG factors deemed relevant to credit ratings analysis.

In addition to ratings and research opinions, Morningstar DBRS also offers data products 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.

In 2023, Morningstar DBRS's largest markets by revenue were the U.S., followed by Canada and EMEA.

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

For 2023, we estimate that transaction-based fees comprised 50% of Morningstar DBRS's revenue; the remainder can be classified as transaction-related, or revenue generated by annual fees tied to surveillance, research, and other services.

Morningstar Retirement

Morningstar Retirement offers products designed to help individuals reach their retirement goals. Its offerings include managed retirement accounts (MRA), fiduciary services, Morningstar Lifetime Allocation funds, and custom models. As of December 31, 2023, Morningstar Retirement AUMA totaled \$230.4 billion.

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.

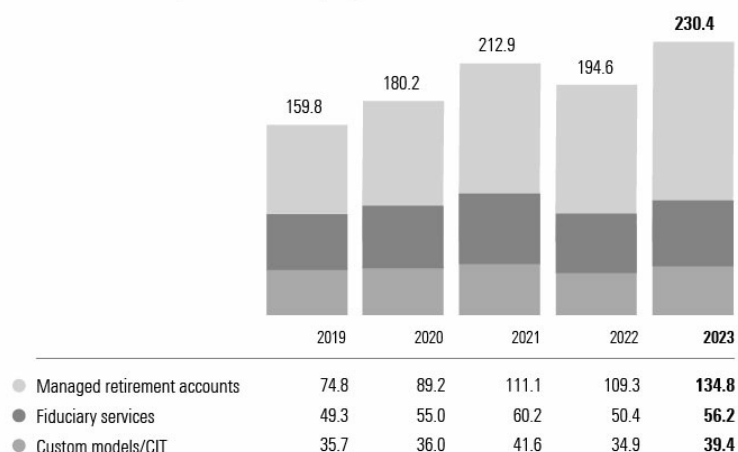
Within the managed accounts market, there are three large players (MRA, Edelman/Financial Engines, and Fidelity) and several smaller players, which are a combination of legacy and newer players. Technology-based companies like Pontera are also creating competing services to our MRA by developing a back door into an individual's retirement account that wealth managers can use to manage their clients' retirement assets in real time. 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 is designed to help 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. 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 collective investment trusts (CITs) offered by Benefit Trust to retirement plan sponsors. For the Lifetime Allocation Funds, we compete with other providers of target-date funds.

In 2023, we added around 250 plans and 5,100 participants across the 18 RIAs and one asset manager on our advisor managed accounts network. We also onboarded one of the nation's largest retirement plans onto managed accounts, developed a new IRA managed accounts offering, and expanded our Morningstar Plan Advantage platform with our two existing large broker dealer clients.

Pricing for Morningstar Retirement 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.

**Morningstar Retirement
Assets Under Management/Advisement (\$bil)**



Corporate and All Other

Corporate and All Other includes unallocated corporate expenses as well as financial results from Morningstar Sustainalytics and Morningstar Indexes.

Morningstar Sustainalytics provides ESG data, research, analysis, and insights to institutional investors globally, covering equity, fixed income, and sovereign asset classes. Our flagship ESG Risk Rating allows investors to assess financially material ESG risks that could affect the long-term performance of their investments. Morningstar Sustainalytics also serves corporate issuers and banking institutions through its corporate solutions products and is a leading provider of green bond Second Party Opinions.

In addition to our risk management products, Morningstar Sustainalytics provides a range of sustainable-investing solutions for investors and financial professionals. We offer products such as our European Union Taxonomy solution, which are designed to enable investors to respond to emerging regulation surrounding sustainability reporting. Our data allows values-based investors to limit their exposure to controversial areas by applying exclusions to personalize their portfolios. Our active ownership data allows investors to understand if their sustainability funds are voting assets under management towards sustainability issues and whether a non-ESG fund is advancing other resolutions.

We've also expanded our data coverage and ratings to address specific sustainability themes. In 2023, we launched a Low-Carbon Transition Rating (LCTR) which provides a forward-looking, science-based evaluation of a company's alignment with a net-zero pathway. The rating examines a firm's current management practices and answers the question: to what degree would the world warm if all companies behaved like the company examined?

In 2023, Morningstar announced a new strategic structure that more tightly connects the index capabilities of Morningstar Indexes with the ESG data, ratings, and research of Morningstar Sustainalytics.

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

In 2023, Morningstar Sustainalytics' largest markets were EMEA and North America.

Major competitors for Morningstar Sustainalytics include FTSE Russell, Moody's, MSCI, and S&P Global. While the traditional ESG research market continues to 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 AI, are facilitating these trends by accelerating the sourcing and use of unstructured ESG data.

We estimate that our annual revenue renewal rate for Morningstar Sustainalytics' license-based products was approximately 97% in 2023 versus 100% in 2022.

Morningstar Indexes offers a broad range of market indexes that can be used as performance benchmarks and as the basis for investment products and other portfolio strategies for a wide range of retail and institutional investor clients. Drawing on Morningstar's intellectual property, our global family of indexes tracks major global regions, strategies, and asset classes, including equity, fixed income, and multi-asset as well as private markets and sustainability.

We believe that investors and financial service providers today are looking for better value from their index provider, with demand for broad market indexes that are high quality but also inexpensive. We also believe that strategic beta indexes for investment strategies and market exposure, of growing importance to all investors, should be unique, research-driven and deliver better outcomes to investors. Morningstar is responding to this need by offering high-quality core beta benchmarks while delivering Morningstar research and insights through unique and differentiated strategic beta indexes.

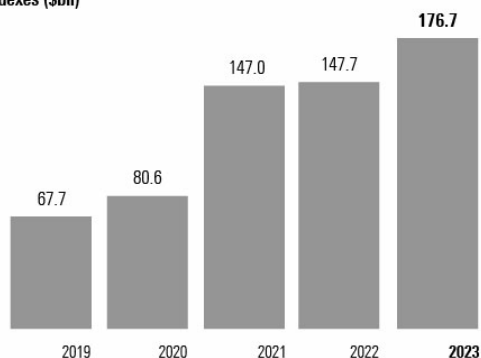
In 2023, Morningstar Indexes completed a multi-year global project to bring index calculations in-house, significantly decreasing our reliance on outside vendors and bringing additional benefits to our clients and the business. We also introduced a number of new product innovations including the launch of global single factors indexes working with the Morningstar quantitative research team, the Next Gen AI Index in collaboration with Morningstar Equity Research, the Global Unicorn Industry Vertical Indexes working with PitchBook and Sustainable Activities Involvement Indexes with Morningstar Sustainalytics. Morningstar Indexes also broadened channels of distribution in 2023, with major advances in index licensing for direct indexing in the U.S. and for structured products in Europe. Further, in June 2023, Morningstar announced a new strategic structure that more tightly connects the index capabilities of Morningstar Indexes with the ESG data, ratings, and research of Morningstar Sustainalytics.

We license Morningstar Indexes to numerous institutions to use as the basis for ETFs, exchange-traded notes, mutual funds, derivatives and separately managed accounts. Firms license Morningstar Indexes for 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, pricing varies based on the level of distribution, the type of user, and the specific indexes licensed. In addition, Morningstar Indexes offers index calculation and administration services through its growing Index Services business.

In 2023, Morningstar Indexes' largest markets were North America and EMEA.

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

Asset Value Linked to Morningstar Indexes (\$bil)



Our Strategy

OUR MISSION

Empowering investor success



OUR STRATEGY

Delivering insights and experiences essential to investing



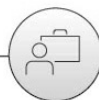
Our values

- Investors first
- Great products
- Great people
- Uncompromising ethics
- Entrepreneurial spirit
- Sustainable responsibility
- Financial success



Our work

- Proprietary data
- Forward-looking research
- Effective investment strategies
- Meaningful analytics



Our clients

- Individuals
- Advisors & wealth managers
- Asset managers
- Institutional asset owners
- Private market investors
- Fixed-income market participants
- Retirement participants



Our brand

- Investor advocacy
- Independence
- Transparency
- Long-term focus

Our strategy is to deliver insights and experiences that make us essential to investor workflow. 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 provide our customers with demonstrable value from our solutions making them reluctant to undertake the cost of switching to other providers.

We are currently focused on the following 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 empowering the modern investor 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 to advisors, facilitating great outcomes for the clients they serve around the world.
- Providing regulatory and compliance solutions for our wealth, buy-side, and asset management clients.
- 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.

Leverage advances in AI to drive innovation across internal and external products and services

Morningstar has always been at the forefront of technology, and we believe that AI is a significant technology that will redefine the investment landscape. We use the Intelligence Engine – the core for all Morningstar's AI developments – across our teams to get better and faster at our work, by speeding up our data collection processes, detecting data errors and system outages, increasing our support team's responsiveness, and improving our client interactions throughout the entire buying journey. This includes:

- Combining the breadth of Morningstar's data, research, and analytical capabilities with latest advances in AI to provide better, faster, and targeted insights to investors.
- Utilizing AI to improve the quality and efficiency of data collection, synthesis, and dissemination processes.
- Using AI as a tool to improve business productivity and enable team members to focus on more high-value work.

We seek to apply AI the Morningstar way—thoughtfully to provide investors the benefits of AI without compromising the integrity and privacy of their data. The Intelligence Engine is designed to advance our mission and support good investor outcomes by taking an approach that is ethical, secure, trustworthy, transparent, and accountable.

Drive operational excellence and scalability to support growth targets

Morningstar has grown significantly in the last few years, and as we have continued to focus on growth in 2023 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's people and culture strategy is centered on providing a focused and differentiated approach to human capital driven by business needs. We are committed to cultivating a culture that develops talent and drives innovation. This includes:

- Strengthening the organization by investing in the people we have today and boosting resilience in our teams by building the bench of talent for the future. To drive a high-performance culture, we are focused on building the next generation of leaders at Morningstar with programs focused on our top performers, supporting and developing our managers, and modernizing our performance and talent management processes.
- Driving operational scale by continued enhancements to our integrated talent strategy focused on workforce, location, talent development, and early career programs; automating processes as appropriate; and leveraging our internal communications capabilities to meet the needs of our global employee footprint.
- Monitoring organizational well-being, including globally operationalizing workforce metrics to detect and mitigate structural barriers to inclusion and equity.

Our People and Culture

At Morningstar, our people are our most important asset. We are committed to fostering an environment where the people who power our mission know their ideas are welcome, their voices are heard, and their contributions are rewarded.

Our human capital management efforts are managed by the chief people officer and implemented with support from leaders across the company, with oversight from our chief executive officer (CEO) and board of directors. The compensation committee of our board of directors approves incentive plan design and performance goals and reviews emerging compensation policies, practices, and potential risks. In addition, human capital management efforts are implemented by leaders across the company.

As of December 31, 2023, we had 11,334 permanent, full-time employees around the world. Approximately 40% of our employees work in India, 30% in the U.S., 11% in Continental Europe, 8% in Canada, 7% in the United Kingdom (U.K.), and the remainder in Australia, Asia (ex-India), and other regions.

Diversity, Equity, and Inclusion

We believe that diverse teams make better decisions and that our colleagues' diverse backgrounds, beliefs, and experiences make Morningstar a stronger firm. As a global employer, our goal is to build an inclusive environment that encourages open dialogue, sparks creativity, and fuels innovation that may lead to better business outcomes.

As of December 31, 2023, approximately 40% of our employees are female. As of the same date, 50% of our board of directors are female. In the U.S., our employee population identifies as approximately 65% White, 22% Asian, 5% Hispanic, 5% Black, and 3% Mixed Race and Other.

Morningstar's adjusted pay gap provides an assessment of equal pay for equal work. It examines a group of employees performing substantially similar work and highlights individuals with lower pay relative to their measured peer group. In our latest adjusted pay gap analysis, we found that, overall, women are paid 98.3% of what men are paid, and U.S. underrepresented minorities are paid 98.7% of what the U.S. non-underrepresented minorities are paid. Employees who were identified through this examination received a pay increase, separate from their ordinary course annual compensation consideration, as part of our October 1, 2023 pay cycle.

For additional breakdowns on our diverse representation by organizational level and functional areas, as well as more details on Morningstar's pay equity program, see Morningstar's 2023 Corporate Sustainability Report (expected to be published in spring 2024). To comply with local regulations, Morningstar also publishes a U.K. Pay Gap report available at gender-pay-gap.service.gap.uk.

Employee Engagement

Our organization's "people analytics" team actively monitors and shares metrics related to the employee experience. These key performance indicators include employee satisfaction, intent to stay, discretionary effort, and enablement. We ask the same questions of our employee base routinely to best understand trends over time. We also evaluate perceptions of managers, psychological safety, and overall well-being via methods such as surveys, exit interviews, and focus groups.

Based on our average measurement across the year, Morningstar's overall engagement score declined to 69% compared to 80% in 2022. In 2023, we applied workforce reductions in some business units and exercised cost containment measures which impacted our overall scores. Our people and culture team in partnership with our executive leadership will continue to monitor and understand employee sentiment and respond with empathy to support employees. Morningstar's global turnover increased to 22% in 2023 from 19% in 2022, however, this increase was driven by involuntary turnover largely due to the significant reduction and shift of our China operations and targeted reorganizations in certain areas of the business. Involuntary turnover increased to 10% in 2023 from 3% in 2022. By contrast, voluntary turnover dropped from 16% in 2022 to 12% in 2023.

Morningstar's efforts to reward and support our colleagues reflect our belief that people are central to our success. We offer a variety of benefits through a total rewards package that supports the financial, physical, emotional, and social well-being of our colleagues. In 2023, our benefits expansion efforts focused on expanded digital health capabilities for employees globally and enhancing mental health support in the U.S.

Professional Growth

Morningstar offers a variety of educational and career development programs to ensure ongoing growth opportunities for all colleagues. Our goal is to provide a meaningful set of development options and experiences for colleagues at all levels, in all relevant job fields, and in all locations across the company. Notably, we offer our employees annual educational stipends to spend on their choice of professional development resources, while also providing financial support for continuing education and the pursuit of professional certifications.

We also offer programs for employee learning and growth. The Morningstar Development Program is the primary entry point to Morningstar for recent college graduates. Through this program, we place new hires into many different entry roles and offer the flexibility to explore and learn through guided placements into subsequent roles.

The program in its original design is currently active in the U.S., Canada, the U.K., and Spain. A modified version of the program has been piloted in India for early entry talent. For those further along in their career, Morningstar provides a learning journey for leaders and managers. Our Advancing Leaders Program curates learning modules designed around leadership competencies that we look to develop in existing and aspiring leaders throughout the organization.

A detailed list of our global benefits offerings can be found in Morningstar's 2023 Corporate Sustainability Report (expected to be published in spring 2024).

Major Customer Groups

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

- Advisors and wealth managers (including independent financial advisors and those affiliated with Registered Investment Advisors (RIAs), broker/dealers or other intermediaries)
- Asset managers (including fund companies, insurance companies, and other companies that build and manage portfolios of securities for their clients)
- Institutional asset owners and consultants
- Fixed-income security issuers and arrangers
- Private market investors
- Retirement (including retirement plan providers, advisors, and sponsors)
- Individual investors

Advisors and wealth managers

Financial advisors are professionals who offer guidance on different aspects of personal finance, aiding individuals and businesses in making more informed investment decisions to reach their financial goals. They can work independently or within financial services firms and often possess certifications or licenses like Certified Financial Planner (CFP), Chartered Financial Analyst (CFA), or Series 7, based on the services they provide and the regulatory standards in their area.

This customer group typically includes independent advisors at RIA firms, advisors affiliated with independent broker/dealers, dually registered advisors (who have the ability to offer brokerage services and investment advisory services), and advisors who are employees of a broker/dealer. These broker/dealers include wirehouses, regional broker/dealers, and banks, which together with RIA firms help comprise the wealth manager component of this customer group.

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 there were more than 327,000 financial advisors in 2022 according to recent data from the U.S. Bureau of Labor Statistics. 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 allowing advisors to provide better recommendations for their clients. We sell our advisor-related solutions directly to independent financial advisors and through enterprise licenses, which allow financial advisors associated with the licensing firm to use our products. We also sell certain solutions directly to wealth managers. Our main products for financial advisors include products in the Morningstar Data and Analytics, Morningstar Wealth, and Morningstar Retirement segments including Morningstar Advisor Workstation, Morningstar Office, Morningstar Managed Portfolios, and Advisor Managed Accounts. In addition, our main products for wealth managers include Morningstar Data and Morningstar Direct in the Morningstar Data and Analytics segment.

Asset management firms

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 with our independent approach, investor-centric mission, and thought leadership.

We serve asset managers through our Morningstar Data and Analytics and Morningstar Credit segments. The main products we offer for asset management firms include Morningstar Direct, Morningstar Data, and Morningstar Indexes. For the buy side, the main products include Morningstar Research, Morningstar DBRS, Morningstar Data, Morningstar Direct, and Morningstar Sustainalytics.

Institutional asset owners and investment consultants

Institutional asset owners operate in a fiduciary capacity on behalf of their beneficiaries, overseeing large pools of capital, which according to WTW 2023 Global Pension Study, in aggregate exceed \$100 trillion in assets under management across public pension funds, sovereign wealth funds, endowments, foundations, corporate pensions, and insurance general accounts.

Investment consultants serve these organizations in an advisory capacity, aiding in the development of investment policy, conducting manager due diligence, risk management and performance reporting. We offer a range of solutions to this diverse set of sponsoring entities, investors and advisors across multiple geographies, including through the Morningstar Data and Analytics and PitchBook segments. Our primary products for this customer group include Morningstar Direct (in Morningstar Data and Analytics), Morningstar Indexes, Morningstar Sustainalytics, and PitchBook.

Private market participants

PitchBook covers the full lifecycle of venture capital, private equity, private credit, and M&A activities, including the limited partners, investment funds, lenders, and service providers involved. We serve this customer group through our PitchBook segment. Our main product for this customer group is the PitchBook Platform, an all-in-one research and analysis web-hosted solution 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 is also delivered through the platform. PitchBook also makes our data available to clients in more flexible formats such as Application Programming Interfaces (APIs) and feeds.

As of December 31, 2023, PitchBook served over 10,600 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.

Fixed income security issuers, arrangers, and investors

We serve fixed income security issuers, arrangers, and investors through our Morningstar Credit segment. Morningstar DBRS typically issues credit ratings in response to requests from issuers, intermediaries, or investors. Morningstar DBRS credit ratings are requested for corporate short and long-term fixed income obligations, sovereign debt, single project financings and structured finance programs, including securitization 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.

We estimate that the global ratings market totaled \$10 billion as of year-end 2021, representing a 6.3% compound annual growth rate over the prior decade. In 2022, global issuance fell sharply due to uncertainty related to the macroeconomic environment and the future path of interest rates. We estimate that the global ratings market totaled roughly \$7.7 billion as of year-end 2022 and \$8.2 billion as of year-end 2023 driving a decline in the 10-year compound annual growth rate to 2.1%. As the macroeconomic environment stabilizes, we expect a return to higher long-term growth rates, supported by various secular trends.

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

As of December 31, 2023, we provided ratings for more than 4,000 issuers of debt.

Retirement market participants

In the U.S., 401(k) and other types of defined-contribution (DC) retirement plans are the dominant retirement savings vehicle offered by employers. According to the Investment Company Institute, there were \$9.9 trillion in assets in DC plans at end of the third quarter of 2023, compared to \$3.1 trillion in private-sector defined benefit (DB) plans and \$8.0 trillion in government DB plans. Total retirement assets across all markets totaled \$35.7 trillion at the end of that same period.

We serve this market through our Morningstar Retirement segment. Our services are designed to help improve the DC retirement system by offering highly personalized savings and investment advice at the employee level, scalable investment and risk mitigation services at the plan and advisor level, and industry research at the policy and institutional level. Currently, our focus is the U.S. market, because it continues to demonstrate healthy growth, and because many of our services 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, advisor managed accounts, Morningstar Plan Advantage, and fiduciary services, and custom models) primarily reach individual investors through employers (plan sponsors) that offer DC plans for their employees. As of December 31, 2023, we served 94 retirement service providers, broker dealers, asset managers, plan sponsors, and RIAs, representing about 319,200 retirement plans.

Recordkeepers and advisors are the two main distribution channels for our services, while asset managers are an emerging channel. We generally service these channels using one of three delivery platforms: managed accounts, advisor managed accounts, and Morningstar Plan Advantage. The former is more geared toward recordkeepers, while our advisor managed accounts enables advisors and asset managers to incorporate their firm's investment allocation philosophies and branding into this participant advice service. Morningstar Plan Advantage is a practice-management and compliance platform that is powered by our network of data connections with record-keepers that helps retirement plan advisors manage and grow their book of business.

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 2023 found that approximately 61% 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.

We serve this market through our Morningstar Wealth segment. We offer three products for individual investors. Our largest based on engagement is our investing media site Morningstar.com, which offers data, editorial and research content available for free to registered customers and visitors. Our second product is Morningstar Investor (Morningstar Premium outside of the U.S. and Australia), which provides access to Morningstar's research, advanced screening tools and portfolio management tools. The third product is a set of investment newsletters based on different investment types and investing strategies.

Revenue Types

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

License-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. License-based revenue represented 74.4% of our 2023 consolidated revenue compared to 71.2% in 2022 and 66.6% in 2021.

Asset-based: We charge basis points and other fees for assets under management or advisement. Asset-based revenue represented 13.7% of our 2023 consolidated revenue compared to 14.4% in 2022 and 15.6% in 2021.

Transaction-based: Revenue is transactional, or one-time, in nature, compared with the recurring revenue streams represented by our licensed and asset-based products. Transaction-based revenue represented 11.9% of our 2023 consolidated revenue compared to 14.4% in 2022 and 17.8% in 2021.

Largest Customer

In 2023, 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 2023, we also completed 43 acquisitions to support our growth objectives. We had one asset acquisition in 2023 and had no divestitures in 2023.

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

International Operations

We conduct our business operations outside of the U.S. through wholly- or majority-owned subsidiaries located in each of the following 31 countries: Australia, Brazil, Canada, Cayman Islands, Chile, China, Cyprus, Denmark, France, Germany, Hong Kong, India, Italy, Japan, Jersey, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Romania, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, 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 through a combination of: (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 the 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. 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 Annual Report on Form 10-K (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® Direct Web Services SM	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, and are applying for several additional patents in various jurisdictions around the world, including the U.S. Our existing patents include those for coordinate-based document processing/data entry, 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. As a rule, 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, without limitation, 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, Envestnet, FactSet, Fitch, LSEG (Refinitiv), Moody's, MSCI, S&P Global, and SEI Investments Company. Some of these companies have financial resources that are significantly greater than ours. We also compete with a variety of other companies of varying sizes in specific areas of our business. We discuss some of the key competitors in each area in the "Our Segments and Products" section of Part I, Item 1. Business 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 are subject to various laws and regulations specific to the lines of business and activities they engage in. 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, investment research, ESG research, ratings and data, and indexes 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 fails or they fail to comply with those laws and regulations or to impose censures, fines, or remedial undertakings as a result of 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 currently-regulated activities (e.g., ESG ratings and research), or changes in the interpretation or enforcement of existing laws and rules may adversely affect our business and profitability.

Morningstar Credit

United States

Morningstar DBRS'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 Securities Exchange Act of 1934, as amended (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

Morningstar DBRS'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

Morningstar DBRS'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

Morningstar DBRS's credit rating entity in the European Union (EU), DBRS Ratings GmbH (located in Frankfurt, Germany), which together with its branches, DBRS Ratings GmbH Sucursal en España (located in Madrid, Spain) and DBRS Ratings GmbH, Branch India (located in Mumbai, India) 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 advisers 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 advisers with the SEC under the Investment Advisers Act of 1940 (Advisers Act). As registered investment advisers, 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 advisers, these subsidiaries are subject to examination by the SEC, which may include on-site examinations.

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 adviser 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 adviser 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 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

Both Morningstar Investment Management Europe Limited and Smart Investment Management Limited are authorized and regulated by the FCA to provide certain financial services. Those regulatory permissions allow Morningstar Investment Management Europe Limited and Smart Investment Management to advise, arrange, deal and manage investments across a range of investment instruments. Related services are delivered through managed portfolios, manager selection, segregated mandates and U.K. authorized fund offerings. As authorized firms, both Morningstar Investment Management Europe Limited and Smart Investment Management Limited are subject to the applicable requirements and regulations set out in the FCA Handbook of rules and guidance.

Morningstar Wealth Administration Limited and Morningstar Wealth Retirement Services Limited are authorized and regulated by the FCA to provide certain financial services. Those regulatory permissions allow Morningstar Wealth Administration Limited to arrange, deal, manage, safeguard and administer a range of investment instruments and for Morningstar Wealth Retirement Services Limited to arrange, deal and operate a personal pension scheme. Related services are delivered through an investment platform. As authorized firms, both Morningstar Wealth Administration Limited and Morningstar Wealth Retirement Services Limited are subject to the applicable requirements and regulations set out 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.

United Arab Emirates

Morningstar Wealth Administration Limited operates a branch office in Dubai, pursuant to the applicable requirements and regulations defined in the Dubai Financial Services Authority Rulebook. The office is located in the Dubai International Financial Centre.

Channel Islands

Morningstar Wealth International Limited is authorized and regulated by the Jersey Financial Services Commission to provide certain financial services. Those regulatory permissions allow Morningstar Wealth International Limited to deal in investments, delivering the related services through an investment platform. As a regulated firm, Morningstar Wealth International Limited is subject to the applicable requirements and regulations set out in the Jersey Financial Services Commission Handbooks and Codes of Practice.

South Africa

Morningstar Investment Management South Africa (Pty) Ltd is an authorized financial services provider, authorized and regulated by the South African Financial Sector Conduct Authority to provide certain financial services. 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.

Morningstar Sustainalytics

Morningstar Sustainalytics delivers ESG research, ratings and data aimed at enabling investors around the world to identify, understand, and manage ESG-driven risks and opportunities. In 2022, via its subsidiary GES International AB, Morningstar Sustainalytics notified the Swedish Finansinspektionen under Section 3 of the Act on Proxy Advisors of its business activity as a proxy advisor in Sweden. Morningstar Sustainalytics UK Ltd. was added to the FCA's list of Proxy Advisors in early 2022. These regulations require disclosure of information regarding the methodologies applied in the preparation of voting recommendations and certain governance information such as a code of conduct and policies on managing conflicts of interest. Other Morningstar Sustainalytics products including Second Party Opinions on green and sustainability linked bond, and the provision of ESG ratings and data have been the subject of proposed legislation or codes of conduct. We continue to monitor these developments closely and will assess what modifications will be needed to Morningstar Sustainalytics' business model, operational processes, and corporate organization in the event regulation is enacted.

Morningstar Indexes

Morningstar's affiliates, Morningstar Indexes Limited and Morningstar Indexes GmbH are registered with, and regulated by the FCA and the German Federal Financial Supervisory Authority (BaFin) and are authorized to act as a U.K. and EU benchmark administrator, respectively. While this authorization allows us to provide U.S. benchmarks in the U.K. and EU, the benchmark administrator designation also has additional 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. In the U.K., Morningstar Indexes Limited is also subject to applicable requirements and regulations under the Senior Managers Regime, as defined in the FCA Handbook of rules and guidance. 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

We have four executive officers. The table below summarizes information about each of these officers.

Name	Age	Position
Joe Mansueto	67	Executive Chairman and Chairman of the Board
Kunal Kapoor	48	Chief Executive Officer
Jason Dubinsky	50	Chief Financial Officer
Danny Dunn	48	Chief Revenue Officer

Joe Mansueto

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

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

In December 2016, InvestmentNews named 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. In 2010, Mansueto 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. In 2007, SmartMoney magazine recognized him in the "SmartMoney Power 30," its annual list of the 30 most powerful forces in business and finance. He received the Distinguished Entrepreneurial Alumnus Award from the University of Chicago Booth School of Business in 2000.

Before founding Morningstar, Mansueto was a securities analyst at Harris Associates. He 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. Mansueto is also the owner and chairman of Chicago Fire FC, an American professional soccer franchise, as well as a significant investor in several media companies, real estate properties and other ventures.

Kunal Kapoor

Kunal Kapoor, CFA, is chief executive officer of Morningstar. 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, and served on the board of PitchBook, prior to its acquisition by Morningstar in late 2016. Kapoor is also a member of the board of directors of Wealth Enhancement Group, a privately-owned independent wealth management firm, a member of the Council on Chicago Booth and serves on the boards of several Chicago non-profit organizations. 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 of Morningstar, responsible for controllership, tax, internal audit, financial planning and analysis, procurement, treasury, real estate and facilities, 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 FP&A function for the global business. Prior to this merger, 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.

Daniel (Danny) Dunn

Danny Dunn is chief revenue officer for Morningstar. He is responsible for the firm's global revenue and client-facing functions including global marketing, sales, client solutions, customer success, field operations, services and support.

Before joining Morningstar in 2016, Dunn was vice president of IBM's Midwest enterprise unit. He was responsible for marketing, strategy, sales, channels, and customer service for the complete IBM portfolio, including Cloud, Software, Services, Systems, and IBM Credit, LLC in the region. Prior to that, he was the Chicago territory director for IBM and held numerous other sales leadership roles. Before joining IBM in 2007, he led sales, account management and client service at Neology, a software and technology services subsidiary of SmithBucklin Corporation.

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

Morningstar, Inc. was 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 create innovative, proprietary and insightful product and service offerings or anticipate our clients' changing needs may negatively affect 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 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
 - The AI technologies we are incorporating into certain of our products and processes may present business, legal and reputational risks
 - Our business, products and facilities are at risk of a number of material disruptive events, which our operational risk management and business continuity programs and insurance coverage may not be adequate to address
 - We could face liability for failing to adequately protect or properly use 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
 - Failure to protect our intellectual property rights, or claims of intellectual property infringement against us, could harm our brand, our financial performance and our ability to compete effectively
- *Risks Related to Legal and Regulatory Matters*
 - 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
 - Errors in our automated advisory tools may subject us to liability for any losses that result
- *Risks Related to Our Operations*
 - Our future success depends on our ability to recruit, develop, and retain qualified employees
 - Our business is complex and has experienced significant growth in recent years which could strain our resources and infrastructure, and if we are unable to effectively scale our operations and increase productivity, we may not be able to successfully implement our business plan
 - Our acquisitions and investments in companies or technologies may not realize the expected business or financial benefits and acquisitions could prove difficult to integrate, disrupt our business, dilute stockholder value and adversely affect our operating results and the market value of our common stock
 - The goodwill of our business and other intangible assets from our acquisitions could be impaired as a result of business conditions in the future, requiring us to record substantial impairments that would impact our operating income
 - Today's fragmented geopolitical, regulatory, and cultural world could adversely affect our ability to expand our product and service offerings
 - As a global taxpayer, we face challenges due to increasing complexities in accounting for taxes (e.g., base erosion, minimum taxes, and tax transparency), which are high priorities in jurisdictions in which we operate and could materially affect our tax obligations and effective tax rate
 - Our revenues, expenses, assets and liabilities are subject to fluctuations in foreign currency exchange rate
 - Our indebtedness could adversely affect our cash flow and financial flexibility. Our variable rate indebtedness could subject us to interest rate risk, which could cause our debt service obligations to increase significantly
- *Risks Related to Ownership of Our Common Stock*
 - The concentrated ownership position of Joe Mansueto could adversely affect our other shareholders
 - Fluctuations in our operating results may negatively affect our stock price
 - The future sale of shares of our common stock may negatively affect our stock price

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 the reputation of our company and our brand generally, as well as the perception of our research and ratings products and services, is based on the trust that users of our products and services have in our commitment to our mission of empowering investor success, our independence of editorial judgment, our insistence on methodological rigor, and our transparency concerning our processes. Any failure to uphold these commitments and standards and real or perceived failure of our customers to have consistently positive experience with us could damage our reputation. Our reputation may also be harmed if any errors are found in our products or services.

Our ESG offerings has, and may in the future, put Morningstar in the public debate over a variety of issues surrounding climate, environment, social concerns, and corporate governance. Our position as an independent provider of investor choice may cause proponents of certain causes to question the adequacy, completeness and objectivity of our methodologies and models and of the data underlying them; the timing and nature of changes in our ratings or assessments and in other products, such as indexes, built on these ratings and assessments; the independence of our ratings determinations and editorial decisions and the influence of third parties, including governments and large institutional investors or asset owners, on such determinations or decisions; and our role in and influence upon various investment processes. Our position as a leading source of ESG research and opinions may also cause proponents of various causes to demand that we publicly take stands on a variety of controversial topics perceived by them as relevant to investor success or the evolving expectations of businesses; however, we may believe we are unsuited or unprepared to address some or all of these topics. New research and ratings offerings face a challenge to create objective, understandable methodologies in a rapidly developing field currently without widely accepted standards and for which regulatory oversight is emerging. Our methodologies generally are susceptible to potential claims of imprecision, empirical or methodological error, bias and puffery. We evaluate the potential impact of ESG factors on other companies and risk a claim of hypocrisy if we take or fail to take actions at the company level that are or seem inconsistent with our own sustainability and corporate responsibility policies and practices, including publicly disclosed ESG and climate-related targets and goals. Our failure to successfully navigate these issues as they arise from time to time may have an adverse effect on our reputation and our business.

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, ETFs 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. We also provide investment advisory and investment management services, including through our own series of mutual funds, which expose 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 Morningstar 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.

The expansion of our business over time, including through acquisitions, has resulted in greater exposure to governmental regulation across our product lines and risks that acquired businesses may harbor business practices that could harm our brand. In some cases, such as with respect to our credit ratings business, interactions with regulators are extensive and continuous, raising the risk of 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 and its relationships with third parties, 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, adverse publicity about certain types of investment and ratings products generally. We may also suffer brand dilution as our brand becomes associated with an ever more diverse variety of products and services that may align less well with our corporate mission. 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 and negatively affect both hiring and retention efforts.

Failing to create innovative, proprietary and insightful product and service offerings, keep pace with new investor requirements and technology developments, and trends, or anticipate our clients' changing needs may negatively affect our competitive position and business results.

We believe innovation in financial information services and investable products available to investors and the various advisers and other intermediaries who serve them continues to accelerate. Developments in technology are fundamentally changing the ways investors, financial intermediaries, and other market participants access data and content, allowing for greater personalization of products customized to individual investor profiles and interests, such as direct indexing and sustainability goals-based investing. These 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 current and target markets and to deliver them in ways that support our customers' investing needs and business models and on our ability to keep pace with the competitive landscape for our products.

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 various investors, including individuals, financial advisers, asset managers, retirement plan providers and sponsors, institutional investors in the private capital markets, and participants in the fixed income markets. 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 advisers to serve investors at all stages of the investing process. Morningstar's managed portfolio offerings help advisers 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. We believe the breadth and depth of our current service offerings set us apart from our competitors, which we believe 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, or fail to successfully communicate such innovations and developments in our offerings to our customers, our competitive position and business results may suffer. In addition, our reputation could be harmed if we are perceived as not moving quickly enough to meet the changing needs of investors or their financial advisers and may sacrifice new business opportunities or renewals from existing customers. These changing needs include a greater expectation that advice be delivered with a high degree of personalization. Investors are also increasingly focused on the security of data we collect from them, as well as the sharing of their data with third parties. Increased interest in alternative asset classes has also created a need for applicable datasets and analytical expertise. Our competitive position and business results may suffer if other companies have greater breadth of product offerings or are able to successfully and more quickly introduce innovative, proprietary research tools and software, including through the application of AI, that gain attention from our clients.

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 AI systems to process and organize large data sets. The impact of costs-cutting pressures across the industries we serve could lower demand for our products. Also, clients within the financial services industry that strive to reduce their operating costs may seek to reduce their spending on our products and services or may build in-house capability to provide the technology or investment advisory services they would otherwise purchase from us. Although we believe our products and services contain value-added features and functionality that deeply embed them in our customers' workflows, these developments may over time reduce the demand for, or customers' willingness to pay for, certain of our products and services.

We must make long-term investments and commit significant resources often before knowing whether those investments will result in products or services that satisfy our clients' needs or generate revenues sufficient to justify the investments. 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 is slowed by the significant client investment required for more advanced use cases. In addition, from time to time, we also incur costs to transition clients to new or enhanced products, systems, or services, as well as additional operating expenses supporting multiple platforms for extended periods of time if clients decline to migrate to the new or enhanced products, systems or services. Such transitions can involve material execution risks and challenges and 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 are unable to manage these investments and transitions successfully, our business, financial condition, and results of operations could be materially and adversely affected.

As our financial intermediary 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 COVID-19 pandemic and the increase in remote and hybrid work environments has 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, such as those we are seeking to address for wealth advisors through bringing together our multiple wealth management capacities around asset management, data aggregation and client portfolio management software. We have a myriad of potential technology investments across our product lines and need to prioritize scarce technology development resources to focus on products that best anticipate the needs and priorities of our customers. In addition, only a limited number of employees have expertise in the software used for certain of our products. The loss of any such employees could negatively impact our development process.

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.

Additionally, our ability to continue to innovate and develop new products is reliant on the products of other vendors, including data, software and services vendors. Some of our products and offerings are dependent upon obtaining updates from data vendors as well as dependent on continuing access to current and historical data. Furthermore, many of our vendors are also competitors, and our ability to continue to provide our products and develop new products could be impacted if the vendors terminate our agreements with them or decide to change the terms or restrict use of the data and products, which could materially harm our business.

Prolonged volatility or downturns affecting the financial sector, global financial markets, and the global economy may impact our financial results.

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 geopolitical circumstances and uncertainties. Prolonged economic and financial downturns, sustained volatility in the financial markets, interest and inflation rate fluctuations and periods of stagflation, and a lack of investor confidence can reduce investor interest and investment activity and decrease demand for our software, data, analyst ratings, and research products and flows of funds into our investment management products. We cannot predict the occurrence, timing or duration of any economic downturn, generally or in the markets in which our businesses operate. Fluctuations in interest rates and rate uncertainty brought on by central bank decisions that reduce credit issuance has, and may continue to, put negative pressure on our credit ratings business. Continued unfavorable trends 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 sustained market downturn.

For our licensed-based businesses, many of our customers are asset-management and financial advisory firms and other financial-services companies, which are also subject to external trends. The ascendance of passive investment 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 downturn or crisis would likely lead to material spending cutbacks among many of the companies to which we sell and longer sales cycles. Consolidation in the financial services sector reduces the number of potential clients for our products and services. Further, clients may discontinue their use of our products and services should they fail and/or merge with or become acquired by other entities that are not our clients or that use fewer of 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. Our PitchBook business is also 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 and adversely affect the number of prospective users for the PitchBook platform.

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 based on market performance. Our revenue from asset-based fees has been, and may in the future be, adversely affected by market declines. Asset levels can also be affected if inflows into the portfolios for which we provide investment advisory services drop or if these portfolios experience redemptions. A drop in 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 would expect our fee-based revenue to show a corresponding decline. The industrywide trend toward lower asset-based fees may also impact our fee-based revenue. A shift by investors to non-traditional asset classes such as cryptocurrencies, private debt, real estate, structured products, and collectibles may affect our assets under management if we are unable to incorporate them into our investment strategies or if they fail to perform in the manner that our research anticipates.

Our credit ratings business, as well as Morningstar Sustainalytics' Second Party Opinion business, have been, and may continue to be, impacted by volatility in U.S. and international financial markets due to their dependence on the number and dollar volume of debt securities issued in the capital markets. In particular, recently our credit ratings business has, and may continue to be, impacted by reduced issuance of commercial mortgage-backed securities in the United States. Market disruptions, rising interest rates, widening credit spreads and economic slowdowns historically have impacted the volume of debt securities issued in global capital markets and the demand for credit ratings and ESG-related ratings and opinions. Demand for credit ratings can also be negatively affected by negative publicity about the credit ratings business, 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.

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 designed 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, failure to apply consistent security measures throughout our business or cyberattack.

We may be targeted by malicious individuals or groups (including those sponsored by nation-states or terrorist organizations) 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 cybersecurity and have implemented systems and processes intended to help identify cyberattacks and protect and remediate security issues in our software and network infrastructure, these attacks have become increasingly frequent, sophisticated, and difficult to detect. Even in cases where an attack is ultimately detected, based on industry data, incidents may go undetected for several months. Our measures may not be adequate or designed to prevent all eventualities or all types or sources of attacks, and we may be vulnerable to circumvention of security systems, denial of service attacks or other cyberattacks, hacking including "hacktivism", "phishing" or other social engineering attacks, computer viruses, ransomware or malware, employee or insider error, employee or vendor malfeasance, physical breaches or other malicious actions. We offer a hybrid work environment, which provides employees with the flexibility to work remotely (and use personal devices) which introduces unique risk management challenges.

We may also be impacted by a cyberattack targeting one of our vendors or within our technology supply chain or infrastructure, including cloud providers. Our information technology systems interact with those of customers, vendors, and service providers and collect an increasing amount of confidential data as we expand our product and service offerings. As a result, inadequacies of third party security technologies and practices introduce additional monitoring risk and cost and may only be detected after a security breach has occurred. Additionally, as we continue to offer a hybrid work environment which provides employees with the flexibility to work from remote locations we continue to rely on video conferencing, web conferencing and cloud services in order to operate magnifying the importance of the integrity of our remote access security measures and which may expose us to additional cyber risks.

We are subject to regulatory expectations for the oversight of users, vendors and service providers, which further increase our compliance obligations. In addition, the proliferation of personal information privacy regimes across the globe have made scalable and comprehensive compliance practices ever more complex and costly to implement.

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, including cloud providers) 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, 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 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 applicable laws may be 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 the greater of €20 million or 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. Even after an acquisition is completed, time is required to integrate the acquired business' technology and processes, which may result in an increased risk of security incidents until the integration for the new business is completed.

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.

The AI technologies we are incorporating into certain of our products and processes may present business, legal, and reputational risks.

We use, and may continue to expand our use of, machine learning and AI technologies into certain of our products and processes. If other firms incorporate AI technologies into their products and offerings more effectively than we do, or if we otherwise fail to keep pace with rapidly evolving AI technological developments, our competitive position and business results may suffer. At the same time, use of AI has recently become the source of significant media attention and political debate. The introduction of AI technologies, particularly generative AI, into new or existing offerings may result in new or expanded risks and liabilities, including due to enhanced governmental or regulatory scrutiny, litigation, compliance issues, ethical concerns, confidentiality or security risks, as well as other factors that could adversely affect our business, reputation, and financial results. For example, AI technologies can lead to unintended consequences, including generating content that appears correct but is factually inaccurate, misleading or otherwise flawed, or that results in unintended biases and discriminatory outcomes, which could harm our reputation and business and expose us to liability. We may also not identify inaccurate information, which may expose us to liability. Laws, regulations or industry standards that develop in response to the use of AI may be burdensome or may significantly restrict the deployment of AI, particularly generative AI technologies, in our products or processes.

We use AI technologies from third parties, which may include open-source software. If we are unable to maintain rights to use these AI technologies on commercially reasonable terms, we may be forced to acquire or develop alternate AI technologies, which may limit or delay our ability to provide competitive offerings and may increase our costs. These AI technologies also may incorporate data from third-party sources, which may expose us to risks associated with data rights and protection, and may also lead to the unintended consequences of using AI discussed above. The intellectual property ownership and license rights surrounding AI technologies as well as data protection laws related to the use and development of AI are currently not fully addressed by courts or regulators. The use or adoption of AI technologies into our products may result in exposure to claims by third parties of copyright infringement or other intellectual property misappropriation, which may require us to pay compensation or license fees to third parties. The evolving legal, regulatory and compliance framework for AI technologies may also impact our ability to protect our own data and intellectual property against infringement.

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 and insurance coverage may not be adequate to address.

Our business and several of our 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 are located across multiple facilities in the U.S. and globally. Our computer systems, database and network facilities may be vulnerable to external attacks that misappropriate our data, corrupt our databases, or limit access to our information systems. Further, our operations and those of our vendors and customers are at risk of disruptions from numerous factors, including pandemic, violent incident, natural disaster, power loss, terrorist attack, telecommunications and Internet failures, civil unrest, cybersecurity attacks and breaches, and other events beyond our reasonable control. Our exposure to these types of disruptions may be more acute in circumstances where our business activities expose us to potential controversy and opposition, including various ESG-related matters. 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 recovery strategies in the event of a disruption. As we have grown in recent years through acquisitions and continue to do so in the future, 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 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 and/or at our significant office locations including but not limited to our corporate headquarters in Chicago, Illinois and our data collection, technology, and operational center in Mumbai, India, 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 or may in the future experience 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.

We do have a long-standing relationship with a third-party vendor in Ukraine which provides contract labor in support of development efforts at PitchBook. Our team has provided financial help and other assistance to these individuals and to date, we have been able to maintain the operations conducted by our contractors in Ukraine at an acceptable level. Through advanced preparation and business continuity planning, there has been limited disruption to the operations of PitchBook or our clients' access to the platform. However, the situation remains volatile and our team continues to monitor new developments to guard against negative impacts to our operations.

We have shifted the storage of a majority 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. To defend against these threats, we have implemented 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 could be negatively impacted. In addition, the daily activities and productivity of our work force is now closely tied to key vendors, such as video conferencing services, to consistently deliver their services without material disruption. Our ability to deliver information using the Internet and to operate in a hybrid 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 primarily rely on a third party to provide backup facilities for our data. We cannot guarantee that these facilities will not be impacted by interruptions in the future. We may not be able to fully recover data or information lost during a database or network facility outage impacting the provider of our backup facilities. Any losses, service disruption, or damages incurred by us could have a material adverse effect on our business, operating results, or financial condition.

Although we maintain insurance, at levels we believe to be appropriate, this insurance may not provide adequate protection in the event of a loss. Additionally, the existence, magnitude and impact of the risks we face often remain unknown for substantial periods of time. These risks could damage our brand and reputation, result in litigation, regulatory actions, sanctions or other statutory penalties, lead to loss of customer confidence in our business operations, including the security and reliability of our products, services and system, any of which could harm our ability to retain customers and gain new ones, result in financial losses for which we are not insured or adequately insured, and could lead to increased expenses to address or mitigate any damages or disruptions.

We could face liability for failing to adequately protect or properly use 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 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 business component containing our credit ratings offerings, 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 compensate such clients or their customers for 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.

Products and enhancements we develop or license have contained, and in the future may contain, undetected errors or defects despite testing or other quality assurance practices. Use of our products or services as part of the investment process and other activities creates the risk that our customers, investors, the companies that we rate or assess across our products or the shareholders of those companies, may pursue claims against us based on even a small error in our data, calculations, methodologies, input, or analysis or a malfunction or failure in our systems, products or services.

We rely on a variety of outside parties as the original sources for the information we use in our published data and research. 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. 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 Morningstar Sustainalytics business component 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 business component containing our credit ratings products. 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.

Additionally, we use and incorporate open-source code in our software development and our products, which could expose us to additional security risks, impede our ability to commercialize our products and services, and lead to additional costs. Security vulnerabilities with the use of open-source software could impact our products and services, which may result in the need for change control, testing and potential re-engineering efforts that could increase costs and impact our software development and products. Generally, open-source licenses will not contain warranties against infringement claims, or covering the quality or security of the code, and some licenses contain provisions requiring the public release of our proprietary source code if it is combined with the open-source code in a certain manner. The public release of our proprietary source code will put us at a competitive disadvantage, allowing competitors to develop similar products in less time and with minimal development efforts. In addition, many open-source licenses contain provisions which are ambiguous and have not been interpreted by U.S. or other courts. Any unanticipated restrictions or conditions on our ability to use, or claims involving our use of, open-source licenses could require us to seek alternative third-party licenses at increased costs or reduced scope, re-engineer products or systems, or discontinue the licensing of certain products.

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, and which may limit the processing of information about individuals outside their home jurisdictions. 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.

Failure to protect our intellectual property rights, or claims of intellectual property infringement against us, could harm our brand, our financial performance and our ability to compete effectively.

The steps we have taken to protect our intellectual property may not be adequate to safeguard our brand, proprietary information and competitive advantage. 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 be able to challenge, invalidate, or circumvent our rights or improperly obtain our proprietary information. Further, we may not be able to effectively utilize trademark, copyright, and trade secret protection in every country in which we offer our services or utilize our intellectual property.

We believe our trademark rights with respect to the Morningstar name and logo, along with our subsidiaries' names and logos represent materially valuable intangible assets. 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 these or other 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 or obtain adequate trademark protection 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, operating results or reputation. In addition, we are and continue to be susceptible to website spoofing attacks, where fraudulent websites are created to closely resemble our brand, products and offerings and are designed to lure potential clients to share personal sensitive information, such as login credentials, social security numbers, credit card information, bank account numbers, and in some instances send money to individuals portraying to be associated with our entities and brands. In addition to individual losses triggered by these attacks, these spoofing attacks could harm our brand, our reputation and negatively impact our ability to attract new clients and customers.

Risks Related to Legal and Regulatory Matters

Compliance failures, regulatory action, or changes in laws could adversely affect our business.

The laws, rules, and regulations, and their interpretations, applicable to our business are extensive and may change in the future and may be inconsistent or vary by jurisdiction. We have not always been able to, and in the future may not be able to comply with these changes or variances 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 may fail to properly identify and respond to regulatory changes applicable to our operations and the risk that we may fail to 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. 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 reputation, business and financial results.

We are subject to various anti-corruption laws that prohibit improper payments or benefits or offers of payments or benefits to foreign governments and their officials and, in some cases, to employees of a business for the purpose of directing, obtaining or retaining business. We conduct business in countries and regions that are less developed than the U.S. and in some cases are generally recognized as potentially more corrupt business environments. Our activities in these countries create the risk of unauthorized payments or offers of payments by one of our employees or agents that could be in violation of various anti-corruption laws including the Foreign Corrupt Practices Act of 1977, as amended (FCPA) and the U.K. Bribery Act 2010 among other similar laws prohibiting bribery or corruption.

We have implemented policies and trainings to discourage these types of practices by our employees and agents. However, our policies, trainings, processes or future improvements thereof, may prove to be less than fully effective, and our employees or agents may engage in conduct for which we might be held responsible. If employees violate our policies or we fail to maintain adequate record-keeping and internal accounting practices to accurately record our transactions we may be subject to regulatory fines, sanctions, damages or other penalties or costs. Violations of any of these laws, including the FCPA or other anti-corruption laws, may result in severe criminal or civil sanctions and penalties, damage our brand and reputation and subject us to other liabilities which could have a material adverse effect on our business, operating results, or financial condition.

Additionally, as we have global business activities, we are subject to international trade restraints including economic and financial sanction laws and embargoes administered by the U.S. Treasury Department's Office of Foreign Assets Controls, which prohibit or restrict the sale or supplying of certain products and services to embargoed or sanctioned countries, regions, governments, individuals, and entities. These international trade restraints have and may in the future impact our ability to continue to market and/or sell our products and services in these geographies, resulting in loss in revenue. Furthermore, new, and additional trade restrictions may be introduced at any time and may require us to change our operations and increase our risk of noncompliance. We may be exposed to increased compliance costs as a result of these changes. Failure to comply with these laws and regulations can subject us to significant fines and penalties and have material adverse effects on our reputation, brand, business, operating results and financial condition.

Several of our businesses are highly regulated throughout the world and the regulatory environment is increasingly complicated and rapidly evolving.

Morningstar DBRS, 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 Morningstar DBRS to regular regulatory examinations and occasional investigations, relating to the company itself or sometimes to the credit ratings industry as a whole. These laws and regulations may impose new or expanded requirements which could impact the day-to-day operations, our customers and the users of our credit ratings. At times, the scope, interpretation, and administration of these laws and regulations may also be uncertain, inconsistent across geographies and difficult to fully reconcile in a cost-efficient manner. 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.

Three of our subsidiaries, Morningstar Investment Management LLC (MIM), Morningstar Investment Services LLC, and Morningstar Research Services LLC, are registered as investment advisers with the SEC under the Advisers Act. In addition, in the case of MIM's advisory relationship with the Morningstar Funds Trust, it is subject to the Investment Company Act of 1940 and the Commodity Exchange Act. Morningstar Investment Services is also a broker/dealer registered under the Exchange Act and is subject to the rules of FINRA. Advisers Act requirements primarily relate to record-keeping, reporting, and standards of care, as well as general anti-fraud prohibitions. Registered investment advisers have several fiduciary obligations to their clients including obligations of good faith and full and fair disclosure of all facts material to the client's engagement of the adviser, to provide investment advice suitable for the particular client, to have a reasonable, independent basis for investment recommendations, of best execution, and to vote client proxies in the best interests of the client. As registered investment advisers, 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 or investment 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. Many of our asset management and financial advisor clients are similarly regulated. If our license products and services fail to satisfy the regulatory requirements applicable to these clients, we may lose their business.

Our regulated investment services operations are subject to regulation in markets outside the U.S. Post Brexit, we made a strategic decision to restrict the provision of regulated investment management activity to EU domiciled clients in part to reduce regulatory risk. The 2022 acquisition of the U.K. and international operations of Praemium (the Morningstar Wealth Platform) has resulted in increased regulatory compliance obligations related to, among other things, the safeguarding and administration of client monies and assets, due to the offering of regulated products and services in the U.K. In addition, Morningstar Wealth Platform activity is also delivered through Jersey, a newer location for Morningstar, resulting in additional regulatory exposure and scrutiny.

In 2023, significant regulatory developments impacting Morningstar's non-U.S. regulated investment activity became effective, most notably the overhaul of the EU and U.K. regulatory prudential regimes and the implementation of the U.K. Consumer Duty rules. These initiatives have further increased regulatory exposure for the relevant Morningstar entities. The addition of South Africa during 2023 to the Financial Action Task Force grey list of jurisdictions under increased monitoring has also resulted in the application of enhanced industry standards and assessment of associated firm processes for Morningstar's regulated investment activities within South Africa.

The Morningstar Funds Trust is a registered open-end mutual fund for which MIM acts as investment advisor under an investment management agreement. The independent trustees of the Morningstar Funds Trust must annually evaluate the terms of the investment management agreement (including fees) the Trust has with MIM. Upon evaluation, the independent trustees may elect to either renew the investment management agreement or make changes. Such changes could include taking steps to improve performance (e. g. removing a portfolio manager, or enhancing research capabilities), merge or liquidate a fund, close a fund to new investors, adjust an advisory fee schedule, or terminate the investment management agreement with MIM any of which could have an adverse effect on MIM.

Our index business, Morningstar Indexes, is subject to regulations related to the oversight of the provision of benchmark administration services in both the EU and U.K.. Specifically, the EU and U.K. benchmarks regulation seeks to improve governance and controls over the benchmark process, in order to ensure that administrators effectively manage conflicts of interest. Furthermore, the regulations require administrators to improve the quality of input data and methodologies and ensure that contributors to benchmarks and the data they provide are subject to adequate controls. Under the existing arrangements, Morningstar entities in the U.S., U.K. and EU are subject to certain requirements of the benchmarks regulation. Work continues to reduce the associated risk by consolidating the regulatory exposure to just the EU and U.K. entities. In addition, Morningstar Indexes has continued to monitor previously identified developments whereby the SEC sought comment on whether index providers, model portfolio providers and pricing services should be regulated as investment advisers or outsourced service providers in the U.S. These potential developments could increase regulatory exposure and compliance costs if and when adopted.

Compliance failures by any of these highly regulated businesses could lead to negative publicity, fines, settlements (as was the case with the previously-disclosed settlements between the SEC and DBRS, Inc. in 2023), and/or temporary or permanent operating restrictions, which could have a material adverse impact on our operating results or financial condition. New laws, regulations and regulatory implementation guidance may also affect the day-to-day operation of these businesses and our customers, including by imposing new or expanded requirements. The failure to timely or adequately address changing or expanding regulatory requirements could have a material adverse impact on our business, operations and financial results.

Environmental, social, and governance considerations could expose us to potential liabilities, increased costs (regulatory or otherwise), compliance failures and reputational harm.

We are subject to laws, regulations, and other measures that govern a wide range of topics, including those related to matters beyond our core business. New laws, regulations, policies, and international accords relating to ESG matters, including sustainability, climate change, human capital, and diversity, are being developed and formalized in the EU, the U.S., and elsewhere, which may require us to comply with specific, target-driven frameworks and/or disclosure requirements. For instance, the European Union Corporate Sustainability Reporting Directive (CSRD) became effective in 2023. CSRD applies to both EU and non-EU in-scope entities and requires such entities to provide expansive disclosures on various sustainability topics including climate change, biodiversity, workforce, supply chain, and business ethics. The CSRD did not apply to our operations in calendar year 2023, but we are assessing our obligations under the CSRD, and we expect that compliance with the CSRD could require significant effort in future years. In the U.S., the SEC has proposed broad climate change disclosure requirements which would require significant compliance efforts, if and when adopted. A number of states have also passed, or are in the process of adopting, broad climate change disclosure requirements. We believe we have implemented robust ESG programs, and have adopted reporting frameworks and principles and announced a number of goals and initiatives related to ESG with the advice from external consultants, including on our decarbonization efforts. Morningstar has committed to decarbonize 50% of our scope 1 and scope 2 greenhouse gas emissions by 2030 and to publicly disclose our emissions annually. The implementation of these goals and initiatives, as well as compliance with emerging regulatory obligations, and forward-looking milestones may require considerable management time and may result in significant expense to us, and we cannot guarantee that we will achieve our objectives. Moreover, increasingly different stakeholder groups have divergent views on ESG matters, which increases the risk that any action or lack thereof with respect to ESG will be perceived negatively by at least some stakeholders and adversely impact our reputation.

Our Morningstar Sustainalytics business could be negatively affected by increased regulation of ESG research, ratings and data. The EU regulation for registering and supervising companies that act as external reviewers for green bonds aligned with the European Green Bond Standards (EuGBS) framework, as well as the draft EU legislative proposal for registering and supervising companies that provide ESG ratings would require significant investments to build and maintain appropriate internal control and compliance processes for these teams. As legislation is evolving in EU, other jurisdictions are running consultation processes to put in place Codes of Conduct for ESG ratings, ESG data and/ or second party opinion providers, that contemplate governance policies, quality assurance and other internal control programs requirements. The final form of any of these regulations or other measures is still uncertain.

Such regulatory regimes could impose significant compliance burdens and costs on Morningstar Sustainalytics and, as with all new regulation, could be subject to ambiguous interpretation that could result in inadvertent noncompliance. Furthermore, as our Morningstar 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.

Any failure, or perceived failure, by us to comply fully with ESG laws and regulations, or meet evolving and varied stakeholder expectations and standards could harm our business, operating results, and financial condition.

Errors in our automated advisory tools may subject us to liability for any losses that result.

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 liable for such errors, which may include liability for breach of our fiduciary duty or applicable law. Such program errors may not be detected despite quality assurance practices. There is a need to continually invest in training to develop and maintain in-house expertise to manage these systems effectively and to educate recordkeeper and retirement plan clients and participants in the capabilities, proper use, and competitive differentiation of these offerings, which can be costly and time consuming.

We seek to constantly innovate and improve our retirement services offering, for example to add new capabilities around modeling and advising on income generating products, 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 versions and updates properly and understand the implications for their plan participants, including issues concerning suitability of certain strategies. More resources may also be required to continue to support legacy versions of the Wealth Forecasting Engine that continue to be used by certain clients. If we make an error, we may be subject to potentially large liabilities for make-whole payments and/or litigation.

Risks Related to Our Operations

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

Execution of our business plan requires identifying, attracting, hiring, and on-boarding new qualified employees. Engineering, research, quantitative, fixed income data and credit analysis skill sets are particularly needed to support and strengthen our key product offerings. 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. There are also challenges inherent in effectively managing an increased number of employees over large geographic distances, including the need to implement appropriate systems, policies, benefits and compliance programs. Our talent acquisition activities may place a strain on our human resource management team. We must continue to refine and expand our recruiting capabilities, systems and processes in order to meet our talent acquisition needs 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 and our company's success. However, changes in labor markets, such as the willingness of some employers to offer fully remote work 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 require most employees in our business locations to make a commitment to a minimum amount of in-office work, but we remain uncertain as to the long-term effect of such requirements on employee attrition and engagement.

We believe the success of our business depends to a significant extent upon the continued service of our senior business and functional leaders and other key employees. However, the talents and experience of these individuals make them attractive candidates to many of our competitors, as well as to early-stage companies that can offer the potential for outsize financial rewards if they are successful. Thus, competition for these employees is intense and the loss of such business leaders could pose substantial challenges to our business. We may not be able to retain these leaders and employees or to develop and retain similar highly qualified personnel in the future, which may cause us to lose potential clients and suffer a decline in revenues.

In addition, we are currently exposed to rising wage scales in most of the employment markets in which our facilities are located, which negatively affect our compensation costs. Inflationary pressures, 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 may further complicate our talent acquisition efforts.

Our future success also depends on the continued service of our executive officers, including Joe Mansueto, our executive chairman 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 or noncompete agreements 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 is complex and has experienced significant growth in recent years which could strain our resources and infrastructure, and if we are unable to effectively scale our operations and increase productivity, we may not be able to successfully implement our business plan.

Our business has and continues to experience significant growth in our diversity of products and services and operational scale, which has placed a strain on and in the future may stress the capabilities of our management, administrative, operational and financial infrastructure. Significant additional investments, both in terms of management attention and one-time and annual costs, have been and are expected to continue to be required to effectively scale our operations and increase productivity across our organization, to address the needs of our customers, to further develop and enhance our products and services, to expand into new geographic areas, and to increase our operating margin over time. Such additional investments will increase our cost base, making it more difficult for us to offset any future revenue shortfalls by reducing expenses in the short term. We may not be able to make these investments as quickly or effectively as necessary to successfully and competitively scale our operations.

We regularly upgrade or replace our various software and data offerings and our operating systems and processes. If implementations are delayed, or if we encounter unforeseen problems with our upgraded or new offerings, systems and processes or in migrating away from existing offerings, systems and processes, our operations and our ability to manage our business could be negatively impacted.

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, which we may not be successful in implementing. 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.

Our success will depend in part upon the ability of our senior management – including the senior management of companies we acquire — to manage our business and plans for growth efficiently. To do so, we must continue to increase the productivity and effectiveness of our existing employee base and to hire, train and manage new employees who can meet or exceed our standards. During 2023, we undertook workforce reductions in certain areas of our business to strengthen the financial footing of the consolidated company. We cannot guarantee that these actions will achieve our intended results in the long-term, and these efforts also subject us to risks such as greater than anticipated costs, adverse effects on employee retention, and increased difficulty managing the scale and complexity of our business. Our hybrid office model and any adjustments made to our current and future office environments may not meet our productivity expectations, on the one hand, and the expectations of our workforce, on other hand, which could negatively impact our growth plans and our ability to attract and retain our employees. We will need to continue to improve our operational, financial and management controls, our reporting systems and procedures, our uses of automation and AI systems to increase productivity, and our utilization of real estate. If we fail to successfully scale our operations and increase productivity, we may be unable to execute our business plan and the value of our company could decline. The investment we make and additional resources we use to expand our operations, target new international customers and expand our presence globally may not produce desired levels of revenue or profitability, which could adversely affect our business and operating results.

Our acquisitions and investments in companies or technologies may not realize the expected business or financial benefits and acquisitions could prove difficult to integrate, disrupt our business, dilute stockholder value and adversely affect our operating results and the market value of our common stock.

As a means to implement our business strategy, we periodically evaluate and make investments in, or acquisitions of, complementary businesses, services and technologies, and intellectual property rights, and expect to continue to make such investments and acquisitions in the future. However, there can be no assurance we can identify suitable investment or acquisition candidates at acceptable prices. In addition, although we conduct robust due diligence through cross-functional teams when making an acquisition, each acquisition presents potential challenges and risks, including the following:

From a technology perspective, we may face potential identified or unknown security vulnerabilities in acquired products that expose us to additional security risks and penalties or delay our ability to integrate the product into our service offerings; difficulties in increasing or maintaining at an acceptable cost the security standards for acquired technology consistent with our other services; difficulty in transitioning the acquired technology onto our existing platforms and customer acceptance of multiple platforms on a temporary or permanent basis; and challenges augmenting the acquired technologies and platforms to the levels that are consistent with our brand and reputation.

From a human resources perspective, we may face difficulties in assimilating, integrating, or retraining acquired employees, which may lead to retention risk with respect to both key acquired employees and our existing key employees or disruption to existing teams; differences between our values and those of our acquired companies, as well as disruptions to our workplace culture; difficulties in and financial costs of addressing acquired compensation structures inconsistent with our compensation structure; and additional stock-based compensation issued or assumed in connection with the acquisition, including the impact on stockholder dilution and our results of operations.

From an operational perspective, we may face diversion of financial and managerial resources from existing operations; challenges relating to the potential entry into new markets in which we have little experience or where competitors may have stronger market positions; difficulties in integrating acquired operations, challenges with the acquired company's customers and partners, including our ability to maintain such relationships and changes to perception of the acquired business as a result of the acquisition; challenges with the acquired company's third-party service providers, including those that are required for ongoing access to third-party data; challenges in incorporating the acquired company's disaster recovery and cyber security protocols with those of Morningstar; the potential for acquired products to impact the profitability of existing products; and in the case of foreign acquisitions, challenges caused by integrating operations over distance, and across different languages, cultures and political environments.

From a financial perspective, we may face challenges and costs relating to known and potential unknown liabilities associated with the acquired businesses, including due to litigation; difficulties in managing, or potential write-offs of, acquired assets or investments, and potential financial and credit risks associated with acquired customers; difficulties in retaining the clients of acquired businesses; negative impact to our results of operations because of the depreciation and amortization of acquired intangible assets, fixed assets and operating lease right-of-use assets; the loss of acquired unearned revenue and unbilled unearned revenue; delays in customer purchases due to uncertainty related to the acquisition; ineffective or inadequate financial controls, procedures and policies at the acquired company; and the tax effects of any such acquisitions including related integration and business operation changes, and assessment of the impact on the realizability of our future tax assets or liabilities.

We also have, and expect 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, among other factors.

Finally, our ability to acquire other businesses or technologies, make strategic investments or integrate acquired businesses effectively may be impaired by trade tensions and increased global scrutiny of foreign investments and acquisitions and investments in the technology sector. For example, several countries, including the U.S. and countries in Europe and the Asia-Pacific region, are considering or have adopted restrictions of varying kinds on transactions involving foreign investments. Antitrust authorities in a number of countries have also reviewed acquisitions and investments in the technology industry with increased scrutiny. Governments may continue to adopt or tighten restrictions of this nature, and such restrictions or government actions could negatively impact our acquisition and investment opportunities, business and financial results. Acquisitions may expose us to litigation from our shareholders or other third parties, which, even if unsuccessful, could be costly to defend and serve as a distraction to management.

The goodwill of our business and other intangible assets from our acquisitions could be impaired as a result of business conditions in the future, requiring us to record substantial impairments that would impact our operating income.

We assess the recoverability of recorded goodwill amounts on an annual basis or when evidence of potential impairment exists. Intangible assets are evaluated when events or changes in circumstances arise that indicate the carrying value of the asset may be unrecoverable. The impairment testing is based on several factors which require judgement from management. In general, changes in our business condition or changes in fair market valuations and our operating performance may result in future impairments of goodwill or intangible assets which could have a material adverse impact on our operating results. Additionally, our goodwill and intangible assets may become impaired if we fail to obtain our anticipated operating efficiencies associated with our acquisitions.

Today's fragmented geopolitical, regulatory, and cultural world could adversely affect our ability to expand our product and service offerings.

Morningstar's business plan involves, in part, 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. 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 execute on our strategy.

The dynamics of today's geopolitical discourse may also impact business opportunities 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.

As a global taxpayer, we face challenges due to increasing complexities in accounting for taxes (e.g., base erosion, minimum taxes, and tax transparency), which are high priorities in jurisdictions in which we operate and could materially affect our tax obligations and effective tax rate.

Our effective tax rate is based on the mix of income and losses in our U.S. and non-U.S. operations, statutory tax rates, and tax-planning opportunities available in the various jurisdictions in which we operate. We could be subject to changes in our tax rates, the adoption of new U.S. or non-U.S. tax legislation or exposure to additional tax liabilities. Due to economic and political conditions, tax rates in various jurisdictions may be subject to significant change. Our future effective tax rates could be affected by changes in the mix of earnings in countries with differing statutory tax rates including, impacts related to transfer pricing, changes in the valuation of deferred tax assets and liabilities, or changes in tax laws or their interpretation by relevant authorities. Significant judgment is required to evaluate our tax positions.

Corporate tax reform, base-erosion efforts, and tax transparency continue to be high priorities in many jurisdictions in which we operate. In October 2021, the Organization for Economic Co-operation and Development (OECD) agreed to a two-pillar approach to global taxation focusing on global profit allocation (Pillar One) and a global minimum tax rate (Pillar Two). In December 2022, the EU member states agreed to implement the OECD's global corporate minimum tax rate of 15% under Pillar Two to be effective in January 2024. Other countries are also considering changes to their tax laws to adopt certain parts of the OECD's proposals. This legislation represents a significant change in the international tax regime and could result in increases to our effective tax rate as a result of the imposition of minimum taxes. We are continuing to monitor developments and administrative guidance in addition to evaluating the potential impact on our consolidated financial statements for future periods.

Our revenues, expenses, assets and liabilities are subject to fluctuations in foreign currency exchange rate.

As a business with international business activities, we are subject to risks related to fluctuations in foreign currency exchange rates. Movements in the exchange rates can impact the U.S. dollar reported value of our revenues, expenses, assets and liabilities denominated in non-U.S. dollar currencies or where the currency of such items is different than the functional currency of the entity where these items were recorded. In addition, the value of assets in indexed investment products can fluctuate significantly over short periods of time and such volatility may be further impacted by fluctuations in foreign currency exchange rates.

We incur expenses for employee compensation and other operating expenses at our non-U.S. locations in the local currency. In the future if there is an increase or decrease in our international business activities that recorded in local currencies, our exposure to fluctuations in foreign currency exchange rates may correspondingly increase or decrease, which could materially adversely affect our business, financial condition or operating results. Although we may in the future decide to undertake foreign exchange hedging transactions, 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.

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. Our long-term debt was \$940.3 million at December 31, 2023. While our business has historically generated strong cash flow and we are in compliance with all of our debt covenants, borrowings under our current credit facility are floating rate. As a result, our annual debt service requirements are affected by rising interest rates and 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 our 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, tax 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 Secured Overnight Financing Rate (SOFR) which replaced USD LIBOR as the reference rate under our credit facility. SOFR is intended to be a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities and is not the economic equivalent of USD LIBOR. While SOFR is a secured rate, USD LIBOR is an unsecured rate. As a result, there can be no assurance that SOFR will perform in the same way as USD LIBOR would have at any time, which may result in increased volatility in the interest rates payable under our credit facility and potentially increase our funding costs.

Furthermore, the terms of our debt agreements include restrictive covenants that limit, among other things, our and our subsidiaries' financial flexibility and ability to implement certain transactions. 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.

We are dependent on third-party service providers in our operations.

We utilize numerous third-party service providers in our operations, including for the provision of contract labor in several locations and backup facilities for our data. A failure by a third-party service provider could expose us to an inability to provide contractual services to our clients in a timely manner. Additionally, if a third-party service provider is unable to provide these services, we may incur significant costs to either internalize some of these services or find a suitable alternative. A failure in the performance of our due diligence processes and controls related to the supervision and oversight of these firms in detecting and addressing conflicts of interest, fraudulent activity, data breaches and cyber-attacks or noncompliance with relevant securities and other laws could cause us to suffer financial loss, regulatory sanctions or damage to our reputation.

Risks Related to Ownership of Our Common Stock

The concentrated ownership position of Joe Mansueto could adversely affect our other shareholders.

As of December 31, 2023, Joe Mansueto, our Executive Chairman and Chairman of the Board, owned approximately 37.4% of our outstanding common stock. While Joe has reduced his percentage ownership of the company in recent years as part of a personal plan to diversify his assets, his concentrated ownership position gives him substantial influence over 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 disincentivize other shareholders from proposing the election of other persons to our board of directors, 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, principally in relation to compensation, and low variable costs, which has historically magnified 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 experience current inflationary pressures over a prolonged period, increased compensation and other expenses could adversely impact our operating results. 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 and our executive team generally doesn't take one-on-one meetings with investors and research analysts. Because of this policy and limited analyst coverage of our stock, our stock price has not and 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 and trading volume of our common stock may decline.

We cannot guarantee we will pay dividends in the future or make any repurchases of our common stock under our repurchase program.

We have historically paid cash dividends on our common stock, but there is no guarantee that such dividends will continue in the future. Whether our Board authorizes future dividends will depend on a number of factors, including, our results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law, and other factors. Moreover, our Board may determine to repurchase shares of our common stock pursuant to an authorized share repurchase program.

On December 6, 2022, our board of directors approved a share repurchase program that authorizes the company to repurchase up to \$500 million of our outstanding common stock. Under this, we may, but are not obligated to, make share repurchases through a variety of methods, including open market or private transactions in amounts that we deem appropriate, in accordance with applicable federal securities laws. The timing and amount of repurchases, if any, will be subject to liquidity, stock price, market and economic conditions, compliance with applicable legal requirements and other relevant factors, including any future indebtedness and loan facilities that could prohibit or restrict our ability to pay dividends, make distributions to our shareholders, or repurchase our shares. Our stock repurchase program may be accelerated, suspended, delayed or discontinued at any time. Any failure to repurchase stock after we have announced our intention to do so may adversely impact our reputation and investor confidence in us and may adversely impact our stock price.

The existence of these share repurchase programs could cause our stock price to be higher than it otherwise would and could potentially reduce the market liquidity for our stock. Repurchase programs are also subject to potential excise tax as under the Inflation Reduction Act of 2022.

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 over a short period of time could cause the market price of our common stock to fall. In addition, the average daily trading volume in our stock is relatively low. Low trading volume in our stock may lead to greater fluctuations in our stock price, and may also make it difficult for shareholders to effect 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 1C. Cybersecurity

The purpose of our information security program is to enable the business to effectively identify, assess, prioritize and manage cybersecurity risk in order to support our long-term corporate objectives and to protect our employees, customers, and company assets from threats to our information systems. Cybersecurity is a critical component of our enterprise risk management and the company has identified cybersecurity as one of the key risk categories it faces.

Risk Management and Strategy

Morningstar takes a risk-based approach for managing its cybersecurity program. Currently, the program is evaluated periodically, including against the NIST Cybersecurity Framework. The outcome of these reviews, as well as any changes implemented as a result of these reviews, are reported to the audit committee of the board of directors (the "Audit Committee").

Morningstar deploys various safeguards to help protect against cybersecurity threats, including but not limited to, anti-malware (EDR) tools, email security, web filtering, multi-factor authentication and single-sign-on, regular patch cadence and vulnerability management, and hardened laptops with full disk encryption and admin permissions removed. For in-house software, Morningstar deploys various security tools to detect vulnerabilities, including but not limited to, static application security and dynamic application security testing, SAC tooling, cloud security posture management and central logging.

The InfoSec Team conducts vulnerability scans and third-party security assessments of operating systems, network devices, and web-facing applications. In order to ensure the resilience of Morningstar products, we require all products to follow enterprise-wide Disaster Recovery (DR) standards. Identified vulnerabilities and DR tasks are assigned to appropriate owners and on a weekly basis we produce a cybersecurity scorecard for each Morningstar product. These scorecards are disseminated to the relevant leadership team.

The InfoSec Team, under the supervision of the chief information security officer (CISO), has also implemented processes to evaluate cybersecurity controls of third-party service providers. As part of the Company's processes for engaging vendors, subcontractors and other third-parties, the InfoSec Team evaluates any such entities that may process confidential information prior to conducting business with them. We evaluate the security status of our critical third parties periodically to determine whether they continue to meet our security standards.

Employees undergo annual security awareness training, and a quarterly phishing exercise is conducted. Quarterly security incident tabletop exercises are conducted with appropriate stakeholders to practice response procedures, and an annual tabletop exercise is conducted with the executive leadership team to test our enterprise resilience. The enterprise resilience team manages both disaster recovery as well as business continuity plans in preparation to recover from high-impact incidents.

Governance

We have a team of experienced information security professionals (InfoSec Team) headed by our CISO, who reports to our chief technology officer (CTO), a member of our executive leadership team. Our CISO holds a Ph.D. in Computer Science with a focus on Cybersecurity and Privacy and has more than 15 years of information security experience. The InfoSec Team is responsible for assessing and managing cybersecurity risks and threats. The InfoSec Team, under the leadership of our CISO, manages our Information Security Program (InfoSec Program), which has oversight of IT risk governance, IT third-party risk management, software and product security, security operations and incident management, IT compliance, technical disaster recovery, and establishing enterprise-wide information security policies and procedures.

Our CISO co-chairs an internal Security and Privacy Advisory Council (SPAC), comprised of senior leaders from the IT, Legal, Audit, and Compliance departments, that meets on a quarterly basis to discuss environmental, regulatory, and technological changes and associated risks to the security and confidentiality of our information. The InfoSec team is tasked with executing this strategy through the implementation of cybersecurity policies, procedures, and strategies. The SPAC receives regular updates on pertinent objectives of the InfoSec Program, as well as a summary of recent security events and reporting on how any incidents were resolved.

The Audit Committee reviews and discusses with management risks relating to our cybersecurity and data privacy practices and has oversight of our cybersecurity risks. Our CTO and CISO provide an update to the Audit Committee at each of its regular meetings, which covers recent trends, identifies emergent risks to our technology infrastructure, DR plan statistics, employee training metrics, and updates on vulnerability assessments and threat landscape as needed. The Audit Committee is also provided a summary of events and reporting on how any such events were resolved.

Cybersecurity Event Management

We have instituted a specific event management process for the identification and resolution of cybersecurity incidents. Cybersecurity incidents are responded to and managed by our 24-hour Security Operations Center (SOC), and technical outages/accidental occurrences are reviewed and managed by operational teams at the relevant Morningstar product and by the Technology Operations Center (TOC). Upon resolution of a cybersecurity incident, we conduct a retrospective analysis to inform our security and operational efforts going forward. We engage third parties, such as incident response service providers, as appropriate, based on the severity of the cybersecurity event and/or the work required to remediate. Upon identification of a cybersecurity event, we assign a significance rating to the event. All cybersecurity events that meet or exceed designated criteria are escalated to the CISO or Chief Information Officer (CIO). Cybersecurity events which may be significant are further escalated to the Cyber Incident Disclosure Committee (Cyber Committee).

The Cyber Committee consists of the CTO, the CIO, the CISO, the chief privacy officer, the chief legal officer, the chief communications officer, representatives of the affected business unit and/or their respective delegates.

We believe that currently we have not encountered a cybersecurity event that has had a material impact on our business, financial condition, or results of our operation. We continue to invest in our IT security infrastructure and framework and to enhance our internal controls and processes to help protect our data from cybersecurity threats. For a discussion of the risks cybersecurity threats pose to our business strategy, results of operations and financial condition, please see "Item 1A. Risk Factors — Risks Related to Our Information Technology and Security" in this Report.

Item 2. Properties

As of December 31, 2023, we leased approximately 526,000 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 approximately 710,000 square feet of office space in 26 other countries around the world, including approximately 272,000 square feet in Mumbai, India and approximately 90,000 square feet in Toronto, Canada. We believe that our existing and planned office facilities, which are used by all of our segments, 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 16, 2024, there were 601 shareholders of record of our common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

We paid four quarterly dividends during 2023. In the fourth quarter of 2023, we announced an increase of our quarterly cash dividend from 37.5 cents per share to 40.5 cents per share. While subsequent dividends will be subject to board approval, we expect to pay a regular quarterly dividend of 40.5 cents per share in 2024.

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.

The table below presents information related to repurchases of common stock we made during the three months ended December 31, 2023. Refer to Note 16 of the Notes to our Consolidated Financial Statements for more information regarding our share repurchase program:

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 ^(a)
October 1, 2023 - October 31, 2023	—	\$ —	—	\$ 498,550,338
November 1, 2023 - November 30, 2023	—	—	—	\$ 498,550,338
December 1, 2023 - December 31, 2023	—	—	—	\$ 498,550,338
Total	—	\$ —	—	

(a) Repurchases will only be effected pursuant to the \$500.0 million share repurchase program authorized by our board of directors and announced publicly on December 6, 2022, which commenced on January 1, 2023 and which will expire on December 31, 2025.

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 16, 2024:

Name and Position	Date of Plan	Plan Termination Date	Plan Duration	Number of Shares to be Sold under the Plan	Timing of Sales under the Plan	Number of Shares Sold under the Plan through February 16, 2024	Projected Beneficial Ownership ⁽¹⁾
Joe Mansueto Executive Chairman	2/28/2023	4/30/2024	05/29/2023 to 04/30/2024	700,000	Shares to be sold under the plan if the stock reaches specified prices	575,425	15,804,659
Joe Mansueto Executive Chairman	11/17/2023	4/30/2025	05/01/2024 to 04/30/2025	500,000	Shares to be sold under the plan if the stock reaches specified prices	—	15,304,659
Steven Kaplan Director	8/3/2023	11/11/2024	03/11/2024 to 11/11/2024	5,000	Shares to be sold under the plan at market price	—	39,151

During the year ended December 31, 2023, the previously disclosed Rule 10b5-1 plan dated March 23, 2023 for Gail Landis and the Rule 10b5-1 plan dated August 31, 2022 for Joe Mansueto, completed in accordance with their respective 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 February 16, 2024 and includes shares of our common stock subject to options that were then exercisable or that will have become exercisable by April 16, 2024 and restricted stock units that will vest by April 16, 2024. The estimates do not reflect any changes to beneficial ownership that may have occurred since February 16, 2024. 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.

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 under "Item 1—Business" and other 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 "committed," "consider," "estimate," "forecast," "future," "goal," "is designed to," "maintain," "may," "might," "objective," "ongoing," "could," "expect," "intend," "plan," "possible," "potential," "seek," "anticipate," "believe," "estimate," "predict," "potential," "prospects," "continue," "seek," "strategy," "strive," "will," "would," or the negative thereof, and similar expressions. 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;
- failure to prevent and/or mitigate cybersecurity events and the failure to protect confidential information, including personal information about individuals;
- compliance failures, regulatory action, or changes in laws applicable to our credit ratings operations, investment advisory, environmental, social, and governance (ESG), and index businesses;
- failing to innovate our product and service offerings or anticipate our clients' changing needs;
- the impact of artificial intelligence (AI) and related new technologies on our business, legal, and regulatory exposure profile and reputation;
- failure to detect errors in our products or failure of our products to perform properly due to defects, malfunctions or similar problems;
- failing to recruit, develop, and retain qualified employees;
- prolonged volatility or downturns affecting the financial sector, global financial markets, and the global economy and its effect on our revenue from asset-based fees and credit ratings business;
- failing to scale our operations and increase productivity in order to implement our business plans and strategies;
- liability for any losses that result from errors in our automated advisory tools or errors in the use of the information and data we collect;
- inadequacy of our operational risk management, business continuity programs and insurance coverage in the event of a material disruptive event;
- failing to efficiently integrate and leverage acquisitions and other investments, which may not realize the expected business or financial benefits, to produce the results we anticipate;
- 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 potential adverse effect of our indebtedness on our cash flows and financial and operational flexibility;
- challenges in accounting for tax complexities in the global jurisdictions we operate in could materially affect our tax obligations and tax rates; and
- failing to protect our intellectual property rights or claims of intellectual property infringement against us.

A more complete description of these risks and uncertainties, among others, 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, future events, or otherwise, except as may be required by law. You are, however, advised to review any further disclosures we make on related subjects, and about new or additional risks, uncertainties, and assumptions in our future filings with the Securities and Exchange Commission (SEC) on Forms 10-K, 10-Q, and 8-K.

This section includes comparisons of certain 2023 financial information to the same information for 2022. Year-to-year comparisons of the 2022 financial information to the same information for 2021 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, 2022, filed with the SEC on February 24, 2023. This section also includes comparisons of 2022 segment financial information to the same information for 2021.

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

Our mission is to empower investor success. 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 investors with the conviction that they can make better-informed decisions and realize success on their own terms.

Our strategy is to deliver insights and experiences that are essential to the investor workflow. 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.

Segments

Effective as of December 31, 2023, the company concluded that it has seven operating segments which are presented as the following five reportable segments: Morningstar Data and Analytics, PitchBook, Morningstar Wealth, Morningstar Credit, and Morningstar Retirement. The operating segments of Morningstar Sustainalytics and Morningstar Indexes do not individually meet the quantitative segment reporting thresholds and have been combined and presented as part of Corporate and All Other, which is not a reportable segment. Prior period segment information is presented on a comparable basis to the basis on which current period segment information is presented and reviewed by the chief operating decision maker (CODM). For additional information about our segment reporting, refer to Note 6 of the Notes to our Consolidated Financial Statements in Part II of this Report.

Revenue

We offer an extensive line of investment-related 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.

Our segments sell many of our research and data products and services through license agreements on either a per user or enterprise-basis. Morningstar Data and Analytics and PitchBook generate most of our licensed-based revenue. Our license agreements typically range from one to three years and are accounted for as subscription services available to customers and not as a license under the accounting guidance.

Our Morningstar Wealth and Morningstar Retirement segments generate most of our asset-based revenue where basis points and other fees are charged for assets under management or advisement (AUMA). Our asset-based arrangements typically range from one to three years.

Our transaction-based revenue, which is recognized primarily in our Morningstar Credit and Morningstar Wealth segments, is one-time in nature, compared with the recurring revenue streams represented by our license and asset-based products.

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 \$544.0 million (of which \$517.7 million was classified as a current liability with an additional \$26.3 million included in long-term liabilities) at the end of 2023. 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 resulting in reduced 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, 2023, we had wholly- or majority-owned subsidiaries in 31 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, 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 (including adjusted operating income);
- Operating margin (including adjusted operating margin); and
- Free cash flow.

Organic revenue, adjusted operating income, adjusted operating margin, 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 standard changes (accounting changes), 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 mergers and acquisitions (M&A)-related expenses (including M&A-related earn-outs) and amortization, as well as all expenses related to the significant reduction and shift of the company's operations in China. We define adjusted operating margin as operating margin excluding all M&A-related expenses (including M&A-related earn-outs) and amortization, as well as all expenses related to the significant reduction and shift of the company's operations in China. 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 and the shift of the company's operations in China.

We define free cash flow as cash provided by or used for operating activities less capital expenditures. Free cash flow is presented solely as a supplemental disclosure to help investors better understand how much cash is available after making capital expenditures. Our management team uses free cash flow to evaluate the health of 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.

In addition to the measures described above, 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 tracks 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, 2024.

Regulatory Trends Affecting Our Business

In addition to the industry developments described under Part I, Item 1. Business - "Our Strategy" there are several longer-term regulatory trends we consider relevant to our business, as summarized below and as described in more detail in Part I, Item 1. Business - "Government Regulation" and in Part I, Item 1A - "Risk Factors" of this Report.

Even in its fragmented state, regulators globally continue 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.

With respect to our credit ratings business, the European Securities Market Authority or the U.K. Financial Conduct Authority may begin to make inconsistent modifications to the laws and regulations of the credit rating agency regulatory regimes, which would increase the cost and complexity of regulatory compliance for our credit ratings business.

In the U.K. and Continental Europe, with respect to our Investment Management business, Morningstar continues to navigate the equivalence regimes and domestic laws governing matters of access in financial services post-Brexit. 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.

Interest from investors, regulators and other relevant stakeholders in firms adopting ESG-related business and operational risk strategies persists. Morningstar is impacted by these trends on the corporate level, as a United States (U.S.) public company with international operations, and on a business level, as a provider of ESG data, ratings and other services to help investors and companies identify, understand, and manage ESG-driven risks and opportunities and inform their decisions. These developments are expected to have long term impacts on our delivery of products and services, customer interactions, physical operations, technology systems, and dependencies on third parties.

Morningstar is monitoring proposed legislation in the U.S., European Union (EU), and in other jurisdictions relevant to its ESG business activities. These and other potential regulations may impact not only the scope of our disclosure obligations and the ESG-related products and services we provide to customers, but also present an opportunity to guide and inform investors who are looking to understand the regulations and develop their own workflows to ensure their compliance with new requirements.

The politicization of ESG-related business activities and investments has increased in recent years, particularly in the U.S. This politicization has led to the rise of anti-ESG proponents and actions, including individual and multi-state inquiries into companies' ESG activities, the submission of anti-ESG shareholder proposals to U.S.-based public companies, and the filing of shareholder derivative lawsuits against U.S. companies. As Morningstar provides data and analysis with respect to ESG-related investments, Morningstar, along with other financial service providers, faces scrutiny in this political environment and expends resources in responding to inquiries. Morningstar continues to closely monitor the ESG and anti-ESG landscape.

Data privacy regulation continues to proliferate, as numerous national and state jurisdictions have adopted or are considering new data privacy regulations.

As a related matter, issues of cybersecurity as they relate to the identification and mitigation of cyber threats 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. In the U.S., the SEC recently adopted disclosure requirements regarding cybersecurity hygiene and preparedness and cyber incident reporting.

Regulators in various global jurisdictions have adopted or are considering regulations governing AI technologies, including the EU's AI Act. Additionally, regulators have sought to clarify that existing regulations apply to novel use cases involving AI technologies. Combined, this regulatory activity creates a complex and potentially costly compliance environment as Morningstar deploys AI technologies in its products and in tools used in the workplace.

Finally, our company is impacted by government regulation and policies focused on macroeconomic trends such as inflation and unemployment. Central banks' increases in interest rates to combat inflationary pressures increases our interest expense on our variable rate indebtedness, while the volatile rate environment reduces credit issuance putting negative pressure on our credit rating business. Our compensation expense reflects rising wage scales in many of the markets where we operate as unemployment rates remain low. Overall, our business, balance sheet, technological infrastructure, and teams have shown resilience and flexibility navigating global macroeconomic trends.

Consolidated Results

Key metrics (in millions)	2023	2022	Change
Revenue	\$ 2,038.6	\$ 1,870.6	9.0 %
Operating income	230.6	167.8	37.4 %
Operating margin	11.3 %	9.0 %	2.3 pp
Cash provided by operating activities	\$ 316.4	\$ 297.8	6.2 %
Capital expenditures	(119.1)	(129.5)	(8.0)%
Free cash flow	<u>\$ 197.3</u>	<u>\$ 168.3</u>	17.2 %
Cash used for investing activities	\$ (81.9)	\$ (799.3)	(89.8)%
Cash provided by (used for) financing activities	\$ (278.4)	\$ 415.1	(167.1)%

pp — percentage points

Consolidated Revenue

Revenue by type ⁽¹⁾

(in millions)				Change	
	2023	2022	2021	2023 vs 2022	2022 vs 2021
Morningstar Data and Analytics					
License-based	\$ 745.5	\$ 695.1	\$ 666.5	7.3 %	4.3 %
Asset-based	—	—	—	— %	— %
Transaction-based	1.7	1.5	1.0	13.3 %	50.0 %
Morningstar Data and Analytics total	\$ 747.2	\$ 696.6	\$ 667.5	7.3 %	4.4 %
PitchBook					
License-based	\$ 551.9	\$ 450.7	\$ 301.6	22.5 %	49.4 %
Asset-based	—	—	—	— %	— %
Transaction-based	—	—	—	— %	— %
PitchBook total	\$ 551.9	\$ 450.7	\$ 301.6	22.5 %	49.4 %
Morningstar Wealth					
License-based	\$ 80.8	\$ 80.9	\$ 82.7	(0.1)%	(2.2)%
Asset-based	122.6	117.6	125.5	4.3 %	(6.3)%
Transaction-based	26.5	30.4	30.2	(12.8)%	0.7 %
Morningstar Wealth total	\$ 229.9	\$ 228.9	\$ 238.4	0.4 %	(4.0)%
Morningstar Credit					
License-based	\$ 11.7	\$ —	\$ —	NMF	— %
Asset-based	—	—	—	— %	— %
Transaction-based	203.7	236.9	271.2	(14.0)%	(12.6)%
Morningstar Credit total	\$ 215.4	\$ 236.9	\$ 271.2	(9.1)%	(12.6)%
Morningstar Retirement					
License-based	\$ 1.7	\$ 2.0	\$ 2.0	(15.0)%	— %
Asset-based	108.5	101.8	102.5	6.6 %	(0.7)%
Transaction-based	0.3	0.2	0.1	50.0 %	100.0 %
Morningstar Retirement total	\$ 110.5	\$ 104.0	\$ 104.6	6.3 %	(0.6)%
Corporate and All Other ⁽²⁾					
License-based	\$ 125.9	\$ 103.0	\$ 78.9	22.2 %	30.5 %
Asset-based	48.5	50.0	36.9	(3.0)%	35.5 %
Transaction-based	9.3	0.5	0.2	NMF	150.0 %
Corporate and All Other total	\$ 183.7	\$ 153.5	\$ 116.0	19.7 %	32.3 %
License-based	\$ 1,517.5	\$ 1,331.7	\$ 1,131.7	14.0 %	17.7 %
Asset-based	279.6	269.4	264.9	3.8 %	1.7 %
Transaction-based	241.5	269.5	302.7	(10.4)%	(11.0)%
Consolidated revenue	\$ 2,038.6	\$ 1,870.6	\$ 1,699.3	9.0 %	10.1 %

NMF — Not meaningful

(1) Starting with the quarter ended March 31, 2023, the company updated its revenue-type classifications to account for product areas with more than one revenue type. Prior periods have not been restated to reflect the updated classifications. Revenue from Morningstar Sustainalytics' second-party opinions product was reclassified from license-based to transaction-based. Revenue from Morningstar Indexes data and services products was reclassified from asset-based to license-based. Revenue from Morningstar DBRS and Morningstar Credit data products was reclassified from transaction-based to license-based.

(2) Corporate and All Other provides a reconciliation between revenue from our reportable segments and consolidated revenue. Corporate and All Other includes Morningstar Sustainalytics and Morningstar Indexes as sources of revenues.

2023 versus 2022

In 2023, our consolidated revenue rose \$168.0 million, or 9.0%. Foreign currency movements decreased revenue by \$3.2 million in 2023.

License-based revenue, which represents subscription services available to customers, increased 14.0%, or 11.8% on an organic basis, during 2023. Reported and organic revenue growth was primarily driven by strong demand for PitchBook and Morningstar Data and Analytics products.

Asset-based revenue increased 3.8%, or 5.6% on an organic basis, during 2023, primarily due to increases in Morningstar Indexes as well as increases in Morningstar Retirement and Morningstar Wealth asset-based revenue, driven by the rebound in global asset values and net inflows across multiple products compared to the prior year.

Transaction-based revenue decreased 10.4%, or 11.5% on an organic basis, during 2023, primarily due to declines in Morningstar Credit revenue.

2022 versus 2021

In 2022, our consolidated revenue rose \$171.3 million, or 10.1%. Foreign currency movements decreased revenue by \$45.9 million in 2022.

License-based revenue increased 17.7%, or 18.0% on an organic basis, during 2022. Reported and organic revenue growth was primarily driven by strong demand for PitchBook and Morningstar Data and Analytics products.

Asset-based revenue increased 1.7%, or 1.5% on an organic basis, during 2022, driven by increases in Morningstar Indexes which was partially offset by lower asset-based revenue in Morningstar Wealth and Morningstar Retirement reflecting declines in global markets.

Transaction-based revenue decreased 11.0%, or 8.3% on an organic basis, during 2022, primarily due to declines in Morningstar Credit revenue.

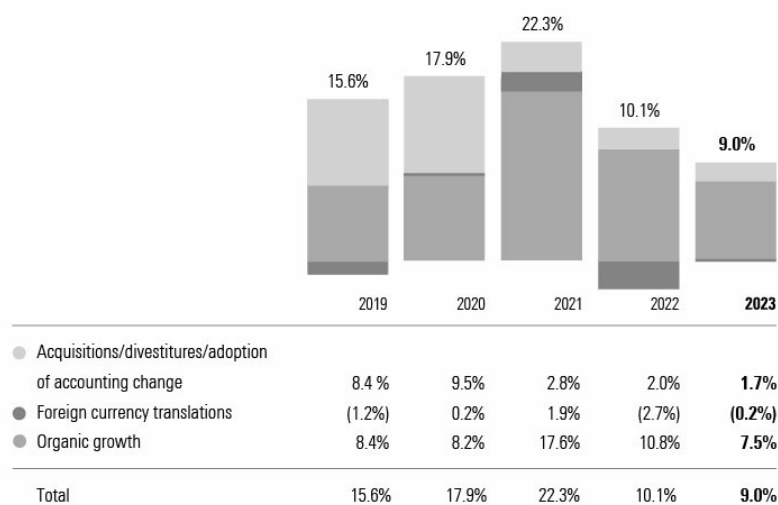
Organic revenue

Organic revenue (revenue excluding acquisitions, divestitures, adoption of new accounting standard changes (accounting changes), 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 required 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 and product areas. 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.

Excluding revenue from acquisitions, accounting changes, and the impact of foreign currency translations, organic revenue increased 7.5% in 2023. PitchBook and Morningstar Data and Analytics were the largest drivers of the increase in organic revenue during 2023.

Contributors to Revenue Growth



The tables below reconcile consolidated revenue to organic revenue:

(in millions)	2023	2022	Change
Consolidated revenue	\$ 2,038.6	\$ 1,870.6	9.0 %
Less: acquisitions	(30.9)	—	NMF
Less: accounting changes	—	—	— %
Effect of foreign currency translations	3.2	—	NMF
Organic revenue	<u>\$ 2,010.9</u>	<u>\$ 1,870.6</u>	7.5 %

Revenue by geographical area

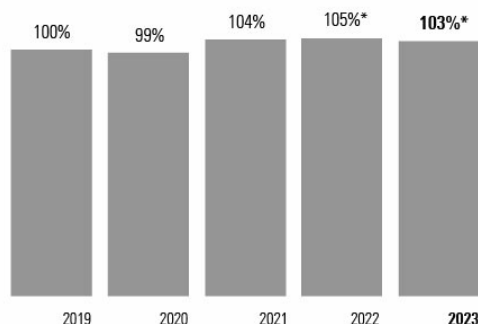
(in millions)	2023	2022	Change
United States	\$ 1,470.6	\$ 1,353.9	8.6 %
Asia	49.3	44.8	10.0 %
Australia	58.4	55.8	4.7 %
Canada	116.3	109.8	5.9 %
Continental Europe	185.5	162.9	13.9 %
United Kingdom	148.0	133.6	10.8 %
Other	10.5	9.8	7.1 %
Total International	<u>568.0</u>	<u>516.7</u>	9.9 %
Consolidated revenue	<u>\$ 2,038.6</u>	<u>\$ 1,870.6</u>	9.0 %

International revenue comprised approximately 28% of our consolidated revenue in 2023 and 2022. Approximately 59% of international revenue was generated from Continental Europe and the U.K. in 2023. Revenue from international operations increased \$51.3 million, or 9.9%, in 2023 driven by strong demand for Morningstar Data and Analytics products.

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; any loss of clients due to cancellations; 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 renewal rate percentages greater or lower than 100%.

Revenue Renewal Rates for License-Based Products and Services



* Includes Morningstar Sustainalytics starting in 2022. Excluding Morningstar Sustainalytics, the 2023 and 2022 renewal rates would have been largely unchanged at 104% and 105% respectively.

Our revenue renewal rate calculation includes only those products that we consider to be license-based. These are primarily weighted toward Morningstar Data and Analytics and PitchBook products, but also includes other license-based products and services. For these license-based products and services, we estimate that our annual renewal rate was approximately 103% in 2023 versus 105% in 2022.

Consolidated Operating Expense

(in millions)	2023	2022	Change
Cost of revenue	\$ 843.5	\$ 779.3	8.2 %
% of revenue	41.4 %	41.7 %	(0.3) pp
Sales and marketing	423.8	356.5	18.9 %
% of revenue	20.8 %	19.1 %	1.7 pp
General and administrative	355.8	400.4	(11.1)%
% of revenue	17.5 %	21.4 %	(3.9) pp
Depreciation and amortization	184.9	166.6	11.0 %
% of revenue	9.1 %	8.9 %	0.2 pp
Total operating expense	\$ 1,808.0	\$ 1,702.8	6.2 %
% of revenue	88.7 %	91.0 %	(2.3) pp

In 2023, operating expense increased \$105.2 million, or 6.2%.

In July 2022, the company began to significantly reduce its operations in Shenzhen, China and to shift the work related to its global business functions to other Morningstar locations. Costs incurred in 2023 related to this transition totaled \$15.6 million, due primarily to severance and personnel costs, transformation costs, which consisted of professional fees and the temporary duplication of headcount as the company hired replacement roles in other markets and continued to employ certain Shenzhen-based staff through the transition, and asset impairment costs. This compared to \$35.7 million in 2022. During the third quarter of 2023, the company substantially completed these activities.

Excluding the impact of the China operations transition, M&A-related expenses, and intangible amortization, operating expenses increased 8.9% during 2023.

Higher compensation expense (which primarily consists of salaries, bonuses, and other company-sponsored benefits), depreciation expense, SaaS-based software subscriptions, facilities-related expenses, and commissions were the key contributors to operating expense growth in 2023. Foreign currency translations had a favorable impact of \$8.3 million on operating expense in 2023.

Compensation expense increased \$121.7 million in 2023. These higher costs reflect higher bonus expense and higher salary costs, including the impact of merit increases, in the PitchBook and Morningstar Data and Analytics segments to support growth.

Depreciation expense increased \$15.4 million during 2023 as a result of higher capitalized software costs for product enhancements in prior periods. The shift in headcount to regions with higher compensation costs due to the company's China operations transition contributed to higher capitalized software costs. Higher leasehold improvements and additions of computer equipment also drove higher depreciation expense in 2023.

Higher software subscriptions were also a driver during 2023, increasing \$10.9 million, due to the company's investment in various SaaS-based platforms across the business.

Facilities-related expense increased \$8.7 million during 2023, in connection with lease expansion in certain geographies.

Sales commission expense increased \$8.2 million in 2023, due to strong sales performance and higher amortization of capitalized commissions related to prior year sales performance.

On September 29, 2023, DBRS, Inc. (DBRS) entered into two settlements with the SEC requiring DBRS to pay an aggregate of \$8.0 million in civil monetary penalties, thus resulting in \$8.0 million of expense in 2023. Under the terms of the settlements, DBRS paid a \$6.0 million civil monetary penalty to the SEC to resolve the investigation related to record-keeping, and paid a \$2.0 million civil monetary penalty to the SEC to resolve the investigation related to commercial mortgage-backed securities (CMBS) ratings methodologies, both in early October 2023.

These increases were partially offset by lower stock-based compensation, professional fees, severance expense, and capitalized labor.

Stock-based compensation decreased \$30.5 million in 2023, primarily driven by the PitchBook management bonus plan. The current year of the plan features lower target payouts versus the prior year. In 2022, higher stock-based compensation was driven in large part by the overachievement of targets under the prior year plan.

Professional fees decreased \$17.1 million in 2023, reflecting efforts to reduce the use of outside professional services as well as lower expenses for third-party resources supporting M&A activity and the transition of the company's China-based activities. In addition, professional fees in 2022 reflected the impact of higher legal fees primarily associated with a completed independent investigation regarding certain research practices of Morningstar Sustainability.

Severance expense decreased \$12.7 million in 2023, compared to the prior year when severance related to the transition and shift of the company's China operations totaled \$25.9 million. This decline was partially offset by \$9.0 million of severance expense during 2023, respectively, related to targeted reorganizations and headcount reductions in certain parts of the business, including Morningstar Sustainalytics, Morningstar Wealth, and Morningstar DBRS. During 2023, the most significant reductions were at Morningstar Sustainalytics. These reorganizations were in part in response to slower than anticipated progress against growth targets due in part to softening demand for ESG solutions for Morningstar Sustainalytics, the impact of sharp market declines in 2022 for Morningstar Wealth, and weak credit issuance activity, especially in U.S. CMBS, for Morningstar DBRS. In addition, the company incurred \$2.4 million in severance expense related to the company's China operations transition during 2023.

An increase of \$11.7 million in capitalized software development related to the shift in headcount to regions with higher compensation costs due to the company's China operations transition and accelerated product development efforts for our key product areas reduced operating expense in 2023.

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 75% of our employees in this category.

Cost of revenue increased \$64.2 million, or 8.2%, in 2023. Higher compensation expense of \$66.1 million was the largest contributor to the increase, primarily due the factors noted above. Cloud computing and production expense also increased \$5.6 million and \$4.7 million, respectively. These increases were partially offset by lower capitalized software expense of \$11.7 million and lower professional fees of \$10.7 million, due to the factors described above.

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, which in turn reduced operating expense. In 2023, we capitalized \$100.0 million associated with software development activities, internal infrastructure, and software, compared with \$88.3 million in 2022. The increase in capitalized software development related to the company's China operations transition resulted in a shift of headcount to higher compensation regions.

Sales and marketing

Sales and marketing expense increased \$67.3 million, or 18.9%, in 2023. Higher compensation expense of \$54.3 million was the largest contributor, primarily due to the factors noted above. Sales commission expense grew by \$7.6 million due in large part to strong sales performance and higher amortization of capitalized commissions related to prior year sales performance, primarily for PitchBook. Advertising and marketing costs increased \$5.3 million during 2023 due to higher pay-per-click advertising and marketing campaign expense.

General and administrative

General and administrative expense decreased \$44.6 million, or 11.1%, in 2023. A decline in stock-based compensation expense of \$32.4 million was the largest contributor to the decline during 2023. The decrease in stock-based compensation expense was primarily driven by the PitchBook management bonus plan. The current year of the plan features lower target payouts versus the prior year. In 2022, higher stock-based compensation was driven in large part by the overachievement of targets under the prior year plan.

Severance expense also declined \$18.2 million during 2023 due to the factors noted above. The decline in severance expense was partially offset by an increase of \$9.0 million of severance expense related to targeted reorganizations in certain areas of business during 2023 as noted above. Professional fees decreased \$6.3 million during 2023.

These decreases were partially offset by an increase in expense related to settlements between the SEC and DBRS, Inc. totaling \$8.0 million and higher rent expense of \$6.8 million during 2023.

Depreciation and amortization

In 2023, depreciation and amortization increased \$18.3 million, or 11.0%, primarily due to depreciation expense.

Depreciation expense increased \$15.4 million in 2023, driven mainly by depreciation expense from higher levels of capitalized software development over the past several years. Higher leasehold improvements and additions of computer equipment also drove higher depreciation expense in 2023.

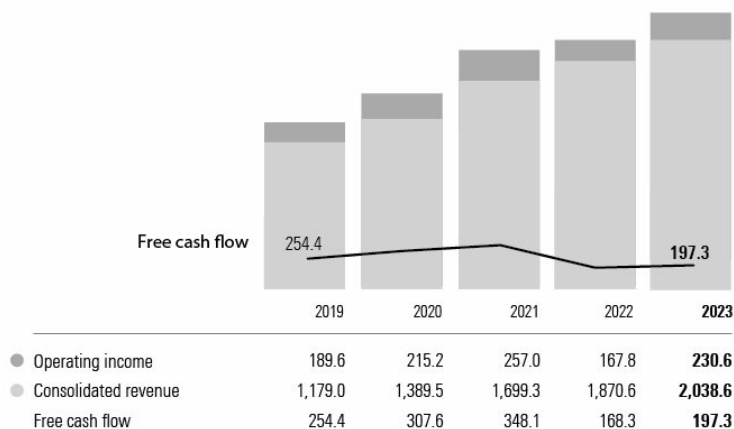
Intangible amortization expense increased \$3.8 million in 2023, primarily from additional amortization related to intangibles from the acquisitions of Leveraged Commentary & Data (LCD) and Praemium Portfolio Services Limited (Praemium).

Consolidated Operating Income and Operating Margin

(in millions)	2023	2022	Change
Operating income	\$ 230.6	\$ 167.8	37.4 %
Operating margin	11.3 %	9.0 %	2.3 pp

Consolidated operating income increased \$62.8 million in 2023, or a 37.4% increase from 2022, reflecting an increase in revenue of \$168.0 million, which was partially offset by an increase in operating expense of \$105.2 million. Operating margin was 11.3% in 2023, an increase of 2.3 percentage points compared with 2022. Severance costs of \$9.0 million related to certain reorganizations excluding our China activities negatively impacted operating margin and adjusted operating margin by 0.4 percentage points during 2023. In addition, the DBRS SEC settlements negatively impacted operating margin and adjusted operating margin by an additional 0.4 percentage points.

Key Metrics (\$mil)



Non-GAAP Financial Measures

We reported adjusted operating income of \$326.5 million in 2023 compared with \$298.9 million in 2022, which excludes intangible amortization expense, M&A-related expenses (including M&A-related earn-outs), and expenses related to the significant reduction and shift of the company's operations in China. 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)	2023	2022	Change
Operating income	\$ 230.6	\$ 167.8	37.4 %
Add: intangible amortization expense ⁽¹⁾	70.5	66.7	5.7 %
Add: M&A-related expenses ⁽²⁾	9.8	17.1	(42.7)%
Add: M&A-related earn-outs ⁽³⁾	—	11.6	NMF
Add: Severance and personnel expenses ⁽⁴⁾	5.5	27.5	(80.0)%
Add: Transformation costs ⁽⁴⁾	7.0	8.2	(14.6)%
Add: Asset impairment costs ⁽⁴⁾	3.1	—	NMF
Adjusted operating income	<u>\$ 326.5</u>	<u>\$ 298.9</u>	9.2 %
Morningstar Data and Analytics	\$ 339.8	\$ 313.3	8.5 %
PitchBook	148.1	71.5	107.1 %
Morningstar Wealth	(40.4)	(14.3)	182.5 %
Morningstar Credit	21.7	59.1	(63.3)%
Morningstar Retirement	54.1	51.4	5.3 %
Less: Corporate and All Other ⁽⁵⁾	<u>(196.8)</u>	<u>(182.1)</u>	8.1 %
Adjusted operating income	<u>\$ 326.5</u>	<u>\$ 298.9</u>	9.2 %

We reported adjusted operating margin of 16.0% in 2023 and 2022, which excludes intangible amortization expense, M&A-related expenses (including M&A-related earn-outs), and expenses related to the significant reduction and shift of the company's operations in China. Adjusted operating margin is a non-GAAP financial measure; the table below shows a reconciliation to the most directly comparable GAAP financial measure.

	2023	2022	Change
Operating margin	11.3 %	9.0 %	2.3 pp
Add: intangible amortization expense ⁽¹⁾	3.5 %	3.6 %	(0.1) pp
Add: M&A-related expenses ⁽²⁾	0.4 %	0.9 %	(0.5) pp
Add: M&A-related earn-outs ⁽³⁾	— %	0.6 %	(0.6) pp
Add: Severance and personnel expenses ⁽⁴⁾	0.3 %	1.5 %	(1.2) pp
Add: Transformation costs ⁽⁴⁾	0.3 %	0.4 %	(0.1)pp
Add: Asset impairment costs ⁽⁴⁾	0.2 %	— %	0.2 pp
Adjusted operating margin	<u>16.0 %</u>	<u>16.0 %</u>	0.0 pp

(1) Excludes finance lease amortization expense of \$1.2 million in 2023 and \$2.1 million in 2022.

(2) Reflects non-recurring expenses related to M&A activity including pre-deal due diligence, transaction costs, and post-close integration costs.

(3) Reflects the impact of M&A-related earn-outs included in operating expense.

(4) Reflects costs associated with the significant reduction of the company's operations in Shenzhen, China and the shift of work related to its global business functions to other Morningstar locations.

Severance and personnel expenses include severance charges, incentive payments related to early signing of severance agreements, transition bonuses, and stock-based compensation related to the accelerated vesting of restricted stock unit (RSU) and market stock unit (MSU) awards. In addition, the reversal of accrued sabbatical liabilities is included in this category.

Transformation costs include professional fees and the temporary duplication of headcount. As the company hired replacement roles in other markets and shifted capabilities, it employed certain Shenzhen-based staff through the transition period, which resulted in elevated compensation costs on a temporary basis.

Asset impairment costs include the write-off or accelerated depreciation of fixed assets in the Shenzhen, China office that were not redeployed, in addition to lease abandonment costs as the company downsized its office space prior to the lease termination date.

(5) Corporate and All Other includes unallocated corporate expenses of \$153.5 million in 2023 and \$135.8 million in 2022, as well as adjusted operating income/loss from Morningstar Sustainalytics and Morningstar Indexes. Unallocated corporate expenses include finance, human resources, legal, and other management-related costs that are not considered when segment performance is evaluated.

Segment Results

Segment adjusted operating income reflects the impact of direct segment expenses as well as certain allocated centralized costs, such as information technology, sales and marketing, and research and data.

Morningstar Data and Analytics

The following table presents the results for Morningstar Data and Analytics:

(in millions)				Change	
	2023	2022	2021	2023 vs 2022	2022 vs 2021
Revenue	\$ 747.2	\$ 696.6	\$ 667.5	7.3 %	4.4 %
Adjusted operating income	\$ 339.8	\$ 313.3	\$ 293.5	8.5 %	6.7 %
Adjusted operating margin	45.5 %	45.0 %	44.0 %	0.5 pp	1.0 pp

Morningstar Data and Analytics depreciation expense was \$ 31.0 million, \$ 23.4 million, and \$ 29.5 million for 2023, 2022, and 2021, respectively.

2023 versus 2022

Morningstar Data and Analytics total revenue increased \$50.6 million, or 7.3%, in 2023. Revenue grew 7.4% on an organic basis, driven primarily by increases in Morningstar Data and Morningstar Direct.

Morningstar Data contributed \$26.2 million to Morningstar Data and Analytics revenue growth, with revenue increasing 10.3% on a reported and organic basis, supported by growth across all major geographies. At the product level, managed investment data, including fund data, continued to be a key driver of higher revenue, followed by growth in Morningstar Essentials and equity data. In 2023, Morningstar Data's coverage continued to evolve to meet client needs, with the addition of structured products and notes data and the continued expansion of coverage on other vehicle types.

Morningstar Direct contributed \$17.1 million to Morningstar Data and Analytics revenue growth, with revenue increasing 9.3%, or 9.2%, on an organic basis, reflecting growth across all major geographies. Morningstar Direct licenses increased 0.8%. In 2023, Morningstar Direct introduced Direct Lens, which unifies the platform's portfolio capabilities in a clear and intuitive interface; self-service data feeds; and the Morningstar Data Python package, which gives data scientists, data strategists, and quantitative analysts seamless access to data in their favorite coding environments.

Morningstar Data and Analytics adjusted operating income increased \$26.5 million, or 8.5%, and adjusted operating margin increased 0.5 percentage points in 2023, as revenue growth outpaced expense growth. Expense growth was primarily driven by higher compensation costs.

2022 versus 2021

Morningstar Data and Analytics total revenue increased \$29.1 million, or 4.4%, in 2022. Revenue grew 8.0% on an organic basis, driven primarily by demand for Morningstar Data and Morningstar Direct.

Morningstar Data contributed \$11.5 million to Morningstar Data and Analytics revenue growth, with revenue increasing 4.7% or 9.4%, on an organic basis, driven by growth across geographies and strong demand for fund data. In 2022, Morningstar Data expanded the reach of its data sets to better cover the client portfolio with enhancements to fixed-income data and analytics and expanded coverage of 529 plan portfolios, public equities, collective investment trusts, and model portfolios. We also introduced new regulatory data solutions in response to global investor protection, capital adequacy, and sustainability regulations.

Morningstar Direct contributed \$11.6 million to Morningstar Data and Analytics revenue growth, with revenue increasing 6.7%, or 10.7%, on an organic basis, driven by growth across geographies. Morningstar Direct licenses increased 5.7%, reflecting gains from both new and existing clients. In 2022, Morningstar Direct enriched and expanded Analytics Lab, which combines access to Morningstar's data and research with Jupyter Notebook, an open-source data-science tool, to allow clients to explore and analyze Morningstar data more efficiently in a flexible environment. Performance was also positively impacted by the release of the Sustainability and Portfolio Hubs, which act as a central repository of research and tools for related workflows, and broadened data coverage in fixed-income, exchange-traded funds (ETFs), ESG, model portfolios, and alternatives to better cover investor portfolios.

Morningstar Data and Analytics adjusted operating income increased \$19.8 million, or 6.7%, and adjusted operating margin increased 1.0 percentage points in 2022, as revenue growth outpaced expense growth. Expense growth was primarily driven by higher compensation costs, as well as increased professional fees.

PitchBook

The following table presents the results for PitchBook:

(in millions)				Change	
	2023	2022	2021	2023 vs 2022	2022 vs 2021
Revenue	\$ 551.9	\$ 450.7	\$ 301.6	22.5 %	49.4 %
Adjusted operating income	\$ 148.1	\$ 71.5	\$ 55.4	107.1 %	29.1 %
Adjusted operating margin	26.8 %	15.9 %	18.4 %	10.9 pp	(2.5) pp

PitchBook depreciation expense was \$ 26.8 million, \$ 23.8 million, and \$ 20.4 million for 2023, 2022, and 2021, respectively.

2023 versus 2022

PitchBook total revenue increased \$101.2 million, or 22.5%, in 2023, which included positive contributions from the acquisition of LCD which closed June 1, 2022. Revenue grew 17.6% on an organic basis.

The PitchBook product area, which includes the PitchBook Platform as well as direct data, contributed \$85.7 million to PitchBook revenue growth, with revenue increasing 21.0% on a reported and organic basis, as licenses grew 14.0%. Growth was primarily driven by strength in its core investor and advisor clients, which offset some continued softness with its company (corporate) market segment. During 2023, PitchBook substantially completed the integration of LCD core data offering and news onto the PitchBook Platform. At the same time, PitchBook introduced new capabilities to inform investor strategies, including the VC Exit Predictor, a proprietary tool and scoring methodology to predict exit outcomes for VC-backed companies, and the Manager Scoring tool, a new methodology that helps limited partners discover and evaluate top-performing private fund managers. Results exclude stand-alone LCD revenues.

PitchBook adjusted operating income increased \$76.6 million, or 107.1%, and adjusted operating margin increased 10.9 percentage points in 2023, as revenue growth outpaced expense growth. Expense growth was primarily driven by higher compensation costs partially offset by a decrease in stock-based compensation expense in 2023 compared to 2022 when higher stock-based compensation costs reflected the overachievement of targets under the PitchBook management bonus plan.

2022 versus 2021

PitchBook total revenue increased \$149.1 million, or 49.4%, in 2022, which included positive contributions from the acquisition of LCD which closed June 1, 2022. Revenue grew 39.1% on an organic basis.

The PitchBook product area contributed \$117.5 million to PitchBook revenue growth, with revenue increasing 40.5% on a reported and organic basis, as PitchBook continued to enhance core data sets and improve the user experience. Reported and organic results for the product area exclude contributions from the LCD acquisition. Licenses grew 28.0%. In 2022, PitchBook added new companies and funds to coverage in the Europe, Middle East, and Africa (EMEA) and Asia-Pacific regions, while enhancing alternative data sets including real assets and hedge funds. Notable product releases included Portfolio Forecasting, a tool that allows Limited Partners to efficiently manage cash flow, pace commitments, and hit allocation targets directly within the PitchBook Platform.

PitchBook adjusted operating income increased \$16.1 million, or 29.1%, and adjusted operating margin decreased 2.5 percentage points in 2022, as expense growth outpaced revenue growth. Expense growth was primarily driven by higher compensation costs and increases in stock-based compensation expense due to the overachievement of targets under the PitchBook management bonus plan. Higher compensation costs reflected increased investment in the business, which also drove higher professional fees, and costs for the LCD business beginning on June 1, 2022.

Morningstar Wealth

The following table presents the results for Morningstar Wealth:

(in millions)				Change	
	2023	2022	2021	2023 vs 2022	2022 vs 2021
Revenue	\$ 229.9	\$ 228.9	\$ 238.4	0.4 %	(4.0)%
Adjusted operating income (loss)	\$ (40.4)	\$ (14.3)	\$ 19.4	182.5 %	NMF
Adjusted operating margin	(17.6)%	(6.2)%	8.1 %	(11.4) pp	(14.3) pp

Morningstar Wealth asset-based revenue represented 53.3% of total segment revenue in 2023. Revenue is based on quarter-end, prior quarter-end, or average asset levels during each quarter, which are often reported on a one-quarter lag for certain Investment Management products including Morningstar Managed Portfolios. The timing of this client asset reporting and the structure of our contracts often results in a lag between market movements and the impact on revenue. The following table summarizes our approximate Morningstar Wealth AUMA:

(in billions)				Change	
	2023	2022	2021	2023 vs 2022	2022 vs 2021
Morningstar Managed Portfolios	\$ 38.7	\$ 32.6	\$ 32.4	18.7 %	0.6 %
Institutional Asset Management	7.7	9.8	11.8	(21.4)%	(16.9)%
Asset Allocation Services	9.1	8.5	8.0	7.1 %	6.3 %
Investment Management (total)	\$ 55.5	\$ 50.9	\$ 52.2	9.0 %	(2.5)%

Morningstar Wealth depreciation expense was \$ 15.8 million, \$ 18.1 million, and \$ 13.3 million for 2023, 2022, and 2021, respectively.

2023 versus 2022

Morningstar Wealth total revenue increased \$1.0 million, or 0.4%, in 2023. Revenue decreased 1.6% on an organic basis, primarily reflecting lower ad sales revenue on Morningstar.com.

Investment Management contributed \$5.0 million to Morningstar Wealth revenue growth, with revenue increasing 4.3%. Organic revenue, which excluded Praemium for the first six months of 2023, decreased 0.1%, reflecting market headwinds in the first half of the year. Reported AUMA, calculated using the most recently available average quarterly or monthly data, increased 9.0% to \$55.5 billion compared with the prior year, supported by stronger market performance which drove higher asset values. Positive net flows to Managed Portfolios over the trailing 12 months, reflecting strong net inflows outside the U.S. and relatively flat net flows in the U.S., offset lower AUMA in Institutional Asset Management which experienced significant outflows from a large institutional client.

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Morningstar Wealth adjusted operating loss increased \$26.1 million, or 182.5%, and adjusted operating margin decreased 11.4 percentage points in 2023, as expense growth outpaced relatively flat revenue growth. Expense growth was primarily driven by higher compensation costs from headcount largely added during 2022 and reflects significant investments to build out the U.S. and international wealth platforms. Those investments supported the continued enhancement of the wealth platforms and products as well as the expansion of teams supporting go-to-market activities. Expenses also included \$1.8 million in severance related to targeted reorganizations in Morningstar Wealth, which had a negative 0.8 percentage point impact on adjusted operating margin in 2023.

2022 versus 2021

Morningstar Wealth total revenue decreased \$9.5 million, or 4.0%, in 2022. Revenue declined 1.9% on an organic basis, reflecting market-driven declines in Investment Management revenue.

Investment Management revenue was \$7.9 million lower, and decreased 6.3%, or 4.3%, on an organic basis. Reported AUMA fell 2.5% to \$50.9 billion compared with the prior year, reflecting the declines in global markets and softer net flows. Excluding \$4.4 billion of assets related to the acquisition of Praemium's U.K. and international offerings in the second quarter of 2022, assets would have declined 10.9% compared with the prior year. In 2022, the company successfully closed the Praemium acquisition, which expanded its wealth management capabilities outside the U.S. During 2022, Investment Management also continued to enhance the advisor and client experience on its turnkey asset management platform and introduced direct indexing, which allows advisors to personalize index portfolios to address individual preferences and tax management needs, as part of an ongoing strategy to build a comprehensive wealth platform leveraging capabilities across Morningstar.

Morningstar Wealth adjusted operating loss increased \$33.7 million, and adjusted operating margin decreased 14.3 percentage points in 2022, due to the decline in revenue described above, higher expenses, and the financial results of Praemium which the company began consolidating as of June 30, 2022. Expense growth was primarily driven by higher compensation costs due to higher headcount, as described above, as well as higher professional fees supporting the integration of third-party technology to support the investments in the U.S. wealth platform.

Morningstar Credit

The following table presents the results for Morningstar Credit:

(in millions)				Change	
	2023	2022	2021	2023 vs 2022	2022 vs 2021
Revenue	\$ 215.4	\$ 236.9	\$ 271.2	(9.1)%	(12.6)%
Adjusted operating income	\$ 21.7	\$ 59.1	\$ 74.5	(63.3)%	(20.7)%
Adjusted operating margin	10.1 %	24.9 %	27.5 %	(14.8) pp	(2.6) pp

Morningstar Credit depreciation expense was \$ 9.1 million, \$ 8.9 million, and \$ 9.6 million for 2023, 2022, and 2021, respectively.

2023 versus 2022

Morningstar Credit total revenue decreased \$21.5 million, or 9.1%, in 2023. Revenue declined 8.5% on an organic basis, primarily due to sharp declines in CMBS ratings revenue driven by ongoing softness in U.S. CMBS ratings activity, and, to a lesser extent, declines in residential mortgage-backed securities (RMBS) related revenue. These declines were partially offset by an increase in asset-backed securities ratings revenues and modest gains in corporate ratings revenues. Revenue related to data products increased.

Morningstar Credit adjusted operating income decreased \$37.4 million, or 63.3%, and adjusted operating margin decreased 14.8 percentage points in 2023, due to the decline in revenue described above and higher expenses. Expenses included \$8.0 million related to the DBRS SEC settlements and \$1.7 million in severance related to targeted reorganizations, which collectively had a negative 4.5 percentage point impact on adjusted operating margin in 2023. The remaining expense growth was primarily driven by higher compensation costs.

2022 versus 2021

Morningstar Credit total revenue decreased \$34.3 million, or 12.6%, in 2022. Revenue declined 10.0% on an organic basis, reflecting a sharp decrease in credit issuance in the second half of the year, including significant declines in CMBS and RMBS issuance. In 2022, areas of investment included added capabilities to support U.S. and European corporates, asset-based securities, and data products. Despite the challenging ratings environment, revenue grew for data products and U.S. corporates. Specifically for U.S. corporates, growth was driven by the addition of coverage and ratings for new middle-market credits.

Morningstar Credit adjusted operating income decreased \$15.4 million, or 20.7%, and adjusted operating margin decreased 2.6 percentage points in 2022, due to the decline in revenue described above. Morningstar Credit expenses decreased driven in part by lower compensation costs and professional fees.

Morningstar Retirement

The following table presents the results for Morningstar Retirement:

(in millions)	2023	2022	2021	Change	
				2023 vs 2022	2022 vs 2021
Revenue	\$ 110.5	\$ 104.0	\$ 104.6	6.3 %	(0.6)%
Adjusted operating income	\$ 54.1	\$ 51.4	\$ 55.4	5.3 %	(7.2)%
Adjusted operating margin	49.0 %	49.4 %	53.0 %	(0.4) pp	(3.6) pp

Morningstar Retirement asset-based revenue represented 98.2% of total segment revenue in 2023 and is based on quarter-end, prior quarter-end, or average asset levels during each quarter, which are often reported on a one-quarter lag. The timing of this client asset reporting and the structure of our contracts often results in a lag between market movements and the impact on revenue. The following table summarizes our approximate Morningstar Retirement AUMA:

(in billions)	2023	2022	2021	Change	
				2023 vs 2022	2022 vs 2021
Managed Accounts	\$ 134.8	\$ 109.3	\$ 111.1	23.3 %	(1.6)%
Fiduciary Services	56.2	50.4	60.2	11.5 %	(16.3)%
Custom Models/CITs	39.4	34.9	41.6	12.9 %	(16.1)%
Morningstar Retirement (total)	<u>\$ 230.4</u>	<u>\$ 194.6</u>	<u>\$ 212.9</u>	18.4 %	(8.6)%

Morningstar Retirement depreciation expense was \$ 11.0 million, \$ 7.9 million, and \$ 9.6 million for 2023, 2022, and 2021, respectively.

2023 versus 2022

Morningstar Retirement total revenue increased \$6.5 million, or 6.3% on both a reported and organic basis, in 2023. AUMA, calculated using the most recently available average quarterly or monthly data, increased 18.4% to \$230.4 billion compared with the prior year, supported by strong market performance. Net inflows to Managed Accounts over the trailing 12 months also contributed to higher AUMA, supported by participant growth, including the impact of the addition of large employer plans during 2023.

Morningstar Retirement adjusted operating income increased \$2.7 million, or 5.3%, and adjusted operating margin decreased 0.4 percentage points in 2023, as expense growth outpaced revenue growth. Expense growth was primarily driven by increases in compensation costs, which were partially offset by lower professional fees.

2022 versus 2021

Morningstar Retirement total revenue decreased \$0.6, or 0.6% on both a reported and organic basis, in 2022. AUMA decreased 8.6% to \$194.6 billion compared with the prior year, reflecting declines in global markets. In 2022, despite market losses, net flows were positive, with particularly strong inflows to managed accounts, supported by growth in the number of participants and the onboarding of one of the nation's largest defined contribution plans.

Morningstar Retirement adjusted operating income decreased \$4.0 million, or 7.2%, and adjusted operating margin decreased 3.6 percentage points in 2022, due to the decline in revenue described above and higher expenses. Expense growth was primarily driven by increases in compensation costs, which were partially offset by lower professional fees.

Corporate and All Other

2023 versus 2022

Morningstar Indexes contributed \$15.3 million to Corporate and All Other revenue growth with revenue increasing 30.5%, or 24.7%, on an organic basis. Organic revenue excludes LCD index-related revenue for the first five months of the year. The increase in revenue was driven in part by higher investable product revenue, supported by market gains and net inflows. Licensed-data revenue also increased.

Morningstar Sustainalytics contributed \$14.9 million to Corporate and All Other revenue growth with revenue increasing 14.4%, or 13.9%, on an organic basis. While still strong, revenue growth slowed across regions compared to the prior year reflecting softer demand for ESG solutions. Demand for regulatory and compliance solutions supported strong growth in EMEA.

Corporate and All Other increased \$14.7 million in 2023 primarily due to compensation costs and professional fees in corporate areas.

2022 versus 2021

Morningstar Sustainalytics contributed \$24.3 million to Corporate and All Other revenue growth with revenue increasing 30.8%, or 41.1%, on an organic basis. The increase in revenue was driven by strength in its licensing business, including demand for compliance and reporting-related solutions related to the EU Action Plan, as asset managers continued to look to Morningstar Sustainalytics to help them meet the various EU regulatory requirements.

Morningstar Indexes contributed \$13.2 million to Corporate and All Other revenue growth with revenue increasing 35.7%, or 26.4%, on an organic basis. The growth in revenue was due primarily to strength in investable and licensed data products. Organic revenue excludes LCD index-related revenue.

Corporate and All Other increased \$47.3 million in 2022. The increase was primarily due to the financial results of Morningstar Sustainalytics and Morningstar Indexes, as well as higher compensation costs and increases in stock-based compensation in corporate areas.

Non-operating expense, net, Equity in investments of unconsolidated entities, and Effective tax rate and Income tax expense

Non-operating expense, net

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

(in millions)	2023	2022
Interest income	\$ 9.0	\$ 1.7
Interest expense	(60.7)	(30.1)
Realized gains (losses) on sale of investments, reclassified from other comprehensive income	2.9	(2.1)
Expense from equity method transaction, net	(11.8)	—
Other income (expense), net	11.5	(6.7)
Non-operating expense, net	<u>\$ (49.1)</u>	<u>\$ (37.2)</u>

Interest income reflects interest from our investment portfolio. Interest expense mainly relates to the outstanding principal balance under our Amended 2022 Credit Agreement and the \$350.0 million aggregate principal amount of our 2030 Notes.

Expense from equity method transaction, net for 2023 primarily reflects the impact of the Termination Agreement (the Termination Agreement) with Morningstar Japan K.K. (now known as SBI Global Asset Management Co., Ltd. (Wealth Advisors)) and the Tender Offer Agreement (the Tender Offer Agreement) with SBI Global Asset Management Co., Ltd. (now known as SBI Asset Management Group Co., Ltd. (SBI)). Refer to Note 9 of the Notes to our Consolidated Financial Statements for additional information on the Termination Agreement and the Tender Offer Agreement.

Other income (expense), net includes foreign currency exchange gains (losses) and unrealized gains (losses) on investments.

Equity in investments of unconsolidated entities

(in millions)	2023	2022
Equity in investments of unconsolidated entities	\$ (7.4)	\$ (3.6)

Equity in investments of unconsolidated entities primarily reflects 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:

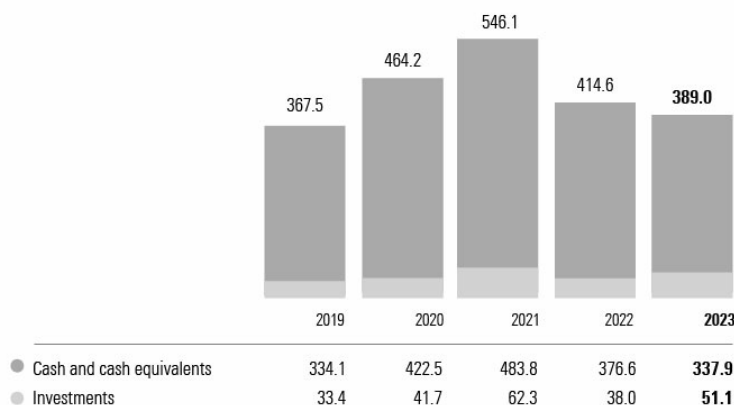
(in millions)	2023	2022
Income before income taxes and equity in investments of unconsolidated entities	\$ 181.5	\$ 130.6
Equity in investments of unconsolidated entities	(7.4)	(3.6)
Income before income taxes	<u>\$ 174.1</u>	<u>\$ 127.0</u>
Income tax expense	\$ 33.0	\$ 56.5
Effective tax rate	19.0 %	44.5 %

Our effective tax rate in 2023 was 19.0%, a decrease of 25.5 percentage points, compared with 44.5% in the prior year. This decrease is primarily attributable to the recognition of \$13.7 million of tax benefits related to a retroactive tax election with respect to our 2021 and 2022 tax periods. We received confirmation of the approval of the tax election in the second quarter of 2023, which allowed us to recognize the tax benefits in that period.

Liquidity and Capital Resources

As of December 31, 2023, we had cash, cash equivalents, and investments of \$389.0 million, down \$25.6 million from the prior year.

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



Cash provided by operating activities is our main source of cash. In 2023, cash provided by operating activities was \$316.4 million, reflecting \$288.3 million of net income, adjusted for non-cash items, and an additional \$28.1 million in positive changes from our net operating assets and liabilities. Cash provided by operating activities increased \$18.6 million, or 6.2%, in 2023. Operating cash flow was impacted by higher cash earnings and lower bonus payments in the first quarter of 2023 relative to the prior-year period. We made annual bonus payments of \$98.3 million during the first quarter of 2023 compared with \$139.9 million in the first quarter of 2022. This was offset by payments related to the Termination Agreement, higher interest payments, and severance and other costs related to the significant reduction and shift of the company's operations in China.

Cash used for financing activities was \$278.4 million in 2023. In 2022, cash provided by financing activities was \$415.1 million. Financing cash flows were impacted by lower proceeds from our financing arrangements which was offset by lower share repurchases. On February 6, 2023, the company made its final \$50.0 million contingent payment related to the acquisition of LCD, of which \$4.5 million is reflected in operating cash flows and \$45.5 million is reflected in financing cash flows.

We believe our available cash balances and investments, along with cash generated from operations and our credit facility, 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 76% of our cash, cash equivalents, and investments as of December 31, 2023 were held by our operations outside the U.S., up from 64% as of December 31, 2022. 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.

Amended 2022 Credit Agreement

On July 2, 2019, we entered into a senior credit agreement (the 2019 Credit Agreement). The 2019 Credit Agreement provided 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 2019 Revolving Credit Facility) and a term loan facility of \$450.0 million. On May 6, 2022, the company terminated the 2019 Credit Agreement.

On May 6, 2022, the company entered into a new senior credit agreement (the 2022 Credit Agreement). The 2022 Credit Agreement provided the company with a five-year multi-currency credit facility with an initial borrowing capacity of up to \$1.1 billion, including a \$650.0 million term loan (the 2022 Term Facility) with an initial draw of \$600.0 million and an option for a second draw of up to \$50.0 million and a \$450.0 million revolving credit facility (the 2022 Revolving Credit Facility). The 2022 Credit Agreement also provided 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 2022 Revolving Credit Facility.

The proceeds of the first draw under the 2022 Term Facility and initial borrowings under the 2022 Revolving Credit Facility were used to finance the acquisition of LCD and to repay a portion of the borrowings under the 2019 Revolving Credit Facility.

The 2022 Credit Agreement was amended (the Amended 2022 Credit Agreement) on September 13, 2022 (the First Amendment to the 2022 Credit Agreement) and on September 30, 2022 (the Second Amendment to the 2022 Credit Agreement). The First Amendment to the 2022 Credit Agreement terminated the unfunded term commitment related to the optional second draw of up to \$50.0 million in the 2022 Term Facility and increased the 2022 Revolving Credit Facility to \$600.0 million. The Second Amendment to the 2022 Credit Agreement increased the 2022 Term Facility to a fully funded \$650.0 million facility (the Amended 2022 Term Facility) and increased the 2022 Revolving Credit Facility to \$650.0 million (the Amended 2022 Revolving Credit Facility) for total borrowing capacity of \$1.3 billion. As of December 31, 2023, our total outstanding debt under the Amended 2022 Credit Agreement was \$623.9 million, net of debt issuance costs, with borrowing availability of \$635.0 million under the 2022 Revolving Credit Facility. Except for incremental borrowing capacity, there were no material changes to the existing terms and conditions of the 2022 Credit Agreement.

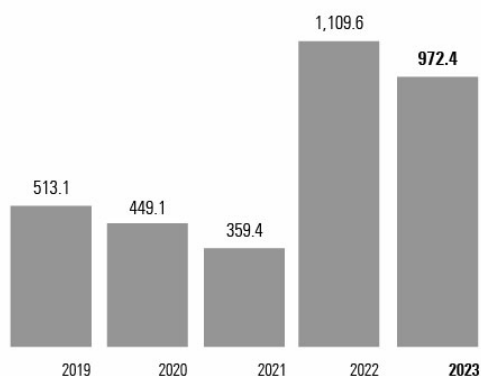
The proceeds of the additional draw under the Amended 2022 Term Facility were used to repay borrowings under the 2022 Revolving Credit Facility. The proceeds of future borrowings under the Amended 2022 Revolving Credit Facility may be used for working capital, capital expenditures, or other general corporate purposes. See Note 3 of the Notes to our Consolidated Financial Statements for additional information on our Amended 2022 Credit Agreement.

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 2019 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. As of December 31, 2023, our total outstanding debt, net of issuance costs, under the 2030 Notes was \$348.5 million. See Note 3 of the Notes to our Consolidated Financial Statements for additional information on our 2030 Notes.

Compliance with Covenants

Each of the Amended 2022 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, 2023, with consolidated funded indebtedness to consolidated EBITDA calculated at approximately 1.7x.

Debt (\$mil)

Share repurchases

On December 6, 2022, the board of directors approved a share repurchase program that authorizes the company to repurchase up to \$500.0 million in shares of the company's outstanding common stock, effective January 1, 2023. This authorization replaced the then-existing share repurchase program and expires on December 31, 2025. 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, 2023, we repurchased a total of 8,484 shares for \$1.4 million under this authorization and have \$498.6 million available for future repurchases.

Dividends

In 2023, we also paid dividends of \$63.9 million. While subsequent dividends will be subject to board approval, we expect to make regular quarterly dividend payments of 40.5 cents per share in 2024.

Wealth Advisors

On January 27, 2023, we entered into the Termination Agreement and the Tender Offer Agreement. Pursuant to the Termination Agreement, Wealth Advisors agreed to cease use of the Morningstar brand and Morningstar, and Wealth Advisors agreed to terminate the License Agreement originally entered into in 1998. As consideration for the transaction, Morningstar agreed to pay Wealth Advisors 8 billion Japanese yen upon the termination of the license agreement and the achievement of certain conditions related primarily to the termination of the use of the Morningstar brand by Wealth Advisors' customers. On April 6, 2023, we made the first cash payment of 6 billion Japanese yen (\$45.1 million), and on April 19, 2023, we made the second and final cash payment of 2 billion Japanese yen (\$14.8 million), pursuant to the Termination Agreement.

As part of such transaction, pursuant to the Tender Offer Agreement, Morningstar agreed to tender up to 10 million shares in Wealth Advisors to SBI. The tender offer closed on February 28, 2023, and SBI purchased 8,040,600 shares of Wealth Advisors from Morningstar, resulting in net proceeds of \$26.2 million and a pre-tax gain of \$18.4 million. Refer to Note 9 of the Notes to our Consolidated Financial Statements for additional information on the Termination Agreement and the Tender Offer Agreement.

Other

We expect to continue making capital expenditures in 2024, 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 2024 to make annual bonus payments of approximately \$124.3 million related to the 2023 bonus program compared with \$98.3 million paid in the first quarter of 2023 for the 2022 bonus program.

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 a supplemental disclosure to help investors better understand how much cash is available after making capital expenditures. Our management team uses free cash flow to evaluate the health of 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)	2023	2022	Change
Cash provided by operating activities	\$ 316.4	\$ 297.8	6.2 %
Capital expenditures	(119.1)	(129.5)	(8.0)%
Free cash flow	\$ 197.3	\$ 168.3	17.2 %

We generated free cash flow of \$197.3 million in 2023, an increase of \$29.0 million compared with 2022. The change reflects a \$18.6 million increase in cash provided by operating activities as well as a \$10.4 million decrease in capital expenditures. The increase in cash flow from operations was primarily driven by higher cash earnings and a lower bonus payment in the first quarter of 2023 compared to the prior period and offset by the cash payments related to the Termination Agreement, higher interest payments, and severance and other costs related to the significant reduction and shift of the company's operations in China.

Excluding the \$4.5 million LCD contingent payment within operating cash flow, payments related to the Termination Agreement of \$59.9 million, and \$26.4 million of severance and other related costs paid for the China transition, which together totaled \$90.8 million, as well as comparable items in the prior year, cash flow from operations would have increased 19.7% to \$407.2 million and free cash flow would have increased 36.7% to \$288.1 million in 2023.

Acquisitions

We paid a total of \$672.3 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 \$62.9 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 2023, 2022, or 2021.

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 noncancellable 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 judgments related to revenue recognition, including allocating 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, which exists infrequently, 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 and assess the likelihood of collection on a customer-by-customer basis. We typically sell to institutional customers with whom we have a history of successful collections.

Deferred revenue is the amount billed or collected in advance for subscriptions or services that has not yet been recognized as revenue. Deferred revenue totaled \$544.0 million at the end of 2023 (of which \$517.7 million was classified as a current liability with an additional \$26.3 million, mainly credit rating surveillance, included in long-term liabilities). We expect to recognize this deferred revenue in future periods as we fulfill our performance 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.

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 margins, estimated attrition rates, 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 either 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, or calculating the weighted average of the estimated contingent payment scenarios. 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 Adopted and Issued Accounting Pronouncements

Refer to Note 17 of the Notes to our Consolidated Financial Statements for recently adopted and issued accounting pronouncements as of December 31, 2023.

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, 2023, our cash, cash equivalents, and investments balance was \$389.0 million. Based on our estimates, a 100 basis-point change in interest rates would not have a material effect on the fair value of our investment portfolio.

We are subject to risk from fluctuations in the interest rates related to a portion of our long-term debt. The interest rates are based upon the applicable Secured Overnight Financing Rate (SOFR) rate plus an applicable margin for such loans or the lender's base rate plus an applicable margin for such loans. On an annualized basis, we estimate a 100 basis-point change in the SOFR rate would have a \$6.2 million impact on our interest expense based on our outstanding principal balance and SOFR rates around December 31, 2023.

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, 2023 :

(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, 2023	0.6818	1.2732	0.7549	1.1038	n/a
Foreign denominated percentage of revenue	2.8 %	7.3 %	5.7 %	6.6 %	5.5 %
Foreign denominated percentage of operating income (loss)	6.4 %	(21.3)%	(10.4)%	8.5 %	(41.0) %
Estimated effect of a 10% adverse currency fluctuation on revenue	\$ (5.8)	\$ (15.1)	\$ (11.9)	\$ (13.8)	\$ (11.4)
Estimated effect of a 10% adverse currency fluctuation on operating income (loss)	\$ (1.5)	\$ 5.0	\$ 2.4	\$ (2.0)	\$ 9.3

The table below shows our net investment exposure in foreign currencies as of December 31, 2023 :

(in millions)	Australian Dollar	British Pound	Canadian Dollar	Euro	Other Foreign Currencies
Assets, net of unconsolidated entities	\$ 61.9	\$ 271.8	\$ 238.4	\$ 231.6	\$ 178.2
Less: liabilities	(32.9)	(79.4)	(135.1)	(155.7)	24.8
Net currency position	\$ 29.0	\$ 192.4	\$ 103.3	\$ 75.9	\$ 203.0
Estimated effect of a 10% adverse currency fluctuation on equity	\$ (2.9)	\$ (19.2)	\$ (10.3)	\$ (7.6)	\$ (20.3)

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, 2023 and 2022, the related consolidated statements of income, comprehensive income (loss), equity, and cash flows for each of the years in the three-year period ended December 31, 2023, 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, 2023 and 2022, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2023, 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, 2023, 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 29, 2024 expressed an adverse 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 \$2,038.6 million in revenues, for the year ended December 31, 2023. 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 certain 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 the extent of audit effort over revenue.

/s/ KPMG LLP

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

Chicago, Illinois
February 29, 2024

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, 2023, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, because of the effect of the material weakness, described below, on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2023, 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, 2023 and 2022, the related consolidated statements of income, comprehensive income (loss), equity, and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes and financial statement schedule II (collectively, the consolidated financial statements), and our report dated February 29, 2024 expressed an unqualified opinion on those consolidated financial statements.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. A material weakness related to ineffective process-level controls over the disclosures required in accordance with FASB ASC 280, Segment Reporting, resulting from ineffective risk assessment of factors that are relevant to assessing whether operating segments can be aggregated, has been identified and included in management's assessment. The material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2023 consolidated financial statements, and this report does not affect our report 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 29, 2024

Morningstar, Inc. and Subsidiaries
Consolidated Statements of Income

Year ended December 31 (in millions except per share amounts)	2023	2022	2021
Revenue	\$ 2,038.6	\$ 1,870.6	\$ 1,699.3
Operating expense:			
Cost of revenue	843.5	779.3	698.4
Sales and marketing	423.8	356.5	274.8
General and administrative	355.8	400.4	318.4
Depreciation and amortization	184.9	166.6	150.7
Total operating expense	1,808.0	1,702.8	1,442.3
Operating income	230.6	167.8	257.0
Non-operating expense, net:			
Interest expense, net	(51.7)	(28.4)	(8.7)
Realized gain (loss) on sale of investments, reclassified from other comprehensive income	2.9	(2.1)	5.0
Realized gain on sale of equity method investments	—	—	0.9
Expense from equity method transaction, net	(11.8)	—	—
Other income (expense), net	11.5	(6.7)	(3.7)
Non-operating expense, net	(49.1)	(37.2)	(6.5)
Income before income taxes and equity in investments of unconsolidated entities	181.5	130.6	250.5
Equity in investments of unconsolidated entities	(7.4)	(3.6)	5.4
Income tax expense	33.0	56.5	62.6
Consolidated net income	\$ 141.1	\$ 70.5	\$ 193.3
Net income per share:			
Basic	\$ 3.31	\$ 1.65	\$ 4.50
Diluted	\$ 3.29	\$ 1.64	\$ 4.45
Dividends per common share:			
Dividends declared per common share	\$ 1.53	\$ 1.46	\$ 1.31
Dividends paid per common share	\$ 1.50	\$ 1.44	\$ 1.26
Weighted average shares outstanding:			
Basic	42.6	42.6	43.0
Diluted	42.9	42.9	43.4

See notes to consolidated financial statements.

Morningstar, Inc. and Subsidiaries
Consolidated Statements of Comprehensive Income (Loss)

Year ended December 31 (in millions)	2023	2022	2021
Consolidated net income	\$ 141.1	\$ 70.5	\$ 193.3
Other comprehensive income, net of tax:			
Foreign currency translation adjustment	12.6	(58.2)	(15.1)
Unrealized gains (losses) on securities:			
Unrealized holding gains (losses) arising during period	2.1	(7.0)	5.7
Reclassification of realized (gains) losses on investments included in net income, net of tax	(2.2)	1.5	(3.9)
Other comprehensive income (loss), net	12.5	(63.7)	(13.3)
Comprehensive income	<u>\$ 153.6</u>	<u>\$ 6.8</u>	<u>\$ 180.0</u>

See notes to consolidated financial statements.

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Morningstar, Inc. and Subsidiaries
Consolidated Balance Sheets

As of December 31 (in millions except share amounts)	2023	2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 337.9	\$ 376.6
Investments	51.1	38.0
Accounts receivable, less allowance for credit losses of \$5.6 million and \$6.6 million, respectively	343.9	307.9
Income tax receivable	0.6	—
Deferred commissions	41.9	40.7
Prepaid expenses	34.9	36.7
Other current assets	5.4	10.9
Total current assets	815.7	810.8
Goodwill	1,578.8	1,571.7
Intangible assets, net	484.4	548.6
Property, equipment, and capitalized software, net	207.7	199.4
Operating lease assets	163.9	191.6
Investments in unconsolidated entities	100.2	96.0
Deferred tax assets, net	14.6	10.8
Deferred commissions	29.3	35.4
Other assets	8.8	10.5
Total assets	\$ 3,403.4	\$ 3,474.8
Liabilities and equity		
Current liabilities:		
Deferred revenue	\$ 517.7	\$ 455.6
Accrued compensation	214.4	220.1
Accounts payable and accrued liabilities	78.4	76.2
Current portion of long-term debt	32.1	32.1
Operating lease liabilities	36.4	37.3
Contingent consideration liability	—	50.0
Other current liabilities	1.8	11.2
Total current liabilities	880.8	882.5
Operating lease liabilities	151.4	176.7
Accrued compensation	23.7	20.7
Deferred tax liabilities, net	35.6	62.9
Long-term debt	940.3	1,077.5
Deferred revenue	26.3	33.5
Other long-term liabilities	17.5	13.9
Total liabilities	\$ 2,075.6	\$ 2,267.7
Equity:		
Morningstar, Inc. shareholders' equity:		
Common stock, no par value, 200,000,000 shares authorized, of which 42,728,182 and 42,480,051 shares were outstanding as of December 31, 2023 and December 31, 2022, respectively	—	—
Treasury stock at cost, 11,987,495 and 11,991,517 shares as of December 31, 2023 and December 31, 2022 respectively	(985.5)	(986.7)
Additional paid-in capital	789.0	757.8
Retained earnings	1,610.8	1,535.0
Accumulated other comprehensive loss:		
Currency translation adjustment	(86.4)	(99.0)
Unrealized gain on available-for-sale investments, net of tax	(0.1)	—
Total accumulated other comprehensive loss	(86.5)	(99.0)
Total equity	1,327.8	1,207.1
Total liabilities and equity	\$ 3,403.4	\$ 3,474.8

See notes to consolidated financial statements.

Morningstar, Inc. and Subsidiaries
Consolidated Statements of Equity

	Morningstar, Inc. Shareholders' Equity							
	Common Stock				Additional		Accumulated	
	Shares	Par	Treasury	Paid-in	Retained	Other		Total
(in millions, except share amounts)	Outstanding	Value	Stock	Capital	Earnings	Comprehensive	Income (Loss)	Equity
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 gain on investments included in net income, net of tax		—	—	—	—	(3.9)		(3.9)
Foreign currency translation adjustment, net		—	—	—	—	(15.1)		(15.1)
Other comprehensive loss, net		—	—	—	—	(13.3)		(13.3)
Issuance of common stock related to stock-option exercises and vesting of stock awards, net of shares withheld for taxes on settlements of stock awards	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
Net income		—	—	—	70.5	—		70.5
Other comprehensive income (loss), net:								
Unrealized loss on available-for-sale investments, net of tax		—	—	—	—	(7.0)		(7.0)
Reclassification of adjustments for loss on investments included in net income, net of tax		—	—	—	—	1.5		1.5
Foreign currency translation adjustment, net		—	—	—	—	(58.2)		(58.2)
Other comprehensive loss, net		—	—	—	—	(63.7)		(63.7)
Issuance of common stock related to vesting of stock awards, net of shares withheld for taxes on settlements of stock awards	226,652	—	3.6	(33.6)	—	—		(30.0)
Reclassification of awards previously liability-classified that were converted to equity		—	—	19.2	—	—		19.2
Stock-based compensation — restricted stock units		—	—	35.9	—	—		35.9
Stock-based compensation — performance share awards		—	—	37.2	—	—		37.2
Stock-based compensation — market stock units		—	—	10.1	—	—		10.1
Common shares repurchased	(882,874)	—	(226.0)	—	—	—		(226.0)
Dividends declared (\$1.46 per share)		—	—	—	(62.0)	—		(62.0)
Balance as of December 31, 2022	42,480,051	—	(986.7)	757.8	1,535.0	(99.0)		1,207.1
Net income		—	—	—	141.1	—		141.1
Other comprehensive income (loss), net:								
Unrealized gain on available-for-sale investments, net of tax		—	—	—	—	2.1		2.1
Reclassification of adjustments for gain on investments included in net income, net of tax		—	—	—	—	(2.2)		(2.2)
Foreign currency translation adjustment, net		—	—	—	—	12.6		12.6
Other comprehensive income, net		—	—	—	—	12.5		12.5
Issuance of common stock related to vesting of stock awards, net of shares withheld for taxes on settlements of stock awards	256,615	—	2.6	(32.9)	—	—		(30.3)

Reclassification of awards previously liability-classified that were converted to equity							
			—	11.3	—	—	11.3
Stock-based compensation — restricted stock units	—	—	38.8	—	—	—	38.8
Stock-based compensation — performance share awards	—	—	6.5	—	—	—	6.5
Stock-based compensation — market stock units	—	—	7.5	—	—	—	7.5
Common shares repurchased	(8,484)	—	(1.4)	—	—	—	(1.4)
Dividends declared (\$1.53 per share)		—	—	—	(65.3)	—	(65.3)
Balance as of December 31, 2023	42,728,182	\$ —	\$ (985.5)	\$ 789.0	\$ 1,610.8	\$ (86.5)	\$ 1,327.8

See notes to consolidated financial statements.

Morningstar, Inc. and Subsidiaries
Consolidated Statements of Cash Flows

Year ended December 31 (in millions)	2023	2022	2021
Operating activities			
Consolidated net income	\$ 141.1	\$ 70.5	\$ 193.3
Adjustments to reconcile consolidated net income to net cash flows from operating activities:			
Depreciation and amortization	184.9	166.6	150.7
Deferred income taxes	(32.4)	(37.3)	(12.1)
Stock-based compensation expense	52.8	83.2	41.9
Provision for bad debt	5.3	3.8	1.9
Equity in investments of unconsolidated entities	7.4	3.6	(5.4)
Gain on equity method transaction	(49.6)	—	—
Acquisition earn-out accrual	—	4.5	17.8
Other, net	(21.2)	14.9	(1.8)
Changes in operating assets and liabilities:			
Accounts receivable	(38.2)	(38.6)	(67.9)
Accounts payable and accrued liabilities	(1.5)	(2.0)	7.1
Accrued compensation and deferred commissions	14.9	(37.5)	58.0
Income taxes, current	(7.8)	18.9	(6.1)
Deferred revenue	50.9	60.0	78.2
Other assets and liabilities	9.8	(12.8)	(5.7)
Cash provided by operating activities	316.4	297.8	449.9
Investing activities			
Purchases of investment securities	(15.7)	(36.5)	(71.1)
Proceeds from maturities and sales of investment securities	31.1	43.0	58.8
Capital expenditures	(119.1)	(129.5)	(101.8)
Acquisitions, net of cash acquired	(0.8)	(646.7)	(24.8)
Proceeds from sale of equity method investments, net	26.2	—	1.1
Purchases of investments in unconsolidated entities	(3.7)	(29.4)	(29.8)
Other, net	0.1	(0.2)	(0.1)
Cash used for investing activities	(81.9)	(799.3)	(167.7)
Financing activities			
Common shares repurchased	(1.4)	(226.0)	(1.3)
Dividends paid	(63.9)	(61.5)	(54.2)
Proceeds from revolving credit facility	260.0	475.0	10.0
Repayment of revolving credit facility	(365.0)	(355.0)	(10.0)
Proceeds from term facility	—	650.0	—
Repayment of term facility	(32.5)	(19.1)	(90.0)
Employee taxes withheld for stock awards	(30.2)	(29.9)	(29.0)
Payment of acquisition-related earn-outs	(45.5)	(16.2)	(34.4)
Other, net	0.1	(2.2)	(2.9)
Cash provided by (used for) financing activities	(278.4)	415.1	(211.8)
Effect of exchange rate changes on cash and cash equivalents	5.2	(20.8)	(9.1)
Net increase (decrease) in cash and cash equivalents	(38.7)	(107.2)	61.3
Cash and cash equivalents—beginning of period	376.6	483.8	422.5
Cash and cash equivalents—end of period	\$ 337.9	\$ 376.6	\$ 483.8
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	\$ 73.2	\$ 75.3	\$ 80.9
Cash paid for interest	\$ 58.4	\$ 28.4	\$ 10.4

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 insights 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 conduct business operations through wholly- or majority-owned subsidiaries in 32 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
FASB	Financial Accounting Standards Board
SEC	Securities and Exchange Commission

Principles of Consolidation

We conduct our business operations through wholly- 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 two categories: held-to-maturity 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.

- 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. Investments in equity securities that we do not intend to hold for more than a year are presented in "Investments" in our Consolidated Balance Sheets. Investments in equity securities that we intend to hold for more than one year are included in "Investments in unconsolidated entities" in our Consolidated Balance Sheets.

We account for our equity method investments in accordance with FASB ASC 323, *Investments — Equity Method and Joint Ventures* (FASB ASC 323). We account for non-marketable equity investments over which we exercise significant influence, but do not have control over the investee, under the equity method. We record our estimated share of earnings or losses in the periods they are reported by the investee and record any dividends as a reduction to the carrying amount of the investment. We evaluate our equity method investments for other than-temporary declines in value. If the estimated fair value of the investment is less than the carrying amount and management considers the decline in value to be other than temporary, the excess of the carrying amount over the estimated fair value is recognized in net income in the period the impairment occurs. Our equity method investments are recorded within "Investments in unconsolidated entities" in our Consolidated Balance Sheets.

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 FASB ASC 420, *Exit or Disposal Cost Obligations*, on the acquisition date.

As part of the purchase price allocation, we follow the requirements of FASB ASC 740, *Income Taxes* (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 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.

When reviewing goodwill for impairment, we assess a number of qualitative factors to determine whether it is more likely than not that the fair value of our reporting units is less than their respective carrying values. Examples of qualitative factors that we assess include macroeconomic conditions affecting our reporting units, financial performance of our reporting units, market and competitive factors related to our reporting units, and other events specific to our reporting units. If we conclude that it is more likely than not that the fair value of a reporting unit is less than its carrying value, we perform a quantitative impairment test. The quantitative impairment test compares the estimated fair value of the reporting unit to its carrying value, and recognizes an impairment loss for the amount by which a reporting unit's carrying amount exceeds its fair value, without exceeding the total amount of goodwill allocated to that reporting unit. We determine the fair value of a reporting unit using a market approach. Determining the fair value of a reporting unit involves judgment and the use of significant estimates and assumptions, which include assumptions regarding the revenue growth rates and operating margins used to calculate estimated future cash flows, as well as revenue and earnings multiples of publicly traded companies whose services and markets are comparable.

We performed our annual impairment review in the fourth quarter and did not record any impairment losses in 2023, 2022, and 2021.

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 2023, 2022, and 2021.

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*. Internal product development costs mainly consist of employee and third-party resource 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)	2023	2022	2021
Capitalized software depreciation expense	\$ 81.2	\$ 64.3	\$ 59.9

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

(in millions)	2023	2022	2021
Capitalized software development costs	\$ 100.0	\$ 81.0	\$ 74.0

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 prepayments 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 FASB ASC Topic 606, *Revenue from Contracts with Customers* (FASB ASC Topic 606).

Under FASB 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. Deferred revenue represents the amount billed or collected in advance of the service being provided which we expect to recognize as revenue in future periods.

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. 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.

When a customer's license-based contract is signed, the customer's service is activated immediately, except where customizations are required. License-based arrangements, our largest source of revenue from customers, generally are billed quarterly or annually. Customers are typically given payment terms of zero to 30 days.

Asset-based revenue is generated through contracts with daily asset management, which is determined to be a daily performance obligation 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 performance obligations that are satisfied when the product or service is delivered. Some of our performance obligations 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 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.

Accounts Receivables and Allowance for Credit Losses

We account for accounts receivable in accordance with FASB ASC Topic 310, *Receivables* (FASB ASC 310) and FASB ASC Topic 326, *Financial Instruments - Credit Losses* (FASB ASC 326). We record a receivable when a customer is billed or when revenue is recognized prior to billing a customer. Accounts receivables are measured at amortized cost basis. We evaluate our allowance to include expected credit losses based on a variety of factors, including customer specific information, the current economic environment, and forecasted macroeconomic conditions.

Sales Commissions

We capitalize sales commissions, which are considered directly attributable to obtaining a customer contract under FASB ASC Topic 606 and FASB ASC 340-40, *Other Assets and Deferred Costs - Contracts with Customers*. Estimates of these capitalized costs are developed by 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, 2023, the period of transfer was determined to be approximately 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, and market stock units. We measure the fair value of our restricted stock units 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. 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.

Segment Reporting

Under FASB ASC 280, *Segment Reporting* (FASB ASC 280), operating segments are defined as components of a company that engage in business activities from which they may earn revenues and incur expenses, and for which discrete financial information is available and is evaluated regularly by the chief operating decision maker (CODM) in deciding how to allocate resources and in assessing performance. Aggregation of similar operating segments into a single reportable operating segment is permitted if the businesses have similar economic characteristics and meet established qualitative criteria.

Effective as of December 31, 2023, we revised our presentation of our seven operating segments to the following five reportable segments: Morningstar Data and Analytics, PitchBook, Morningstar Wealth, Morningstar Credit, and Morningstar Retirement. The operating segments of Morningstar Sustainalytics and Morningstar Indexes do not individually meet the quantitative segment reporting thresholds and have been combined and presented as part of Corporate and All Other, which is not a reportable segment. Corporate and All Other provides a reconciliation between revenue from our reportable segments and consolidated revenue amounts. Refer to Note 6 for detailed segment information.

Severance

We account for post-employment benefits in accordance with FASB ASC 712, *Compensation - Non-retirement Post-employment Benefits* (FASB ASC 712). Under FASB ASC 712, we recognize compensation expense associated with these benefits as a liability when probable and estimable.

In July 2022, the company began to significantly reduce its operations in Shenzhen, China and to shift the work related to its global business functions, including global product and software development, managed investment data collection and analysis, and equity data collection and analysis, to other Morningstar locations. During the third quarter of 2023, the company substantially completed these activities.

As a result of these activities, the company incurred \$ 25.9 million of severance expense in 2022. These amounts were recorded within "General and administrative" on our Consolidated Statements of Income. The liability was recorded within "Accrued compensation - current" on our Consolidated Balance Sheet. The company has substantially paid all of the accrued severance amounts as of December 31, 2023.

In 2023, the company incurred \$ 15.4 million of severance expense of which \$ 9.0 million was related to targeted reorganizations and headcount reductions in certain parts of the business and \$ 2.4 million was related to the Company's China operations transition during 2023.

3. Credit Arrangements

Debt

The following table summarizes our debt as of December 31, 2023 and 2022.

(in millions)	As of December 31, 2023	As of December 31, 2022
Term Facility, net of unamortized debt issuance costs of \$0.5 million and \$0.7 million, respectively	\$ 608.9	\$ 641.1
Revolving Credit Facility	15.0	120.0
2.32 % Senior Notes due October 26, 2030, net of unamortized debt issuance costs of \$1.5 million and \$1.5 million, respectively	348.5	348.5
Total debt	<u>\$ 972.4</u>	<u>\$ 1,109.6</u>

Maturities of the company's principal debt payments as of December 31, 2023 are as follows:

(in millions)	As of December 31, 2023
2024	\$ 32.5
2025	32.5
2026	32.5
2027	526.9
2028	—
Thereafter	350.0
Total	\$ 974.4

Credit Agreement

On July 2, 2019, the company entered into a senior credit agreement (the 2019 Credit Agreement). The 2019 Credit Agreement provided 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 2019 Revolving Credit Facility) and a term loan facility of \$ 450.0 million. The 2019 Credit Agreement also provided 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 2019 Revolving Credit Facility. On May 6, 2022, the company terminated the 2019 Credit Agreement.

On May 6, 2022, the company entered into a new senior credit agreement (the 2022 Credit Agreement). The 2022 Credit Agreement provided the company with a five-year multi-currency credit facility with an initial borrowing capacity of up to \$ 1.1 billion, including a \$ 650.0 million term loan (the 2022 Term Facility) with an initial draw of \$ 600.0 million and an option for a second draw of up to \$ 50.0 million and a \$ 450.0 million revolving credit facility (the 2022 Revolving Credit Facility). The 2022 Credit Agreement also provided for the issuance of up to \$ 50.0 million of letters of credit and a \$ 100.0 million sub-limit for a swingline.

The proceeds of the first draw under the 2022 Term Facility and initial borrowings under the 2022 Revolving Credit Facility were used to finance the acquisition of Leveraged Commentary & Data (LCD) and to repay a portion of the borrowings under the 2019 Revolving Credit Facility. The optional second draw on the 2022 Term Facility was available to fund the contingent consideration payment of up to \$ 50.0 million in connection with the LCD acquisition.

The 2022 Credit Agreement was amended (the Amended 2022 Credit Agreement) on September 13, 2022 (the First Amendment to the 2022 Credit Agreement) and on September 30, 2022 (the Second Amendment to the 2022 Credit Agreement). The First Amendment to the 2022 Credit Agreement terminated the unfunded term commitment related to the optional second draw of up to \$ 50.0 million in the 2022 Term Facility and increased the 2022 Revolving Credit Facility to \$ 600.0 million. The Second Amendment to the 2022 Credit Agreement increased the 2022 Term Facility to a fully funded \$ 650.0 million facility (the Amended 2022 Term Facility) and increased the 2022 Revolving Credit Facility to \$ 650.0 million (the Amended 2022 Revolving Credit Facility) for total borrowing capacity of \$ 1.3 billion. As of December 31, 2023, our total outstanding debt under the Amended 2022 Credit Agreement was \$ 623.9 million, net of debt issuance costs, with borrowing availability of \$ 635.0 million under the 2022 Revolving Credit Facility. Except for incremental borrowing capacity, there were no material changes to the existing terms and conditions of the 2022 Credit Agreement.

The proceeds of the additional draw under the Amended 2022 Term Facility were used to repay borrowings under the 2022 Revolving Credit Facility. The proceeds of future borrowings under the Amended 2022 Revolving Credit Facility may be used for working capital, capital expenditures, or other general corporate purposes.

The interest rate applicable to any loan under the Amended 2022 Credit Agreement is, at the company's option, either: (i) the applicable Secured Overnight Financing Rate (SOFR) plus an applicable margin for such loans, which ranges between 1.00 % and 1.48 %, based on the company's consolidated leverage ratio or (ii) the lender's base rate plus the applicable margin for such loans, which ranges between 0.00 % and 0.38 %, based on our consolidated leverage ratio.

The portions of deferred debt issuance costs related to the Amended 2022 Revolving Credit Facility are included in other current and non-current assets, and the portion of deferred debt issuance costs related to the Amended 2022 Term Facility is reported as a reduction to the carrying amount of the Amended 2022 Term Facility. Debt issuance costs related to the Amended 2022 Revolving Credit Facility are amortized on a straight-line basis to interest expense over the term of the Amended 2022 Credit Agreement. Debt issuance costs related to the Amended 2022 Term Facility are amortized to interest expense using the effective interest method over the term of the Amended 2022 Credit Agreement.

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 2019 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, 2023, our total outstanding debt, net of issuance costs, under the 2030 Notes was \$ 348.5 million.

Compliance with Covenants

Each of the Amended 2022 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, 2023.

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)	2023	2022	2021
Basic net income per share:			
Consolidated net income	\$ 141.1	\$ 70.5	\$ 193.3
Weighted average common shares outstanding	42.6	42.6	43.0
Basic net income per share	\$ 3.31	\$ 1.65	\$ 4.50
Diluted net income per share:			
Consolidated net income	\$ 141.1	\$ 70.5	\$ 193.3
Weighted average common shares outstanding	42.6	42.6	43.0
Net effect of dilutive stock options and stock awards	0.3	0.3	0.4
Weighted average common shares outstanding for computing diluted income per share	42.9	42.9	43.4
Diluted net income per share	\$ 3.29	\$ 1.64	\$ 4.45

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		
	2023	2022	2021
License-based	\$ 1,517.5	\$ 1,331.7	\$ 1,131.7
Asset-based	279.6	269.4	264.9
Transaction-based	241.5	269.5	302.7
Consolidated revenue	<u>\$ 2,038.6</u>	<u>\$ 1,870.6</u>	<u>\$ 1,699.3</u>

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.

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 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.

Transaction-based performance obligations are satisfied when the product or service is completed or delivered. Some transaction-based 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, 2023 had a net increase of \$ 54.9 million, primarily driven by cash payments received or payable in advance of satisfying our performance obligations. We recognized \$ 424.9 million of revenue in 2023 that was included in the contract liabilities balance as of December 31, 2022.

We expect to recognize revenue related to our contract liabilities, including future billings, for 2024 and subsequent years as follows:

(in millions)	As of December 31, 2023
2024	\$ 970.0
2025	289.6
2026	94.8
2027	14.9
2028	6.3
Thereafter	22.6
Total	<u>\$ 1,398.2</u>

The aggregate amount of revenue we expect to recognize for 2024 and subsequent years is higher than our contract liability balance of \$ 544.0 million as of December 31, 2023. The difference represents the value of future obligations for signed contracts that have yet to be billed.

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, 2023. We are applying the optional exemption available under FASB 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, 2023, 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 FASB 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, 2023. 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	
	2023	2022
Accounts receivable, less allowance for credit losses	\$ 343.9	\$ 307.9
Deferred commissions	71.2	76.1
Total contract assets	\$ 415.1	\$ 384.0

6. Segment and Geographical Area Information

Segment Information

As disclosed in Note 2, the company revised its reportable segments in accordance with FASB ASC 280. Our segments are generally organized around the company's product offerings. The company concluded that it has seven operating segments which are presented as the following five reportable segments:

- Morningstar Data and Analytics
- PitchBook
- Morningstar Wealth
- Morningstar Credit
- Morningstar Retirement

The operating segments of Morningstar Sustainability and Morningstar Indexes do not individually meet the quantitative segment reporting thresholds and have been combined and presented as part of Corporate and All Other, which is not a reportable segment. Corporate and All Other provides a reconciliation between revenue from our total reportable segments and consolidated revenue amounts.

Morningstar Data and Analytics provides investors comprehensive data, research and insights, and investment analysis to empower investment decision-making. Morningstar Data and Analytics includes product areas such as Morningstar Data, Morningstar Direct, and Morningstar Advisor Workstation.

PitchBook provides investors with access to a broad collection of data and research covering the private capital markets, including venture capital, private equity, private credit and bank loans, and merger and acquisition (M&A) activities. Investors can also access Morningstar's data and research on public equities.

Morningstar Wealth brings together our model portfolios and wealth platform; practice and portfolio management software for registered investment advisers (RIAs); data aggregation and enrichment capabilities; and our individual investor platform. Morningstar Wealth includes the Investment Management product area.

Morningstar Credit provides investors with credit ratings, research, data, and credit analytics solutions that contribute to the transparency of international and domestic credit markets. Morningstar Credit includes the Morningstar DBRS product area and the Morningstar Credit data and credit analytics product areas.

Morningstar Retirement offers products designed to help individuals reach their retirement goals. Its offerings include managed retirement accounts (MRA), fiduciary services, Morningstar Lifetime Allocation funds, and custom models.

FASB ASC 280 establishes standards for reporting information about operating segments. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the CODM, in deciding how to allocate resources and assess performance. The company's chief executive officer, who is considered to be its CODM, reviews financial information presented on an operating segment basis for purposes of making operating decisions and assessing financial performance.

The CODM allocates resources and assesses performance of segments based on segment revenue as well as Adjusted Operating Income. Segment Adjusted Operating Income excludes intangible amortization, merger and acquisition (M&A)-related expenses (including M&A-related earn-outs), and items related to the significant reduction and shift of the company's operations in China, such as severance and personnel expenses, transformation costs, and asset impairment costs. The CODM does not consider these items for the purposes of making decisions to allocate resources among segments or to assess segment performance. Although the amounts are excluded from segment Adjusted Operating Income, they are included in reported consolidated operating income and are included in the reconciliation to consolidated results. Expenses presented as part of the company's segments include allocations of shared costs. These allocations are based on expected utilization of shared resources. Adjusted Operating Income is the reported measure that the company believes is most consistent with those used in measuring the corresponding amount in the consolidated financial statements.

The CODM does not review any information regarding total assets on a segment basis. Operating segments do not record intersegment revenues; therefore, there is none to be reported.

The following tables present information about the company's reportable segments for the years ended December 31, 2023, 2022, and 2021 along with the items necessary to reconcile the segment information to the totals reported in the accompanying consolidated financial statements. Prior period segment information is presented on a comparable basis to the basis on which current period segment information is presented and reviewed by the CODM.

(in millions)	Year ended December 31,		
	2023	2022	2021
Revenue:			
Morningstar Data and Analytics	\$ 747.2	\$ 696.6	\$ 667.5
PitchBook	551.9	450.7	301.6
Morningstar Wealth	229.9	228.9	238.4
Morningstar Credit	215.4	236.9	271.2
Morningstar Retirement	110.5	104.0	104.6
Total Reportable Segments	1,854.9	1,717.1	1,583.3
Corporate and All Other ⁽¹⁾	183.7	153.5	116.0
Total Revenue	\$ 2,038.6	\$ 1,870.6	\$ 1,699.3
Adjusted Operating Income (Loss):			
Morningstar Data and Analytics	\$ 339.8	\$ 313.3	\$ 293.5
PitchBook	148.1	71.5	55.4
Morningstar Wealth	(40.4)	(14.3)	19.4
Morningstar Credit	21.7	59.1	74.5
Morningstar Retirement	54.1	51.4	55.4
Total Reportable Segments	\$ 523.3	\$ 481.0	\$ 498.2
Less reconciling items to Operating Income:			
Corporate and All Other ⁽²⁾	\$ (196.8)	\$ (182.1)	\$ (134.8)
Intangible amortization expense ⁽³⁾	(70.5)	(66.7)	(62.0)
M&A-related expenses ⁽⁴⁾	(9.8)	(17.1)	(17.4)
M&A-related earn-outs ⁽⁵⁾	—	(11.6)	(27.0)
Severance and personnel expenses ⁽⁶⁾	(5.5)	(27.5)	—
Transformation costs ⁽⁶⁾	(7.0)	(8.2)	—
Asset impairment costs ⁽⁶⁾	(3.1)	—	—
Operating Income	230.6	167.8	257.0
Non-operating expense, net	(49.1)	(37.2)	(6.5)
Equity in investments of unconsolidated entities	(7.4)	(3.6)	5.4
Income before income taxes	\$ 174.1	\$ 127.0	\$ 255.9

(1) Corporate and All Other provides a reconciliation between revenue from our Total Reportable Segments and consolidated revenue amounts. Corporate and All Other includes Morningstar Sustainalytics and Morningstar Indexes as sources of revenues.

(2) Corporate and All Other includes unallocated corporate expenses of \$ 153.5 million in 2023, \$ 135.8 million in 2022, \$ 113.1 million in 2021, as well as adjusted operating income/loss from Morningstar Sustainalytics and Morningstar Indexes. Unallocated corporate expenses include finance, human resources, legal, and other management-related costs that are not considered when segment performance is evaluated.

(3) Excludes finance lease amortization expense of \$ 1.2 million in 2023, \$ 2.1 million in 2022, \$ 1.7 million in 2021.

(4) Reflects non-recurring expenses related to M&A activity including pre-deal due diligence, transaction costs, and post-close integration costs.

(5) Reflects the impact of M&A-related earn-outs included in operating expense.

(6) Reflects costs associated with the significant reduction of the company's operations in Shenzhen, China and the shift of work related to its global business functions to other Morningstar locations.

Severance and personnel expenses include severance charges, incentive payments related to early signing of severance agreements, transition bonuses, and stock-based compensation related to the accelerated vesting of restricted stock unit (RSU) and market stock unit (MSU) awards. In addition, the reversal of accrued sabbatical liabilities is included in this category.

Transformation costs include professional fees and the temporary duplication of headcount. As the company hired replacement roles in other markets and shifted capabilities, it employed certain Shenzhen-based staff through the transition period, which resulted in elevated compensation costs on a temporary basis.

Asset impairment costs include the write-off or accelerated depreciation of fixed assets in the Shenzhen, China office that were not redeployed, in addition to lease abandonment costs as the company downsized its office space prior to the lease termination date.

The following table presents depreciation expense and stock-based compensation expense by reportable segment:

(in millions)	Year ended December 31,					
	Depreciation Expense			Stock-based Compensation Expense		
	2023	2022	2021	2023	2022	2021
Morningstar Data and Analytics	\$ 31.0	\$ 23.4	\$ 29.5	\$ 10.6	\$ 10.5	\$ 9.5
PitchBook	26.8	23.8	20.4	10.3	40.2	11.9
Morningstar Wealth	15.8	18.1	13.3	6.4	5.7	4.4
Morningstar Credit	9.1	8.9	9.6	7.0	6.3	3.4
Morningstar Retirement	11.0	7.9	9.6	1.6	1.6	1.4
Total Reportable Segments	93.7	82.1	82.4	35.9	64.3	30.6
Corporate and All Other ⁽⁷⁾	19.5	15.7	4.6	16.9	18.9	11.3
Total	\$ 113.2	\$ 97.8	\$ 87.0	\$ 52.8	\$ 83.2	\$ 41.9

(7) Corporate and All Other provides a reconciliation between depreciation expense and stock-based compensation expense from our Total Reportable Segments and consolidated depreciation expense and stock-based compensation expense. Corporate and All Other includes unallocated corporate expenses of depreciation expense and stock-based compensation expense related to finance, human resources, legal, and other management-related costs that are not considered when segment performance is evaluated as well as depreciation expense and stock-based compensation expense from Morningstar Sustainability and Morningstar Indexes.

The following tables present segment revenue disaggregated by revenue type:

(in millions)	Year ended December 31, 2023								
	Morningstar Data and Analytics	PitchBook	Morningstar Wealth	Morningstar Credit	Morningstar Retirement	Total Reportable Segments	Corporate and All Other ⁽⁸⁾	Total	
Revenue by Type: ⁽⁹⁾									
License-based	\$ 745.5	\$ 551.9	\$ 80.8	\$ 11.7	\$ 1.7	\$ 1,391.6	\$ 125.9	\$ 1,517.5	
Asset-based	—	—	122.6	—	108.5	231.1	48.5	279.6	
Transaction-based	1.7	—	26.5	203.7	0.3	232.2	9.3	241.5	
Total	\$ 747.2	\$ 551.9	\$ 229.9	\$ 215.4	\$ 110.5	\$ 1,854.9	\$ 183.7	\$ 2,038.6	

(in millions)	Year ended December 31, 2022							
	Morningstar Data and Analytics	PitchBook	Morningstar Wealth	Morningstar Credit	Morningstar Retirement	Total Reportable Segments	Corporate and All Other ⁽⁸⁾	Total
Revenue by Type: ⁽⁹⁾								
License-based	\$ 695.1	\$ 450.7	\$ 80.9	\$ —	\$ 2.0	\$ 1,228.7	\$ 103.0	\$ 1,331.7
Asset-based	—	—	117.6	—	101.8	219.4	50.0	269.4
Transaction-based	1.5	—	30.4	236.9	0.2	269.0	0.5	269.5
Total	\$ 696.6	\$ 450.7	\$ 228.9	\$ 236.9	\$ 104.0	\$ 1,717.1	\$ 153.5	\$ 1,870.6

(in millions)	Year ended December 31, 2021							
	Morningstar Data and Analytics	PitchBook	Morningstar Wealth	Morningstar Credit	Morningstar Retirement	Total Reportable Segments	Corporate and All Other ⁽⁸⁾	Total
Revenue by Type: ⁽⁹⁾								
License-based	\$ 666.5	\$ 301.6	\$ 82.7	\$ —	\$ 2.0	\$ 1,052.8	\$ 78.9	\$ 1,131.7
Asset-based	—	—	125.5	—	102.5	228.0	36.9	264.9
Transaction-based	1.0	—	30.2	271.2	0.1	302.5	0.2	302.7
Total	\$ 667.5	\$ 301.6	\$ 238.4	\$ 271.2	\$ 104.6	\$ 1,583.3	\$ 116.0	\$ 1,699.3

(8) Corporate and All Other provides a reconciliation between revenue from our Total Reportable Segments and consolidated revenue amounts. Corporate and All Other includes Morningstar Sustainalytics and Morningstar Indexes as sources of revenues.

(9) Starting with the quarter ended March 31, 2023, the company updated its revenue-type classifications to account for product areas with more than one revenue type. Prior periods have not been restated to reflect the updated classifications. Revenue from Morningstar Sustainalytics' second-party opinions product was reclassified from license-based to transaction-based. Revenue from Morningstar Indexes data and services products was reclassified from asset-based to license-based. Revenue from Morningstar DBRS and Morningstar Credit data products was reclassified from transaction-based to license-based.

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 is attributed to geographical area based on country in which the sale was contracted.

Revenue by geographical area

(in millions)	Year ended December 31		
	2023	2022	2021
United States	\$ 1,470.6	\$ 1,353.9	\$ 1,184.3
Asia	49.3	44.8	41.1
Australia	58.4	55.8	56.9
Canada	116.3	109.8	112.9
Continental Europe	185.5	162.9	159.1
United Kingdom	148.0	133.6	135.7
Other	10.5	9.8	9.3
Total International	568.0	516.7	515.0
Consolidated revenue	\$ 2,038.6	\$ 1,870.6	\$ 1,699.3

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

(in millions)	As of December 31	
	2023	2022
United States	\$ 178.5	\$ 165.6
Asia	9.9	12.8
Australia	1.9	2.3
Canada	3.6	4.5
Continental Europe	6.5	8.5
United Kingdom	7.2	5.4
Other	0.1	0.3
Total International	29.2	33.8
Consolidated property, equipment, and capitalized software, net	<u>\$ 207.7</u>	<u>\$ 199.4</u>

Operating lease assets by geographical area

(in millions)	As of December 31	
	2023	2022
United States	\$ 100.7	\$ 120.0
Asia	16.5	22.6
Australia	3.2	3.9
Canada	8.2	5.5
Continental Europe	18.1	18.5
United Kingdom	16.9	20.6
Other	0.3	0.5
Total International	63.2	71.6
Consolidated operating lease assets	<u>\$ 163.9</u>	<u>\$ 191.6</u>

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 and held-to-maturity. 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. 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	
	2023	2022
Equity investments	\$ 44.9	\$ 32.7
Available-for-sale	2.2	2.3
Held-to-maturity	4.0	3.0
Total	<u>\$ 51.1</u>	<u>\$ 38.0</u>

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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, 2023				As of December 31, 2022			
	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	\$ 37.7	\$ 7.2	\$ —	\$ 44.9	\$ 30.7	\$ 2.5	\$ (0.5)	\$ 32.7
Available-for-sale:								
Marketable debt securities	2.3	—	(0.1)	2.2	2.2	0.1	—	2.3
Held-to-maturity:								
Certificates of deposit	4.0	—	—	4.0	3.0	—	—	3.0
Total	<u>\$ 44.0</u>	<u>\$ 7.2</u>	<u>\$ (0.1)</u>	<u>\$ 51.1</u>	<u>\$ 35.9</u>	<u>\$ 2.6</u>	<u>\$ (0.5)</u>	<u>\$ 38.0</u>

As of December 31, 2023 and 2022, 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, 2023 and 2022.

(in millions)	As of December 31, 2023		As of December 31, 2022	
	Cost	Fair Value	Cost	Fair Value
Held-to-maturity:				
Due in one year or less	\$ 4.0	\$ 4.0	\$ 3.0	\$ 3.0
Due in one to three years	—	—	—	—
Total	<u>\$ 4.0</u>	<u>\$ 4.0</u>	<u>\$ 3.0</u>	<u>\$ 3.0</u>

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)	2023	2022	2021
Realized gains	\$ 2.9	\$ 1.0	\$ 5.0
Realized losses	—	(3.1)	—
Realized gains (losses), net	<u>\$ 2.9</u>	<u>\$ (2.1)</u>	<u>\$ 5.0</u>

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

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

(in millions)	2023	2022	2021
Unrealized gains, net	\$ 4.2	\$ 5.4	\$ 1.8

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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		Level Within the Fair Value Hierarchy as of December 31, 2023		
	as of				
	December 31, 2023	Level 1	Level 2	Level 3	
Financial assets:					
Marketable equity investments, exchange-traded funds, and mutual funds	\$ 44.9	\$ 44.9	\$ —	\$ —	
Marketable debt securities	2.2	2.2	—	—	
Cash equivalents	—	—	—	—	
Financial liabilities:					
Contingent consideration	—	—	—	—	
Total	\$ 47.1	\$ 47.1	\$ —	\$ —	

	Fair Value				
	as of	Level Within the Fair Value Hierarchy as of December 31, 2022			
(in millions)	December 31, 2022	Level 1	Level 2	Level 3	
Financial assets:					
Marketable equity investments, exchange-traded funds, and mutual funds	\$ 32.7	\$ 32.7	\$ —	\$ —	
Marketable debt securities	2.3	2.3	—	—	
Cash equivalents	0.2	0.2	—	—	
Financial liabilities:					
Contingent consideration	50.0	—	—	50.0	
Total	\$ 85.2	\$ 35.2	\$ —	\$ 50.0	

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, 2023 and 2022. We did not hold any securities categorized as Level 3 as of December 31, 2023.

As of December 31, 2022, financial liabilities that were classified as Level 3 within the fair value hierarchy included a contingent consideration liability of \$ 50.0 million related to the LCD acquisition, which represents the acquisition date fair value of \$ 45.5 million plus changes due to remeasurement of this liability in subsequent reporting periods.

The contingent consideration reflected potential future payments that were contingent upon the achievement of certain conditions related to the separation of LCD's contractual relationships from S&P Global (S&P) contracts that included other S&P products and services. This additional purchase consideration, for which the amount was contingent, was recognized at fair value at the date of acquisition, which was calculated as the weighted average of the estimated contingent payment scenarios. The contingent consideration was remeasured each reporting period until the contingency was resolved with any changes in fair value recorded in the current period earnings.

In the first quarter of 2023, we made a cash payment of \$ 50.0 million, resolving our contingent consideration liability related to our acquisition of LCD.

8. Acquisitions, Goodwill, and Other Intangible Assets*2023 Acquisitions*

We did not make any significant acquisitions during 2023.

*2022 Acquisitions*Leveraged Commentary & Data (LCD)

On June 1, 2022, we completed our acquisition of LCD, a market leader in news, research, data, insights, and indexes for the leveraged finance market, from S&P for an initial cash payment of \$ 600.0 million plus a contingent payment of up to \$ 50.0 million. We began consolidating the financial results of LCD in our consolidated financial statements as of June 1, 2022.

The total consideration transferred was recorded as \$ 645.5 million, comprised of a \$ 600.0 million cash payment plus contingent consideration with an acquisition date fair value of \$ 45.5 million.

The transaction was accounted for as a business combination under the acquisition method of accounting pursuant to FASB ASC 805, which requires that assets acquired and liabilities assumed be recognized at fair value as of the acquisition date. We finalized the purchase price allocation related to our acquisition of LCD during the second quarter of 2023 and did not record any significant adjustments compared to the preliminary estimates at the date of acquisition.

The final contingent consideration was determined based upon the achievement of certain conditions related to the separation of LCD's contractual relationships from S&P contracts that include other S&P products and services during the six-month period following closing. To estimate the fair value of the contingent consideration at the acquisition date, we calculated the weighted average of the estimated contingent payment scenarios. At subsequent balance sheet dates, the contingent consideration was measured at fair value and any changes in the estimate were recorded in earnings unless the change in fair value was the result of facts and circumstances that existed as of the acquisition date. During the third and fourth quarters of 2022, the contingent consideration was remeasured and increased by \$ 0.9 million and \$ 3.6 million, respectively, for total consideration of \$ 50.0 million as of December 31, 2022. The contingent consideration is classified as "Contingent consideration liabilities" on our Consolidated Balance Sheet as of December 31, 2022. On February 6, 2023, we made a cash payment of \$ 50.0 million, resolving our contingent consideration liability related to our acquisition of LCD.

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	\$ 645.5
Accounts receivable and other current assets	\$ 9.7
Intangible assets, net	275.6
Deferred revenue	(25.8)
Total fair value of net assets acquired	\$ 259.5
Goodwill	\$ 386.0

Acquired accounts receivable were recorded at gross contractual amounts receivable, which approximates fair value. We collected substantially all of the gross contractual amounts receivable within a reasonable period of time after the acquisition date.

The allocation of the estimated fair values of the assets acquired and liabilities assumed includes \$ 275.6 million of acquired intangible assets, as follows:

	(in millions)	Weighted average useful life (years)
Customer-related assets	\$ 197.3	20
Technology-based assets	65.7	10
Intellectual property	12.6	10
Total intangible assets	<u>\$ 275.6</u>	

Goodwill of \$ 386.0 million represents the excess over the fair value of the net tangible and intangible assets acquired. Since LCD was an asset acquisition, goodwill is deductible for income tax purposes for that transaction.

Praemium Portfolio Services Limited (Praemium)

On June 30, 2022, we completed our acquisition of Praemium, a U.K.-based global provider of digital-first financial services, with \$ 44.9 million in cash paid at closing, subject to post-closing adjustments. Praemium and its subsidiaries offer several investment platforms and customer relationship management services to their financial planning and wealth management clients across the U.K. and international markets. We began consolidating the financial results of Praemium in our consolidated financial statements as of June 30, 2022.

The transaction was accounted for as a business combination under the acquisition method of accounting pursuant to FASB ASC 805, which requires that assets acquired and liabilities assumed be recognized at fair value as of the acquisition date. We finalized the purchase price allocation related to our acquisition of Praemium during the second quarter of 2023 and did not record any significant adjustments compared to the 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 acquisition date:

	(in millions)
Fair value of consideration transferred	\$ 44.9
Cash and cash equivalents	\$ 5.5
Accounts receivable and other current and non-current assets	3.3
Intangible assets, net	22.1
Deferred revenue	(0.3)
Deferred tax liability, net	(5.4)
Other current and non-current liabilities	(2.2)
Total fair value of net assets acquired	<u>\$ 23.0</u>
Goodwill	\$ 21.9

Acquired accounts receivable were recorded at gross contractual amounts receivable, which approximates fair value. We collected substantially all of the gross contractual amounts receivable within a reasonable period of time after the acquisition date.

The allocation of the estimated fair values of the assets acquired and liabilities assumed includes \$ 22.1 million of acquired intangible assets, as follows:

	(in millions)	Weighted average useful life (years)
Customer-related assets	\$ 2.9	10
Technology-based assets	19.2	10
Total intangible assets	<u>\$ 22.1</u>	

Goodwill of \$ 21.9 million represents the excess over the fair value of the net tangible and intangible assets acquired. Goodwill is not deductible for income tax purposes for that transaction.

We recognized a net deferred tax liability of \$ 5.4 million primarily because the amortization expense related to certain intangible assets is not deductible for income tax purposes.

2021 Acquisitions

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	<u>\$ 13.4</u>	

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.

Goodwill

As disclosed in Note 2, the company revised its presentation of reportable segments in accordance with FASB ASC 280. The company concluded that it has seven operating segments, which are presented as the five following reportable segments: Morningstar Data and Analytics, PitchBook, Morningstar Wealth, Morningstar Credit, and Morningstar Retirement. The company's operating segments also represent the company's reporting units to which goodwill is assigned. The company allocated goodwill by reporting unit in accordance with FASB ASC 350. Under the new reporting unit structure, the consolidated goodwill balance is initially allocated based on each reporting unit's relative fair value. The company used a market approach and assigned goodwill to the reporting units. The following table shows the changes in our goodwill balances from January 1, 2022 to December 31, 2023:

(in millions)	Morningstar Data and Analytics	PitchBook	Morningstar Wealth	Morningstar Credit	Morningstar Retirement	Total Reportable Segments	Corporate and All Other	Total
Balance as of January 1, 2022	\$ 609.1	\$ 221.4	\$ 71.6	\$ 130.4	\$ 93.5	\$ 1,126.0	\$ 81.0	\$ 1,207.0
Acquisition of LCD	—	386.0	—	—	—	386.0	—	386.0
Acquisition of Praemium	—	—	21.9	—	—	21.9	—	21.9
Other, primarily foreign currency translation	(8.8)	—	(0.5)	(23.5)	—	(32.8)	(10.4)	(43.2)
Balance as of December 31, 2022	600.3	607.4	93.0	106.9	93.5	1,501.1	70.6	1,571.7
Foreign currency translation	5.2	—	1.2	1.7	—	8.1	(1.0)	7.1
Balance as of December 31, 2023	<u>\$ 605.5</u>	<u>\$ 607.4</u>	<u>\$ 94.2</u>	<u>\$ 108.6</u>	<u>\$ 93.5</u>	<u>\$ 1,509.2</u>	<u>\$ 69.6</u>	<u>\$ 1,578.8</u>

We did not record any impairment losses in 2023, 2022, or 2021 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, 2023				As of December 31, 2022			
	Gross	Accumulated Amortization	Net	Weighted Average Useful Life (years)	Gross	Accumulated Amortization	Net	Weighted Average Useful Life (years)
Customer-related assets	\$ 601.7	\$ (263.8)	\$ 337.9	14	\$ 595.1	\$ (221.3)	\$ 373.8	14
Technology-based assets	315.3	(197.0)	118.3	8	312.8	(173.8)	139.0	8
Intellectual property & other	93.2	(65.0)	28.2	8	92.1	(56.3)	35.8	8
Total intangible assets	<u>\$ 1,010.2</u>	<u>\$ (525.8)</u>	<u>\$ 484.4</u>	12	<u>\$ 1,000.0</u>	<u>\$ (451.4)</u>	<u>\$ 548.6</u>	12

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

(in millions)	2023	2022	2021
Amortization expense	\$ 70.5	\$ 66.7	\$ 62.0

We did not record any impairment losses involving intangible assets in 2023, 2022, or 2021. We amortize intangible assets using the straight-line method over their expected economic useful lives.

Based on acquisitions completed through December 31, 2023, we expect intangible amortization expense for 2024 and subsequent years to be as follows:

	(in millions)
2024	\$ 65.5
2025	57.2
2026	53.4
2027	46.1
2028	42.1
Thereafter	220.1
Total	\$ 484.4

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:

	As of December 31,	
(in millions)	2023	2022
Investment in SmartX Advisory Solutions	\$ 35.0	\$ 35.0
Non-current investment in Wealth Advisors	27.7	18.7
Equity method investments	22.6	26.6
Other investments in unconsolidated entities	14.9	15.7
Total investments in unconsolidated entities	\$ 100.2	\$ 96.0

On January 27, 2023, we entered into a Termination Agreement (the Termination Agreement) with Morningstar Japan K.K. (now known as SBI Global Asset Management Co., Ltd. (Wealth Advisors)), and a Tender Offer Agreement (the Tender Offer Agreement) with SBI Global Asset Management Co., Ltd. (now known as SBI Asset Management Group Co., Ltd. (SBI)).

Pursuant to the Termination Agreement, Wealth Advisors agreed to cease use of the Morningstar brand, and Morningstar and Wealth Advisors agreed to terminate the License Agreement originally entered into in 1998. As consideration for the transaction, Morningstar agreed to pay Wealth Advisors 8 billion Japanese yen upon the termination of the license agreement and the achievement of certain conditions related primarily to the termination of the use of the Morningstar brand by Wealth Advisors' customers.

On April 6, 2023, we made the first cash payment of 6 billion Japanese yen (\$ 45.1 million), and on April 19, 2023, we made the second and final cash payment of 2 billion Japanese yen (\$ 14.8 million), pursuant to the Termination Agreement. The total cash payments of \$ 59.9 million are reflected in "Other assets and liabilities" within operating activities on the Consolidated Statements of Cash Flows. The expense related to the Termination Agreement is recorded within "Expense from equity method transaction, net" in our Consolidated Statements of Income for the year ended December 31, 2023.

As part of this transaction, pursuant to the Tender Offer Agreement, Morningstar agreed to tender up to 10 million shares in Wealth Advisors to SBI. The tender offer closed on February 28, 2023, and SBI purchased 8,040,600 shares of Wealth Advisors from Morningstar, resulting in net proceeds of \$ 26.2 million and a pre-tax gain of \$ 18.4 million. The pre-tax gain is recorded within "Expense from equity method transaction, net" in our Consolidated Statements of Income for the year ended December 31, 2023.

Subsequent to the tender offer, the company's ownership percentage in Wealth Advisors decreased to 13.2 % from 22.1 %, and as a result, we no longer account for our investment in Wealth Advisors as an equity method investment. Each reporting period, we remeasure our remaining investment in Wealth Advisors, an equity security with a readily determinable value, at fair value and recognize unrealized holding gains or losses within "Other income (expense), net" on our Consolidated Statements of Income. During the first quarter of 2023, we recognized an unrealized holding gain of \$ 31.2 million, which is recorded within "Expense from equity method transaction, net" in our Consolidated Statements of Income.

As of December 31, 2023, \$ 18.0 million of our investment in Wealth Advisors is included in "Investments" on our Consolidated Balance Sheets.

The carrying amount of other investments in unconsolidated entities without a readily determinable fair value was \$ 49.9 million and \$ 50.7 million as of December 31, 2023 and December 31, 2022, respectively. We did not record any material impairment losses in 2023 or 2022.

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,	
	2023	2022
Capitalized software	\$ 642.0	\$ 545.5
Computer equipment	108.6	103.2
Furniture and fixtures	41.7	38.9
Leasehold improvements	113.3	106.5
Telephone equipment	2.3	2.3
Construction in progress	13.8	13.7
Property, equipment, and capitalized software, at cost	921.7	810.1
Less: accumulated depreciation	(714.0)	(610.7)
Property, equipment, and capitalized software, net	\$ 207.7	\$ 199.4

The following table summarizes our depreciation expense:

(in millions)	2023	2022	2021
Depreciation expense	\$ 113.2	\$ 97.8	\$ 87.0

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 the economic benefits of the asset; and
- 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.

Our operating lease expense for the years ended December 31, 2023, 2022, and 2021 was \$ 47.6 million, \$ 41.6 million, and \$ 42.5 million, respectively. Charges related to our operating leases that are variable and, therefore, not included in the measurement of the lease liabilities were \$ 18.0 million and \$ 16.9 million for the years ended December 31, 2023 and 2022, respectively. We made lease payments of \$ 45.3 million and \$ 42.6 million during the years ended December 31, 2023 and 2022, respectively.

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

Minimum Future Lease Commitments (in millions)	
2024	\$ 43.7
2025	36.3
2026	38.9
2027	31.3
2028	24.7
Thereafter	36.6
Total minimum lease commitments	211.5
Adjustment for discount to present value	23.7
Present value of lease liabilities	\$ 187.8

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

	As of December 31, 2023
Weighted-average remaining lease term (in years)	5.8
Weighted-average discount rate	3.9 %

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 stock 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 does not permit 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 2021 Plan:

(in millions)	As of December 31, 2023
Shares available for future grants	2.5

Accounting for Stock-Based Compensation Awards

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

(in millions)	Year ended December 31		
	2023	2022	2021
Restricted stock units	\$ 38.8	\$ 35.9	\$ 25.8
Performance share awards	6.5	37.2	10.6
Market stock units	7.5	10.1	5.5
Total stock-based compensation expense	\$ 52.8	\$ 83.2	\$ 41.9
Income tax benefit related to the stock-based compensation expense	\$ 10.3	\$ 18.3	\$ 8.9

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

(in millions)	Year ended December 31		
	2023	2022	2021
Cost of revenue	\$ 23.8	\$ 21.6	\$ 16.5
Sales and marketing	8.3	8.5	4.4
General and administrative	20.7	53.1	21.0
Total stock-based compensation expense	\$ 52.8	\$ 83.2	\$ 41.9

The following table summarizes the amount of unrecognized stock-based compensation expense as of December 31, 2023 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	\$ 54.7	29
Performance share awards	0.3	29
Market stock units	21.9	27
Total unrecognized stock-based compensation expense	<u>\$ 76.9</u>	28

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 Fair Value
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
Granted	275,106	254.93
Vested	(234,971)	205.42
Forfeited	(21,978)	213.69
RSUs Outstanding - December 31, 2022	389,867	\$ 218.55
Granted	221,465	204.32
Vested	(232,121)	204.14
Forfeited	(26,871)	220.35
RSUs Outstanding - December 31, 2023	<u>352,340</u>	\$ 218.96

The total fair value of RSUs that vested in 2023, 2022, and 2021 was \$ 47.4 million, \$ 48.3 million, and \$ 32.3 million, respectively.

Market Stock Units

Market stock units (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 granted to the executive officers and certain other employees also have a feature that will provide an increased number of shares that can be earned at the vesting date, 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, 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 %
May 15, 2022	29.6 %	0.59 %	2.79 %
November 15, 2022	31.8 %	0.60 %	4.24 %
May 15, 2023	31.7 %	0.79 %	3.65 %
November 15, 2023	31.9 %	0.56 %	4.56 %

The risk-free interest rate was determined based on the U.S. Constant Maturity Treasury yield curve on the measurement date with a maturity commensurate with the terms. The expected volatility was determined using our historical stock price volatility over the three years preceding the measurement date.

The table below shows MSUs granted and outstanding as of December 31, 2023 :

	As of December 31, 2023
MSUs granted during 2023	78,448
Weighted average grant date fair value	\$ 231.77
Number of MSUs outstanding	148,799

PitchBook Bonus Plan

We have 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 2023-2025 period. Pursuant to the terms of this renewal, awards having an aggregate target value equal to \$ 28.6 million will be available for issuance with annual grants of \$ 7.15 million for 2023, \$ 7.15 million in 2024, and \$ 14.3 million in 2025.

Each grant will consist of performance-based share unit awards, which will typically vest over a one-year period and will be measured primarily based on the achievement of certain annual revenue and operating margin 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 additional 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 performance share awards granted and outstanding as of December 31, 2023 :

	As of December 31, 2023
Performance share awards granted during 2023	86,251
Weighted average grant date fair value	\$ 288.23
Number of performance share awards outstanding	31,268

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 2023, 2022, and 2021, 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)	2023	2022	2021
401(k) matching contributions	\$ 22.1	\$ 19.7	\$ 16.2

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, 2023, 2022, and 2021:

(in millions)	2023	2022	2021
Income before income taxes and equity in investments of unconsolidated entities	\$ 181.5	\$ 130.6	\$ 250.5
Equity in investments of unconsolidated entities	(7.4)	(3.6)	5.4
Income before income taxes	\$ 174.1	\$ 127.0	\$ 255.9
Income tax expense	\$ 33.0	\$ 56.5	\$ 62.6
Effective tax rate	19.0 %	44.5 %	24.5 %

Our effective tax rate for the year ended December 31, 2023 was 19.0 %, a decrease of 25.5 percentage points, compared with 44.5 % in the prior year. This decrease is primarily attributable to the recognition of \$ 13.7 million of tax benefits related to a retroactive tax election with respect to our 2021 and 2022 tax periods. We received confirmation of the approval of the tax election in the second quarter of 2023, which allowed us to recognize the tax benefits in that period.

Our effective tax rate for the year ended December 31, 2022 was 44.5 %, an increase of 20.0 percentage points, compared with 24.5 % in 2021. The increase was primarily attributable to minimum taxes, non-deductible expenses, and additional reserves for uncertain tax positions.

The amount of accumulated undistributed earnings of our foreign subsidiaries was \$ 274.3 million as of December 31, 2023. We generally consider our U.S. directly-owned foreign subsidiary earnings to be permanently reinvested. We have not recorded deferred income taxes on the \$ 274.3 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)	2023		2022		2021	
	Amount	%	Amount	%	Amount	%
Income tax expense at U.S. federal rate	\$ 36.6	21.0 %	\$ 26.7	21.0 %	\$ 53.7	21.0 %
State income taxes, net of federal income tax benefit	7.3	4.2 %	6.4	5.0 %	10.7	4.2 %
Stock-based compensation activity	1.6	0.9 %	(1.5)	(1.2)%	(7.2)	(2.8)%
Equity in net income (loss) of unconsolidated subsidiaries (including holding gains upon acquisition)	1.1	0.6 %	1.0	0.8 %	0.2	0.1 %
Acquisition earn-out	—	— %	1.8	1.4 %	5.1	2.0 %
Net change in valuation allowance related to deferred tax assets, including net operating losses	(3.2)	(1.8)%	7.7	6.1 %	0.1	— %
Difference between U.S. federal statutory and foreign tax rates and other impacts of foreign operations	1.7	1.0 %	(1.9)	(1.5)%	(2.6)	(1.0)%
Change in unrecognized tax benefits	(9.8)	(5.6)%	14.1	11.1 %	(0.2)	(0.1)%
Credits and incentives	(4.1)	(2.4)%	(3.8)	(3.0)%	(2.1)	(0.8)%
Foreign tax provisions (GILTI, FDII, and BEAT) ⁽¹⁾	(0.2)	(0.1)%	(4.6)	(3.6)%	(0.7)	(0.3)%
Non-deductible expenses and other, net	2.0	1.2 %	10.6	8.4 %	5.6	2.2 %
Total income tax expense	<u>\$ 33.0</u>	<u>19.0 %</u>	<u>\$ 56.5</u>	<u>44.5 %</u>	<u>\$ 62.6</u>	<u>24.5 %</u>

(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		
	2023	2022	2021
Current tax expense:			
U.S.			
Federal	\$ 27.7	\$ 49.1	\$ 38.3
State	13.4	14.9	13.6
Non-U.S.	24.3	30.1	23.0
Current tax expense	65.4	94.1	74.9
Deferred tax expense (benefit):			
U.S.			
Federal	(15.6)	(20.8)	(2.8)
State	(4.2)	(6.8)	(0.3)
Non-U.S.	(12.6)	(10.0)	(9.2)
Deferred tax expense, net	(32.4)	(37.6)	(12.3)
Income tax expense	<u>\$ 33.0</u>	<u>\$ 56.5</u>	<u>\$ 62.6</u>

The following table provides our income before income taxes and equity in investments of unconsolidated entities, generated by our U.S. and non-U.S. operations:

(in millions)	Year ended December 31		
	2023	2022	2021
U.S.	\$ 101.4	\$ 82.4	\$ 218.3
Non-U.S.	80.1	48.2	32.2
Income before income taxes and equity in investments of unconsolidated entities	<u>\$ 181.5</u>	<u>\$ 130.6</u>	<u>\$ 250.5</u>

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,	
	2023	2022
Deferred tax assets:		
Stock-based compensation	\$ 7.1	\$ 10.0
Accrued liabilities	27.5	25.8
Deferred revenue	8.5	9.2
Net operating loss carryforwards - U.S.	—	0.1
Net operating loss carryforwards - Non-U.S.	18.1	15.8
Capitalized expenses	69.2	34.5
Deferred royalty revenue	—	0.1
Allowance for doubtful accounts	1.8	1.9
Lease liabilities	35.0	39.7
Capital loss and other carryforwards	16.7	—
Other	0.1	0.1
Total deferred tax assets	<u>184.0</u>	<u>137.2</u>
Deferred tax liabilities:		
Acquired intangible assets	(73.2)	(75.4)
Property, equipment, and capitalized software	(39.2)	(36.2)
Lease right-of-use assets	(30.2)	(33.1)
Unrealized exchange gains, net	(1.0)	(0.1)
Prepaid expenses	(19.2)	(19.5)
Investments in unconsolidated entities	(14.6)	(7.7)
Withholding tax - foreign dividends	(1.3)	(0.4)
Total deferred tax liabilities	<u>(178.7)</u>	<u>(172.4)</u>
Net deferred tax liability before valuation allowance	5.3	(35.2)
Valuation allowance	(26.3)	(16.9)
Deferred tax liabilities, net	<u>\$ (21.0)</u>	<u>\$ (52.1)</u>

The net increase in our valuation allowance, from \$ 16.9 million at December 31, 2022 to \$ 26.3 million at December 31, 2023, is primarily attributable to capital losses and foreign tax credit carryforwards for which full realization is uncertain. Included in this increase, is \$ 8.1 million of foreign tax credits that will expire in 2031 through 2033. In assessing the need for a valuation allowance, many factors are considered, including the specific taxing jurisdiction, the carryforward period, income tax strategies and forecasted earnings for the entities in each jurisdiction. A valuation allowance is recognized if, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred tax asset will not be realized.

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

(in millions)	As of December 31,	
	2023	2022
Deferred tax asset, net	\$ 14.6	\$ 10.8
Deferred tax liability, net	(35.6)	(62.9)
Deferred tax liability, net	\$ (21.0)	\$ (52.1)

We utilized our remaining U.S. federal net operating loss (NOL) carryforwards of \$ 0.1 million during 2023 and have no carryforwards remaining as of December 31, 2023.

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

(in millions)	As of December 31,	
	2023	2022
Non-U.S. NOLs subject to expiration dates from 2024 through 2042	\$ 17.8	\$ 9.6
Non-U.S. NOLs with no expiration date	54.1	52.9
Total	\$ 71.9	\$ 62.5
Non-U.S. NOLs not subject to valuation allowances	\$ 12.3	\$ 12.2

The increase in non-U.S. NOL carryforwards as of December 31, 2023 compared with the same period in 2022 primarily reflects NOLs generated from compensation and related liabilities attributable to the shift of our China operations.

In assessing the realizability of our deferred tax assets, we consider whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. We recorded a valuation allowance against approximately \$ 59.6 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. With the exception of 2019, 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 2024. It is not possible to estimate the effect of current audits on previously recorded unrecognized tax benefits.

As of December 31, 2023, our Consolidated Balance Sheet included a current liability of \$ 6.2 million and a non-current liability of \$ 8.3 million for unrecognized tax benefits. As of December 31, 2022, our Consolidated Balance Sheet included a current liability of \$ 18.3 million and a non-current liability of \$ 6.0 million for unrecognized tax benefits. These amounts include interest and penalties, less any associated tax benefits.

The table below reconciles the beginning and ending amount of the gross unrecognized tax benefits as follows:

(in millions)	2023		2022	
Gross unrecognized tax benefits - beginning of the year	\$	26.5	\$	11.4
Increases as a result of tax positions taken during a prior-year period		0.6		11.3
Decreases as a result of tax positions taken during a prior-year period		(14.3)		—
Increases as a result of tax positions taken during the current period		1.9		7.7
Decreases relating to settlements with tax authorities		(0.4)		(3.1)
Decreases as a result of lapse of the applicable statute of limitations		(1.3)		(0.8)
Gross unrecognized tax benefits - end of the year	\$	13.0	\$	26.5

In 2023, we recorded a net decrease of \$ 11.8 million of gross unrecognized tax benefits before settlements and lapses of statutes of limitations, of which \$ 11.8 million decreased our income tax expense by \$ 11.8 million.

Of the \$ 11.8 million net decrease in our gross unrecognized tax benefits, \$ 13.7 million is related to tax benefits related to a retroactive tax election with respect to our 2021 and 2022 tax periods which required approval by a taxing authority before recognizing the tax benefit of our election in our Consolidated Statements of Income. In 2022, we recorded the \$ 13.7 million as a current liability in our reserves for uncertain tax positions. We received confirmation of the approval of the tax election in the second quarter of 2023, which allowed us to recognize the tax benefits in that period.

In addition, we reduced our unrecognized tax benefits by \$ 1.7 million for settlements and lapses of statutes of limitations, of which \$ 1.7 million decreased our income tax expense by \$ 1.6 million.

As of December 31, 2023, we had \$ 13.0 million of gross unrecognized tax benefits, which if recognized, would decrease our income tax expense by \$ 12.8 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,			
	2023		2022	
Liabilities for interest and penalties	\$	2.3	\$	1.7

We recorded the increase in the liabilities for penalties and interest, net of any tax benefits, to income tax expense in our Consolidated Statements of Income in 2023.

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. Unless a loss contingency is 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.

Regulatory Matters

Our businesses may be, or may become subject to regulation or increased scrutiny from executive, legislative, regulatory, and private parties. As a result, those activities may be subject to governmental, regulatory, and legislative investigations, regulatory examinations in the ordinary course of business, subpoenas, and other forms of legal process, which may lead to claims and litigation that are based on our ratings and related research activities, including credit ratings, ESG ratings, managed investment, and equity ratings. Additionally, our businesses may also be subject to periodic reviews, inspections, examinations, and investigations by regulators in the jurisdictions in which they operate, 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.

Credit Ratings Matters

On September 29, 2023, DBRS, Inc. (DBRS) entered into two settlements with the SEC to resolve investigations of DBRS's compliance with recordkeeping requirements for certain credit ratings-related communications sent over unapproved electronic messaging channels and disclosure and non-financial internal controls requirements related to former commercial mortgage-backed securities (CMBS) ratings methodologies DBRS used during the period July 2019 through November 2022. Under the terms of the settlements, DBRS agreed to ongoing compliance-related obligations to resolve the investigation related to record-keeping and paid a \$ 6.0 million civil monetary penalty to the SEC for this matter, and also paid a \$ 2.0 million civil monetary penalty to the SEC to resolve the investigation related to CMBS ratings methodologies, both in early October 2023.

Other Matters

We are involved from time to time in commercial disputes and legal proceedings that arise in the normal course of our business. While it is difficult to predict the outcome of any particular dispute 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

On December 6, 2022, the board of directors approved a share repurchase program that authorizes the company to repurchase up to \$ 500.0 million in shares of the company's outstanding common stock, effective January 1, 2023. This authorization replaced the then-existing share repurchase program and expires on December 31, 2025. 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.

For the year ended December 31, 2023, we repurchased a total of 8,484 shares for \$ 1.4 million. As of December 31, 2023, we have \$ 498.6 million available for future repurchases under the current share repurchase program.

17. Recent Accounting Pronouncements

Recently adopted accounting pronouncements

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 FASB 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.

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. On May 6, 2022, we terminated our 2019 Credit Agreement and entered into the 2022 Credit Agreement in connection with the acquisition of LCD. As we entered into the 2022 Credit Agreement for reasons unrelated to reference rate reform, ASU No. 2020-04 is not applicable. See Note 3 for additional information on our 2022 Credit Agreement and Note 8 for additional information on our acquisition of LCD.

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 FASB ASC 606, *Revenue from Contracts with Customers*. The new standard was effective for us on January 1, 2023. We elected to early adopt ASU No. 2021-08 during 2022 and the adoption did not have a material effect on our consolidated financial statements, related disclosures, and results of operations.

Recently issued accounting pronouncements not yet adopted

Segment reporting: On November 27, 2023, the FASB issued ASU No. 2023-07: *Improvements to Reportable Segment Disclosures* (Topic 280) (ASU No. 2023-07), which requires improved reportable segment disclosures, primarily through enhanced disclosures about significant segment expenses. The new standard is effective for our fiscal year beginning on January 1, 2024 and interim periods beginning on January 1, 2025. Early adoption is permitted. Entities should apply the new guidance retrospectively to all prior periods presented in the financial statements. We have not made a decision on early adoption and are evaluating the effect that ASU No. 2023-07 will have on our consolidated financial statements and related disclosures.

Income Taxes: On December 14, 2023, the FASB issued ASU No. 2023-09: *Improvements to Income Tax Disclosures* (Topic 740) (ASU No. 2023-09), which requires additional disclosures primarily related to the income tax rate reconciliation and income taxes paid. This new standard is effective for our fiscal year beginning on January 2025. Early adoption is permitted. Entities should apply the guidance prospectively although retrospective application is permitted. We have not made a decision on early adoption and are evaluating the effect that ASU No. 2023-09 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 maintain disclosure controls and procedures to reasonably assure that information required to be disclosed in the reports filed or submitted under the Securities and Exchange Act of 1934, as amended (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 ensure 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, 2023. 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 not effective as of December 31, 2023, due solely to the material weakness in internal control over financial reporting related to segment reporting described below.

Notwithstanding the material weakness described below, our chief executive officer and chief financial officer have concluded that the consolidated financial statements in this Annual Report on Form 10-K (Report) fairly present, in all material respects, the company's financial position and results of operations and cash flows as of and for the periods presented, in conformity with U.S. generally accepted accounting principles.

(b) Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined under Rules 13a-15(f) and 15d-15(f) of the Exchange Act).

We carried out an evaluation, under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, and under the oversight of our board of directors, 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 not effective as of December 31, 2023, due to a material weakness in internal control over financial reporting related to segment reporting described below.

The company had ineffective process-level controls over the disclosures required in accordance with FASB ASC 280, *Segment Reporting*, resulting from ineffective risk assessment of factors that are relevant to assessing whether operating segments can be aggregated.

KPMG LLP, the company's independent registered public accounting firm, who audited our consolidated financial statements included in this Report, has also issued an adverse opinion on the effectiveness of the company's internal control over financial reporting. KPMG's report is included in Part II, Item 8 of this report under the caption "Financial Statements and Supplementary Data".

Remediation Plan

In response to the material weakness, we have begun implementing process and control improvements to address the above material weakness including:

- a. Enhancing our risk assessment process, focusing on factors that could impact our financial reporting, including related disclosures.
- b. Further enhancing our process-level controls related to the company's segment reporting.

Management believes evidence of effectiveness of the remediation steps can be achieved within the next year and we intend to regularly report to the Audit Committee on progress and results of the remediation plan. The material weakness in our internal control over financial reporting will not be considered remediated until the remediated controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively.

No system of controls, no matter how well designed and operated, can provide absolute assurance that the objectives of the system of controls will be met, and no evaluation of controls can provide absolute assurance that the objectives of the system of controls will be met, and no evaluation of controls can provide absolute assurance that all control deficiencies or material weaknesses have been or will be detected. There is no assurance that the remediation will be fully effective.

(c) Changes in Internal Control Over Financial Reporting

Except for the identification of the material weakness described above, there were no changes in our internal control over financial reporting during the fiscal quarter ended December 31, 2023, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information**Trading Arrangements**

During the three months ended December 31, 2023, the company's executive officers and directors adopted or terminated contracts, instructions, or written plans for the purchase or sale of the company's securities as noted below:

Name and Title	Date of Adoption of Trading Plan	Scheduled Expiration Date of Trading Plan ⁽¹⁾	Aggregate Number of Securities to Be Purchased or Sold
Joe Mansueto Executive Chairman	11/17/2023 ⁽²⁾	4/30/2025	Sale of up to 500,000 shares of common stock

(1) The trading plan may also expire on such earlier date as all transactions under the trading plan are completed.

(2) Intended to satisfy the affirmative defense of Rule 10b5-1(c).

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 Board of Directors and Corporate Governance —Director Independence, —Board Committees and Charters, and —Delinquent Section 16(a) Reports in the company's Definitive Proxy Statement for the 2024 Annual Meeting of Shareholders, which will be filed not later than 120 days after the end of the registrant's fiscal year ended December 31, 2023, (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—Director Compensation, and Compensation Discussion and Analysis—Compensation Committee Report and —Executive Compensation Tables 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 Compensation Discussion and Analysis—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 —Director Independence 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 Proposal 3: Ratification of the Appointment of Independent Registered Public Accounting Firm—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 Report under Item 8 —Financial Statements and Supplementary Data:

Report of KPMG LLP, Independent Registered Public Accounting Firm

KPMG LLP Chicago, IL Auditor Firm ID: 185

Financial Statements:

Consolidated Statements of Income—Years ended December 31, 2023, 2022, and 2021

Consolidated Statements of Comprehensive Income—Years ended December 31, 2023, 2022, and 2021

Consolidated Balance Sheets—December 31, 2023 and 2022

Consolidated Statements of Equity—Years ended December 31, 2023, 2022, and 2021

Consolidated Statements of Cash Flows—Years ended December 31, 2023, 2022, and 2021

Notes to Consolidated Financial Statements

2. Financial Statement Schedules**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The report of KPMG LLP dated February 29, 2024 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, 2023, December 31, 2022, and December 31, 2021.

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,				
2023	\$ 6.6	\$ 5.3	\$ (6.3)	\$ 5.6
2022	4.5	3.8	(1.7)	6.6
2021	\$ 4.2	\$ 1.9	\$ (1.6)	\$ 4.5

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.
2.2	Asset Purchase Agreement, by and between S&P Global Inc. and Morningstar, Inc., dated as of April 3, 2022, is incorporated by reference to Exhibit 2.1 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022.
2.3	Amendment to the Asset Purchase Agreement, by and between S&P Global Inc. and Morningstar, Inc., dated as of June 1, 2022, is incorporated by reference to Exhibit 2.2 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022.
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, 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.
10.6*	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.
10.7*	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.
10.8*	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.
10.9*	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.
10.10*	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.
10.11*	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.
10.12*	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.
10.13*	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 and prior to May 15, 2022, is incorporated by reference to Exhibit 10.5 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021.
10.14*	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.

10.15*	Form of Morningstar Amended and Restated 2011 Stock Incentive Plan Bonus Restricted Stock Unit Award Agreement, for awards made on and after May 15, 2022, is incorporated by reference to Exhibit 10.2 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022.
10.16*	Form of Morningstar Amended and Restated 2011 Stock Incentive Plan Market Stock Unit with Revenue Kicker Award Agreement, for awards made on and after May 15, 2022, is incorporated by reference to Exhibit 10.3 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022.
10.17*	Form of Morningstar Amended and Restated 2011 Stock Incentive Plan Bonus Restricted Stock Unit Award Agreement, for awards made on or after March 1, 2023, is incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended March 31, 2023.
10.18*	Contract Services Agreement dated as of February 1, 2023, between Morningstar, Inc. and Bevin Desmond, is incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K that we filed with the SEC on February 2, 2023.
10.19*	Separation Agreement and General Release dated as of February 1, 2023, between Morningstar, Inc. and Bevin Desmond, is incorporated by reference to Exhibit 10.2 to our Current Report on Form 8-K that we filed with the SEC on February 2, 2023.
10.20	Credit Agreement dated as of May 6, 2022, among Morningstar, Inc., certain subsidiaries of Morningstar, Inc., 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 June 30, 2022.
10.21	Amendment No. 1 to the Credit Agreement dated as of September 13, 2022, among Morningstar, Inc., certain subsidiaries of Morningstar, Inc., Bank of America, N.A. and the other lenders party thereto, is incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2022.
10.22	Amendment No. 2 to the Credit Agreement dated as of September 30, 2022, among Morningstar, Inc., certain subsidiaries of Morningstar, Inc., Bank of America, N.A. and the other lenders party thereto, is incorporated by reference to Exhibit 10.2 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2022.
10.23	Note Purchase Agreement, dated as of October 26, 2020, among Morningstar and each of the purchasers signatory thereto, is incorporated by reference to Exhibit 10.1 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.
97†	Morningstar, Inc. Incentive Compensation Recoupment Policy
101†	The following financial information from Morningstar's Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on February 29, 2024, 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 29, 2024.

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
<div>/s/ Kunal Kapoor</div> <div>Kunal Kapoor</div>	Chief Executive Officer (principal executive officer) and Director	February 29, 2024
<div>/s/ Jason Dubinsky</div> <div>Jason Dubinsky</div>	Chief Financial Officer (principal financial and principal accounting officer)	February 29, 2024
<div>/s/ Joe Mansueto</div> <div>Joe Mansueto</div>	Executive Chairman and Chairman of the Board	February 29, 2024
<div>/s/ Robin Diamonte</div> <div>Robin Diamonte</div>	Director	February 29, 2024
<div>/s/ Cheryl Francis</div> <div>Cheryl Francis</div>	Director	February 29, 2024
<div>/s/ Stephen Joynt</div> <div>Stephen Joynt</div>	Director	February 29, 2024
<div>/s/ Steven Kaplan</div> <div>Steven Kaplan</div>	Director	February 29, 2024
<div>/s/ Gail Landis</div> <div>Gail Landis</div>	Director	February 29, 2024
<div>/s/ Bill Lyons</div> <div>Bill Lyons</div>	Director	February 29, 2024
<div>/s/ Doniel Sutton</div> <div>Doniel Sutton</div>	Director	February 29, 2024
<div>/s/ Caroline Tsay</div> <div>Caroline Tsay</div>	Director	February 29, 2024

The information below is presented as of December 31, 2023. Listed below are all the subsidiaries of Morningstar, Inc., except certain subsidiaries which are not included in the listing because, considered in the aggregate, they do not constitute a significant subsidiary as of the date compiled.

Subsidiaries of Morningstar, Inc.

Subsidiary	Jurisdiction of Formation	Ownership Information
Corporate Fundamentals, Inc.	US (Delaware)	Morningstar, Inc. owns 100%.
DBRS, Inc.	US (Delaware)	Morningstar Ratings Holding Corp. owns 100%.
Morningstar Credit Analytics LLC (Note D)	US (Delaware)	Morningstar, Inc. owns 100%.
Morningstar Index Holding Corp.	US (Delaware)	Morningstar, Inc. owns 100%.
Morningstar Investment Management LLC	US (Delaware)	Morningstar, Inc. owns 100%.
Morningstar Investment Services LLC	US (Delaware)	Morningstar Investment Management LLC owns 100%.
Morningstar Ratings Holding Corp.	US (Delaware)	Morningstar, Inc. owns 100%.
Morningstar Research Services LLC	US (Delaware)	Morningstar, Inc. owns 100%.
PitchBook Data, Inc.	US (Delaware)	Morningstar, Inc. owns 100%.
PitchBook Holding, Inc.	US (Delaware)	PitchBook Data, Inc. owns 100%
Sustainalytics U.S. Inc.	US (Delaware)	Morningstar, Inc. owns 100%.
Morningstar Commodity Data, Inc.	US (Illinois)	Morningstar, Inc. owns 100%.
Morningstar Credit Ratings, LLC	US (Pennsylvania)	DBRS, Inc. owns 100%.
ADL (Aust) Pty Limited	Australia	Morningstar Australasia Pty Limited owns 100%.
Ibbotson Pty Limited	Australia	Morningstar Australasia Pty Limited owns 100%.
Morningstar Australasia Pty Limited	Australia	Morningstar Group Australia Pty Limited owns 100%.
Morningstar Direct Investments Pty Limited	Australia	Morningstar Group Australia Pty Limited owns 100%.
Morningstar Group Australia Pty Limited	Australia	Morningstar Holland B.V. owns 100%.
Morningstar Investment Management Australia Limited	Australia	Morningstar Group Australia Pty Limited owns 100%.
Sustainalytics Australia Pty Ltd.	Australia	Sustainalytics Holding B.V. owns 100%.
Morningstar Brasil Informacoes Financeiras Ltda.	Brazil	Morningstar Holland B.V. owns 100%. (Note A)
DBRS Limited	Canada	Ratings Acquisition Corp. owns 100%.
Jantzi Research Inc.	Canada	Sustainalytics Holding B.V. owns 100%.
Morningstar Associates, Inc.	Canada	Morningstar Canada Group, Inc. owns 100%.
Morningstar Canada Group, Inc.	Canada	Morningstar Holland B.V. owns 100%.

Morningstar Research, Inc.	Canada	Morningstar Canada Group, Inc. owns 100%.
Ratings Acquisition Corporation	Cayman Islands	Morningstar Ratings Holding Corp. owns 100%.
Servicios Morningstar Chile Limitada	Chile	Morningstar Holland B.V. owns 100%. (Note A)
Morningstar (Shanghai) Ltd.	China	Morningstar Asia, Ltd. owns 100%.
Morningstar (Shenzhen) Ltd.	China	Morningstar Asia, Ltd. owns 100%.
Morningstar Finance (Cyprus) Limited	Cyprus	Morningstar Ratings Holding Corp. owns 100%.
GES Investment Services Danmark A/S	Denmark	GES International AB owns 100%.
Morningstar Danmark A/S	Denmark	Morningstar Danmark Holding ApS owns 100%.
Morningstar Danmark Holding ApS	Denmark	Morningstar Holland B.V. owns 100%.
Morningstar France Fund Information SARL	France	Morningstar France Holding SAS owns 100%.
Morningstar France Holding SAS	France	Morningstar Holland B.V. owns 100%.
Morningstar Investment Consulting France SAS	France	Morningstar France Holding SAS owns 100%.
Sustainalytics S.A.R.L.	France	Sustainalytics B.V. owns 100%.
DBRS Ratings GmbH	Germany	Ratings Acquisition Corp. owns 100%.
Morningstar Deutschland GmbH	Germany	Morningstar Holland B.V. owns 100%.
Morningstar Indexes GmbH	Germany	Morningstar Indexes Limited owns 100%
Sustainalytics GmbH	Germany	Sustainalytics B.V. owns 100%.
Morningstar Asia Limited	Hong Kong	Morningstar Holland B.V. owns 100%.
Morningstar Investment Management Asia Limited	Hong Kong	Morningstar Investment Management LLC owns 100%.
WealthCraft Limited	Hong Kong	Morningstar Wealth (UK) Limited owns 100%.
DBRS Ratings GmbH, Branch India	India	(Note C)
Morningstar India Private Limited	India	Corporate Fundamentals, Inc. owns 100%.
Morningstar Investment Research India Private Limited	India	Morningstar Investment Management LLC owns 100%.
Morningstar Italy, S.R.L.	Italy	Morningstar Holland B.V. owns 100%.
Ibbotson Associates Japan K.K.	Japan	Morningstar Investment Management LLC owns 100%.
Morningstar Japan, Inc.	Japan	Ibbotson Associates Japan K.K. owns 100%
Sustainalytics Japan Inc.	Japan	Sustainalytics Holding B.V. owns 100%.
Morningstar Wealth International Limited	Jersey	Morningstar Wealth Portfolio Services Limited owns 100%.
Morningstar Korea, Ltd.	Korea	Morningstar, Inc. owns 100%.
Morningstar Luxembourg S.a.r.l.	Luxembourg	Morningstar Holland B.V. owns 100%.
Investigaciones MS Mexico, S. de R.L. de C.V.	Mexico	Morningstar Holland B.V. owns 100%. (Note A)

Morningstar Research Limited	New Zealand	Morningstar Australasia Pty Limited owns 100%.
Morningstar Norge AS	Norway	Morningstar Holland B.V. owns 100%.
GES Poland SP. Z.O.O.	Poland	GES International AB owns 100%.
Sustainalytics S.R.L.	Romania	Sustainalytics B.V. owns 100%.
Morningstar Investment Adviser Singapore Pte. Limited	Singapore	Morningstar Asia Limited owns 100%.
Morningstar Research Pte. Limited	Singapore	Morningstar Asia Limited owns 100%.
Sustainalytics Pte Ltd.	Singapore	Sustainalytics Holding B.V. owns 100%.
Morningstar Investment Management South Africa (Pty) Limited	South Africa	Morningstar Investment Management LLC owns 100%.
Morningstar Research (Proprietary) Limited	South Africa	Morningstar Holland B.V. owns 100%.
DBRS Ratings GmbH Sucursal en España	Spain	(Note C)
Morningstar Europe Services, S.L.	Spain	Morningstar Holland B.V. owns 100%.
Morningstar Network, S.L.	Spain	Morningstar Holland B.V. owns 100%.
GES International AB	Sweden	Sustainalytics Holding B.V. owns 100%.
Morningstar HoldCo AB	Sweden	Morningstar Holland B.V. owns 100%.
Morningstar Sweden AB	Sweden	Morningstar HoldCo AB owns 100%.
Morningstar Switzerland GmbH	Switzerland	Morningstar Holland B.V. owns 100%.
Morningstar Research Thailand Limited	Thailand	Morningstar, Inc. owns 100%. (Note B)
Morningstar Europe B.V.	The Netherlands	Morningstar, Inc. owns 100%.
Morningstar Holland B.V.	The Netherlands	Morningstar Europe B.V. owns 100%.
Sustainalytics B.V.	The Netherlands	Morningstar Europe B.V. owns 100%.
Sustainalytics Holding B.V.	The Netherlands	Morningstar Holland B.V. owns 100%.
Morningstar (Dubai) Ltd.	United Arab Emirates	Morningstar Holland B.V. owns 100%.
Morningstar Wealth Administration (DIFC Branch) Limited	United Arab Emirates	Morningstar Wealth Administration Limited owns 100%.
DBRS Ratings Limited	United Kingdom	Ratings Acquisition Corp. owns 100%.
Morningstar Europe Limited	United Kingdom	Morningstar Holland B.V. owns 100%.
Morningstar Finance Limited	United Kingdom	Ratings Acquisition Corp. owns 100%.
Morningstar Indexes Limited	United Kingdom	Morningstar Index Holding Corp. owns 100%.
Morningstar Investment Management Europe Limited	United Kingdom	Morningstar Investment Management LLC owns 100%.
Morningstar Real-Time Data Limited	United Kingdom	Morningstar UK Limited owns 100%.
Morningstar UK Limited	United Kingdom	Morningstar Holland B.V. owns 100%.
Morningstar Wealth Administration Limited	United Kingdom	Morningstar Wealth Portfolio Services Limited owns 100%.
Morningstar Wealth EMA Trustees Limited	United Kingdom	Morningstar Wealth Administration Limited owns 100%.
Morningstar Wealth Portfolio Services Limited	United Kingdom	Morningstar Investment Management LLC owns 100%.
Morningstar Wealth Retirement Services Limited	United Kingdom	Morningstar Wealth Administration Limited owns 100%.

Morningstar Wealth Retirement Trustees Limited	United Kingdom	Morningstar Wealth Administration Limited owns 100%.
Morningstar Wealth Software Limited	United Kingdom	Morningstar Wealth (UK) Limited owns 100%
Morningstar Wealth Trustee Limited	United Kingdom	Morningstar Wealth Administration Limited owns 100%.
Morningstar Wealth (UK) Limited	United Kingdom	Morningstar Wealth Portfolio Services Limited owns 100%.
PitchBook Data Limited	United Kingdom	PitchBook Data, Inc. owns 100%.
Smart Investment Management Limited	United Kingdom	Morningstar Wealth Administration Limited owns 100%.
Smartfund Nominees Ltd	United Kingdom	Morningstar Wealth Administration Limited owns 100%.
Sustainalytics UK Limited	United Kingdom	Sustainalytics B.V. owns 100%.
W M Pension Trustee Services Limited	United Kingdom	Morningstar Wealth Administration Limited owns 100%.

Note A: Morningstar, Inc. owns less than 1% of this entity.

Note B: Corporate Fundamentals, Inc. and Morningstar Direct Investments Pty Limited each own less than 1% of this entity respectively.

Note C: DBRS Ratings GmbH, Branch India and DBRS Ratings GmbH Sucursal en España are each a branch of DBRS Ratings GmbH.

Note D: Name was changed from Morningstar Credit Information & Analytics LLC effective as of January 2, 2024.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (Nos. 333-124783, 333-176203, and 333-258332) on Form S-8 of our reports dated February 29, 2024, with respect to the consolidated financial statements of Morningstar, Inc. and the effectiveness of internal control over financial reporting.

/s/ KPMG LLP

Chicago, Illinois
February 29, 2024

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Kunal Kapoor, certify that:

1. I have reviewed this annual report on Form 10-K of Morningstar, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 29, 2024

/s/ Kunal Kapoor

Kunal Kapoor

Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Jason Dubinsky, certify that:

1. I have reviewed this annual report on Form 10-K of Morningstar, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 29, 2024

/s/ Jason Dubinsky

Jason Dubinsky

Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF
THE SARBANES-OXLEY ACT OF 2002

Kunal Kapoor, as Chief Executive Officer of Morningstar, Inc. (the Company), certifies, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Company's Annual Report on Form 10-K for the year ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the Report) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m); and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Kunal Kapoor

Kunal Kapoor

Chief Executive Officer

Date: February 29, 2024

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF
THE SARBANES-OXLEY ACT OF 2002

Jason Dubinsky, as Chief Financial Officer of Morningstar, Inc. (the Company), certifies, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Company's Annual Report on Form 10-K for the year ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the Report) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m); and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Jason Dubinsky

Jason Dubinsky

Chief Financial Officer

Date: February 29, 2024

MORNINGSTAR, INC.
DODD-FRANK POLICY ON RECOUPMENT OF INCENTIVE COMPENSATION

Introduction

The Board of Directors (the "Board") of Morningstar, Inc. (the "Company") has adopted this Dodd-Frank Policy on Recoupment of Incentive Compensation (this "Policy"), which provides for the recoupment of compensation in certain circumstances in the event of a restatement of financial results by the Company. This Policy shall be interpreted to comply with the requirements of U.S. Securities and Exchange Commission ("SEC") rules and Nasdaq Stock Market ("Nasdaq") listing standards implementing Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") and, to the extent this Policy is in any manner deemed inconsistent with such rules, this Policy shall be treated as retroactively amended to be compliant with such rules.

Administration

This Policy shall be administered by the Compensation Committee of the Board (the "Compensation Committee"). Any determinations made by the Compensation Committee shall be final and binding on all affected individuals. The Compensation Committee is authorized to interpret and construe this Policy and to make all determinations necessary, appropriate or advisable for the administration of this Policy, in all cases consistent with the Dodd-Frank Act. The Board or Compensation Committee may amend this Policy from time to time in its discretion.

Covered Executives

This Policy applies to any current or former "executive officer," within the meaning of Rule 10D-1 under the Securities Exchange Act of 1934, as amended, of the Company or a subsidiary of the Company (each such individual, an "Executive"). This Policy shall be binding and enforceable against all Executives and their beneficiaries, executors, administrators, and other legal representatives.

Recoupment Upon Financial Restatement

If the Company is required to prepare an accounting restatement due to the material noncompliance of the Company with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period (a "Financial Restatement"), the Compensation Committee shall cause the Company to recoup from each Executive, as promptly as reasonably possible, any erroneously awarded Incentive-Based Compensation, as defined below.

No-Fault Recovery

Recoupment under this Policy shall be required regardless of whether the Executive or any other person was at fault or responsible for accounting errors that contributed to the need for the Financial Restatement or engaged in any misconduct.

Compensation Subject to Recovery; Enforcement

This Policy applies to all compensation granted, earned or vested (including, but not limited to, performance-based cash, stock, market stock units, options or other equity-based awards paid or granted to the Executive) based wholly or in part upon the attainment of any financial reporting measure determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measure that is derived wholly or in part from such measures, whether or not presented within the Company's financial statements or included in a filing with the SEC, including, but not limited to, adjusted revenue, adjusted EBITDA, stock price and total shareholder return ("TSR") ("Incentive-Based Compensation"). Compensation that is granted, vests or is earned based solely upon the occurrence of non-financial events, including, but not limited to, base salary, restricted stock units or options with time-based vesting, or a bonus awarded solely at the discretion of the Board or Compensation Committee and not based on the attainment of any financial measure is not subject to this Policy.

In the event of a Financial Restatement, the amount to be recovered will be the excess of (i) the Incentive-Based Compensation received by the Executive during the Recovery Period (as defined below), based on the erroneous data and calculated without regard to any taxes paid or withheld, over (ii) the Incentive-Based Compensation that would have been received by the Executive had it been calculated based on the restated financial information, as determined by the Compensation Committee.

For purposes of this Policy, "Recovery Period" means the three completed fiscal years immediately preceding the date on which the Company is required to prepare the Financial Restatement, as determined in accordance with the last sentence of this paragraph, or any transition period that results from a change in the Company's fiscal year (as set forth in Section 5608(b)(i)(D) of the Nasdaq Listing Rules). The date on which the Company is required to prepare a Financial Restatement is the earlier to occur of (A) the date the Board or a Board committee (or authorized officers of the Company if Board action is not required) concludes, or reasonably should have concluded, that the Company is required to prepare a Financial Restatement or (B) the date a court, regulator, or other legally authorized body directs the Company to prepare a Financial Restatement.

For Incentive-Based Compensation based on stock price or TSR, where the amount of erroneously awarded compensation is not subject to mathematical recalculation directly from the information in the Financial Restatement, then the Compensation Committee shall determine the amount to be recovered based on a reasonable estimate of the effect of the Financial Restatement on the stock price or TSR upon which the Incentive-Based Compensation was received and the Company shall document the determination of that estimate and provide it to Nasdaq.

Incentive-Based Compensation is considered to have been received by an Executive in the fiscal year during which the applicable financial reporting measure was attained or purportedly attained, even if the payment or grant of such Incentive-Based Compensation occurs after the end of that period.

The Company may use any legal or equitable remedies that are available to the Company to recoup any erroneously awarded Incentive-Based Compensation, including but not limited to by collecting from the Executive cash payments or shares of Company common stock from or by forfeiting any amounts that the Company owes to the Executive.

In addition to the foregoing, in the event that an Executive Officer fails to repay or reimburse erroneously awarded compensation that is subject to recovery, the Committee may require an Executive Officer to reimburse the Company for any and all expenses reasonably incurred (including legal fees) by the Company in recovering erroneously awarded compensation under this Policy.

No Indemnification

The Company shall not indemnify any Executive or pay or reimburse the premium for any insurance policy to cover any losses incurred by such Executive under this Policy.

Notwithstanding the terms of any indemnification or insurance policy or any contractual arrangement with any Executive Officer that may be interpreted to the contrary, the Company shall not indemnify any Executive Officer against the loss of any Erroneously Awarded Compensation. No Executive Officer shall receive any advancement of expenses for disputes related to any loss of compensation by such person in accordance with this Policy, and no person shall be paid or reimbursed by the Company Group for any premiums paid by such person for any third-party insurance policy covering potential recovery obligations under this Policy. For this purpose, "indemnification" includes any modification to current compensation arrangements or other means that would amount to de facto indemnification (for example, providing the person a new cash award which would be cancelled to effect the recovery of any Erroneously Awarded Compensation). In no event shall the Company Group be required to award any person an additional payment if any Restatement would result in a higher incentive compensation payment.

Exceptions

The compensation recouped under this Policy shall not include Incentive-Based Compensation received by an Executive (i) prior to beginning service as an Executive or (ii) if he or she did not serve as an Executive at any time during the performance period applicable to the Incentive-Based Compensation in question. The Compensation Committee (or a majority of independent directors serving on the Board) may determine not to seek recovery from an Executive in whole or part to the extent it determines in its sole discretion that such recovery would be impracticable because (A) the direct expense paid to a third party to assist in enforcing recovery would exceed the recoverable amount (after having made a reasonable attempt to recover the erroneously awarded Incentive-Based Compensation and providing corresponding documentation of such attempt to Nasdaq), (B) recovery would violate the home country law that was adopted prior to November 28, 2022, as determined by an opinion of counsel licensed in the applicable jurisdiction that is acceptable to and provided to Nasdaq, or (C) recovery would likely cause the Company's 401(k) plan or any other tax-qualified retirement plan to fail to meet the requirements of Section 401(a)(13) or Section 411(a) of the Internal Revenue Code of 1986, as amended, and the regulations thereunder.

Other Remedies Not Precluded

The exercise by the Compensation Committee of any rights pursuant to this Policy shall be without prejudice to any other rights or remedies that the Company, the Board or the Compensation Committee may have with respect to any Executive subject to this Policy. Rights of recoupment under this Policy are in addition to, and not in lieu of, any other remedies, rights, or requirements regarding the clawback or recoupment of any compensation under any other policy of the Company; **provided, however**, that any amounts clawed back or recouped under any other policy that would be recoupable under this Policy will count toward any required recoupment under this Policy and vice versa.

Effective Date and Applicability

This Policy has been adopted by the Board on October 6, 2023 and shall apply to any Incentive-Based Compensation that is received by an Executive on or after October 2, 2023.