This brochure provides information about the qualifications and business practices of Morningstar Research Services LLC. If you have any questions about the contents of this brochure, please contact us at (312) 696-6000 or send an email to complianceemail@morningstar.com. The information in this brochure has not been approved or verified by the United States Securities and Exchange Commission or by any state securities authority.

Additional information about Morningstar Research Services LLC also is available on the SEC’s website at www.adviserinfo.sec.gov.

Morningstar Research Services LLC is registered with the United States Securities and Exchange Commission as a Registered Investment Adviser. Registration with the Securities and Exchange Commission does not imply a certain level of skill or training. Please retain this brochure for future reference.

Item 2. Material Changes
The Form ADV Part 2A dated March 25, 2022 contains the following material change since the firm’s last Form ADV Part 2A filing dated March 5, 2021:

Updates were made in Item 4. Advisory Business, Item 5. Fees and Compensation, and Item 8. Methods of Analysis, Investment Strategies, and Risk of Loss to add a new service, Asset Allocation Services. Under this service, we present asset class exposures for our client’s choice of benchmark index(es) along with category-level allocation targets for specific risk levels or investment-style orientations. In some cases, we determine sector-specific categories and indicate how those categories can be incorporated into allocations. This service is only offered in connection with our Investment Selection Services.

Item 4. Advisory Business was also updated to add a new component to our Due Diligence services whereas we use a questionnaire to conduct an Operational Due Diligence review based on client requirements.

Item 10. Other Financial Activities and Affiliations was updated to note that the Manager Selection team’s bonus is now based on the bonus plan for Morningstar Investment Management LLC’s Workplace and Retirement Solutions group to better align the compensation structure for the team with the area where their work has the most impact. We also disclose that our parent company, Morningstar, Inc., may engage us to perform certain services, and our compensation for those services will likely be lower than the compensation we receive from non-affiliated clients for the same or similar services. We mitigate any conflicts of interest this may cause by prohibiting the use of non-public or confidential information we learn in the normal course of business with our clients with Morningstar, Inc. We further disclosed that while we do not provide any compensation to employees of our affiliates for introducing potential clients to us, our affiliate may choose to pay their employee additional sales compensation for the introduction.

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading was updated to note that our employees are now required to obtain pre-clearance for initial digital coin offerings.

The Form ADV Part 2A also contains the following non-material changes since the firm’s last Form ADV Part 2A filing:

Updates were made throughout this Firm Brochure to note that our Manager Select Services are now referred to as Manager Due Diligence and Selection Services.

Item 8. Methods of Analysis, Investment Strategies, and Risk of Loss was updated to clarify and provide additional information on our process for the Morningstar Analyst Rating. The Morningstar Sustainability Rating, and references to it, were removed as that rating is offered by our parent company, Morningstar, Inc.

Minor changes were made to the Brochure Supplement that accompanies this Firm Brochure to improve readability and update employees’ professional designations.

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Item 4. Advisory Business
A. Firm
Morningstar Research Services LLC is a Delaware limited liability company formed in 2016, and is a wholly owned subsidiary of Morningstar, Inc. (“Morningstar”). Morningstar is a publicly traded company (NASDAQ Ticker: MORN) with Mr. Joseph Mansueto, Executive Chairman of Morningstar, holding more than 40% of Morningstar’s outstanding shares. Because of that ownership, Mr. Mansueto is an indirect owner of Morningstar Research Services.

Morningstar Research Services is registered with the United States Securities and Exchange Commission (“SEC”) under Section 203(c) of the Investment Advisers Act of 1940, as amended. Morningstar Research Services consists primarily of investment professionals that were previously part of Morningstar’s U.S.-based manager and equity research teams. Morningstar’s manager and equity research teams have been producing investment research since 1986 and 1999 respectively.

B. Services - Overview
Investment Research Reports
Our core offering is the production of investment research reports on equity securities, mutual funds, exchange-traded funds, separately managed accounts, model portfolios, and other managed investment products (“Investment Research Reports”),

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Investment Research Reports are prepared without taking into consideration any investor or investor’s specific facts and circumstances and thus are generic/impersonal investment advice intended to be educational in nature and for user’s research purposes.

Our Investment Research Reports or excerpts from them are distributed in two primary ways: (1) through Morningstar’s software products (e.g., Morningstar Direct), newsletters, and Morningstar-branded websites (e.g., www.morningstar.com) (collectively “Distribution through Morningstar”); and (2) through license agreements directly with non-affiliated financial institutions including broker/dealer firms, banks, insurance companies, and investment advisory firms and media platforms (“License Arrangements”).

Our core investment research offerings include the following:

1. Equity Research Reports
   a. We produce investment research reports with qualitative analysis on primarily North American equity securities. Our equity analysts utilize a proprietary discounted cash flow model as part of their evaluation of a security and their determination of its fair value estimate of the security’s stock. See Item 8 below for details.

2. Manager Research Reports
   a. We produce investment research reports with qualitative analysis on certain open-end mutual funds, exchange-traded funds (ETF), separately managed accounts, model portfolios, and other managed investment products (each a “Managed Investment” or collectively, “Managed Investments”). The cornerstone of our qualitative investment research is the determination of a Managed Investment’s Morningstar Analyst RatingTM. See Item 8 below for more details.

As the process by which equities and Managed Investments can be analyzed is limited by the size of the equity and manager research teams, Morningstar has developed machine-learning models that use the decision-making process of the analysts, their past rating or analysis decisions, and the data used to support those decisions. The machine-learning model is then applied to create quantitative analysis or ratings, which are designed to be analogous to what an analyst might produce if they covered the security.

Manager Due Diligence and Selection Services
We provide investment consulting services to affiliated registered investment advisers (“Affiliated Clients”) as well as non-affiliated financial institutions including broker/dealer firms, banks, insurance companies, and investment advisory firms (“Non-Affiliated Clients”). These services are provided on a non-discretionary basis; with the Affiliated and Non-Affiliated Clients (collectively “Institutional Clients”) having final decision-making authority on whether to follow our recommendation(s) or not.

Our core manager due diligence and selection services, either on a stand-alone basis or in combination, are the following:

1. Due Diligence
   a. We apply quantitative screens and qualitative analysis to evaluate investment managers with the end goal of identifying those we believe would be appropriate for an Institutional Client to consider given their stated objective/purpose. See Item 8 below for details.

   b. In addition to identifying investment managers, we often are required to provide a written analysis on each investment manager including our rationale for recommending them.

   c. At the Institutional Client’s discretion, we may be engaged to provide on-going monitoring. This on-going monitoring typically includes our periodically applying quantitative screens and qualitative analysis and when need be, recommending a change or changes to what we initially recommended to the Institutional Client. This is often supplemented with a written document detailing our rationale for such a change(s). Institutional Clients have the final decision-making authority as to whether to accept our recommendation or not and, if accepted, the timing of when the changes are to occur.

   d. If requested by an Institutional Client and based on their requirements, we use a questionnaire to conduct an operational due diligence review as part of our investment due diligence process.

2. Investment Selection
   a. We analyze an investment universe as defined by an Institutional Client and create a list of Managed Investments that meets the Institutional Client’s specific criteria (e.g., certain performance level over a five-year period, tenure of portfolio manager). The list of Managed Investments is typically used by the Institutional Client in providing investment advice to their clients. A given list is typically broken down by asset class and for each asset class, the identification of several Managed Investments that have passed our quantitative screens and qualitative analysis. See Item 8 below for details. In engagements with Unaffiliated Clients, the list of Managed Investments under each asset class may require that a certain number of them be their proprietary Managed Investments. If such requirement is present, the Unaffiliated Client is responsible for communicating such constraint to its clients.

   b. In addition to identifying Managed Investments, we often are requested to provide a written analysis on each Managed Investment including our rationale for recommending it.

   c. At the Institutional Client’s discretion, we may also be engaged to perform on-going monitoring. This on-going monitoring typically includes periodically applying quantitative screens and qualitative analysis against the defined investment universe and when need be, recommending a change or changes to the Institutional Client may want to consider. In addition to recommending Managed Investments, we often are required to provide a written analysis on our rationale for making such recommendation. The Institutional Client has the final decision-making authority as to accepting our recommendation or not and, if accepted, the timing of when the changes are to occur.

3. Asset Allocation Services
   a. Some Institutional Clients engage us to provide asset allocation breakdowns in combination with our Investment Selection services. At the Institutional Client’s direction, we present asset class exposures for their choice of benchmark index(es) along with category-level allocation targets for specific risk levels or investment-style orientations. In some cases, we determine sector-specific Managed Investment categories and indicate how those categories can be incorporated into allocations based on their Morningstar Style Box position. If included in an agreement with an Institutional Client, asset allocations are periodically reviewed and adjusted as needed. This service is only offered in connection with our Investment Selection Services.
Ancillary Services

1. Newsletter Content

We provide content for two newsletters (1) FundInvestor and (2) ETFInvestor distributed by Morningstar. The purpose of these newsletters is to provide subscribers education/information on an investment topic or topics as well as data, statistics and written analysis on a specific fund(s) and/or ETF(s).

2. Other Commentaries/Reports

a. We prepare commentaries such as market outlooks, sector outlooks, industry reports, and thematic research as well as various other types of reports that are a more condensed/ targeted format than what is in our standard investment research reports. Such commentaries and reports are available through Morningstar’s software products, newsletters and Morningstar branded websites. The goal of these commentaries and reports is to provide readers with education/information. Our analysts also participate in videos produced by Morningstar and made available through Morningstar’s branded websites and platforms.

3. Analyst Access

a. Institutional Clients are given the ability to interact with our analysts about their published investment research (referred to hereafter as “Analyst Access”). During such conversations, the analyst:
   i. Answers questions pertaining to the content of their published research;
   ii. Clarifies points made within their published research;
   iii. Provides insight into the analyst’s research process;
   iv. Reiterates the analysis/opinions made within the published research; and
   v. Provides their opinions on a given market sector or sectors.

4. Due Diligence Tools

a. To assist with an Institutional Client’s internal research team’s processes and workflows for Managed Investment selection and monitoring, we prepare a custom suite of reports to help teams evaluate Managed Investments and operate more efficiently. Scorecards use objective and data-driven methods to rank Managed Investments based on formulas that aggregate many of the important characteristics that drive a Managed Investment’s performance, as determined by Morningstar’s research analysts. The Scorecards are delivered with updated data each month, using a client’s preferred file type and location. Additional summary reports that assist with the due diligence process include Screens (a report that lists high-quality investments for different strategies and goals, according to Morningstar’s research analysts), Alerts (a report that captures material changes and supports the monitoring workflow for a custom list of investments), and Red Flags (a report that captures warning signs and supports the monitoring workflow for a custom list of investments).

C. Customized Services

At an Institutional Client’s request, we will take under consideration a request to provide them a customized version of the above services or a different type of advisory service that would utilize our investment research, due diligence, and Managed Investment selection expertise. Given the customized nature, the Institutional Client may impose constraints/ restrictions on such things as security types, asset classes, or proprietary Managed Investment requirements and/or wish to collaborate with us on such things as investment methodology and screening criteria.

D. Wrap Fee Programs

We do not sponsor a wrap fee program, nor do we provide portfolio management services to a wrap fee program.

E. Assets Under Management

Given the nature of our services, we do not have assets under management.

Item 5. Fees and Compensation

A. Fees and Compensation

For our Investment Research Reports, our compensation is generally structured in the following way:

1. Equity Research Reports

a. With respect to Distribution through Morningstar, we do not charge a separate fee to a subscriber of Morningstar’s software or websites to access our qualitative reports on equity securities. The subscription fee charged to subscribers of Morningstar’s software and/or websites not only includes access to such reports, but access to Morningstar’s data, statistics, tools and general educational materials as well. That subscription fee is determined, billed and received by Morningstar. We do not receive a fee from Morningstar for subscriber’s access to our qualitative reports.

b. With respect to License Arrangements, fees are negotiable, but generally starts at $500 per authorized user annually. The actual amount charged depends on a range of variables including the number of users it wishes to have available to our investment research, the number of securities they wish to receive investment research reports on, the inclusion or exclusion of the analyst access service, the degree of customizations (e.g., translated in other languages), and the client’s assets under management. The fee is typically charged quarterly in advance. In other instances, fees are based on the percentage of gross revenue received related to the use of an Equity Research Report. These fees are typically 10% of gross revenue and are charged quarterly in arrears. If, in accordance with contractual terms, the institutional client terminates the License Arrangement they have with us prior to the end of the billing period, we may refund any unearned fees on a pro rata basis after the termination of the contract. In addition to the fee, payment terms and payment schedules are negotiable.

c. In certain cases, Non-Affiliated Clients may determine what to pay us for our Equity Research Reports by using a "broker vote" process. That process is where we receive remuneration for our investment research and analyst access services based on its perceived value as determined by the institutional investor’s representatives. Actual remuneration is determined by the institutional investor, is typically received in arrears and is paid to us by the institutional investor’s broker(s) at intervals they and/or their broker determine.

2. Manager Research Reports

a. With respect to Distribution through Morningstar, we do not charge a separate fee to a subscriber of Morningstar’s software or websites to access our manager research reports. The subscription fee charged to subscribers of Morningstar’s
software and/or websites not only includes access to such reports, but access to Morningstar’s data, statistics, tools and general educational materials as well. That subscription fee is determined, billed and received by Morningstar. We do not receive a fee from Morningstar for subscriber’s access to our Manager Research Reports.

b. With respect to License Arrangements, fees are negotiable, but generally starts at $500 per authorized user annually. The actual amount charged to the institutional client depends on a range of variables including the number of users they wish to have access to our investment research, the type of client they wish to redistribute our research to, the number of Funds they wish to receive investment research reports on, the inclusion or exclusion of the analyst access service, the degree of customizations (e.g., translated in other languages), and the client’s assets under management. The fee is typically charged quarterly in advance. If, in accordance with contractual terms, the institutional client terminates the License Arrangement they have with us prior to the end of the billing period, we may refund any unearned fees on a pro rata basis after the termination of the contract. In addition to the fee, payment terms and payment schedules are negotiable.

For Manager Due Diligence and Selection Services, our compensation is the following:

1. Due Diligence
a. Fees are negotiable, but typically starts at $5,000 per investment manager reviewed. The actual amount charged to a Non-Affiliated Client depends on a range of variables including their intended use, the number of investment managers they wish to have reviewed, the type of reporting they wish to receive from us, the degree of customizations or constraints they wish to place on us, and whether they want us to provide on-going monitoring services. The fee is typically charged quarterly in advance. If, in accordance with contractual terms, the Non-Affiliated Client terminates the License Arrangement prior to the end of the billing period, we may refund any unearned fees on a pro rata basis after the termination of the contract. In addition to the fee, payment terms and payment schedules are negotiable. Fees in connection with services provided to Affiliated Clients are typically governed by an intercompany agreement and is often lower than the above stated amount.

2. Investment Selection
a. Fees are negotiable, but typically starts at $50,000 per standard list or $65,000 per custom list annually. The actual amount charged to a Non-Affiliated Client depends on a range of variables including their intended use, the number and type of asset classes they wish the list to cover, the number and type of Managed Investments they wish the list to have, the type of reporting they wish to receive from us, the degree of customizations or constraints they wish to place on us, and whether they want us to provide on-going monitoring services. The fee is typically charged quarterly in advance. In instances where our Investment Selection services are used as an input for an Institutional Client’s financial product, basis point fees are generally charged. Basis point fees are charged quarterly in arrears, and typically start at 15-20 bps annually. If, in accordance with contractual terms, the Non-Affiliated Client terminates the License Arrangement prior to the end of the billing period, we may refund any unearned fees on a pro rata basis after the termination of the contract. In addition to the fee, payment terms and payment schedules are negotiable.

3. Asset Allocation Services
a. Fees are negotiable, but typically start at $20,000. This service is only available in conjunction with the Investment Selection services referenced above.

For Ancillary Services:

1. Newsletters
a. We do not charge a separate fee to the subscribers of Morningstar’s Newsletters to access our written analysis of other commentaries/reports. The subscription fee charged to subscribers of Morningstar’s software and/or websites not only includes access to such commentaries/reports, but access to Morningstar’s data, statistics, tools and general educational materials as well. That subscription fee is determined, billed and received by Morningstar. We do not receive a fee from Morningstar for subscriber’s access to our commentaries/reports.

2. Other Commentaries/Reports
a. We do not charge a separate fee to Morningstar’s software or websites subscribers to access our other commentaries/reports. The subscription fee charged to subscribers of Morningstar’s software and/or websites not only includes access to such commentaries/reports, but access to Morningstar’s data, statistics, tools and general educational materials as well. That subscription fee is determined, billed and received by Morningstar. We do not receive a fee from Morningstar for subscriber’s access to our commentaries/reports.

3. Analyst Access
a. Equity Analysts
   i. Licensed Agreements – compensation for granting access to our equity analysts is negotiable and is included in the per user charge as referred to in 1(b) of Section A of Fees and Compensation above. In broker vote cases, remuneration paid by the institutional investor includes their perceived value in having access to our equity analysts.

b. Manager Research Analysts
   i. Licensed Agreements – compensation for granting access to our manager research analysts is negotiable and is included in the per user charge as referred to in 2(b) of Section A of Fees and Compensation above.

4. Due Diligence Tools
a. With respect to License Arrangements, fees are negotiable, but generally starts at $20,000 annually. The actual amount charged depends on a range of variables including the number of users with access, how the tools will be used, and how the reports will be distributed. The fee is typically charged quarterly in advance. If, in accordance with contractual terms, the institutional client terminates the License Arrangement they have with us prior to the end of the billing period, we may refund any unearned fees on a pro rata basis after the termination of the contract. In addition to the fee, payment terms and payment schedules are negotiable.
**For Customized Services:**

Fees for a customized version of the above services or a different type of advisory services that would utilize our investment research, due diligence, or investment selection expertise are negotiable. In negotiating with an institutional investor, the actual amount charged depends on a range of variables including the type of service being sought, the type of securities involved (e.g., equities or Managed Investments), the intended purpose for our service, the type of output being sought from us, the intended use of the Morningstar name. In addition to the fee, payment terms and payment schedules are negotiable.

**B. Payment**

Payments, payment terms and payment schedules are negotiable and governed by the contractual agreement with the Non-Affiliated Clients. Other than Affiliated Clients, we typically send an invoice on a quarterly basis, although in some instances, we may bill monthly or annually. For our Affiliated Clients, fees are charged through an intercompany charge.

**C. Other Costs in Connection with our Advisory Services**

The above noted fees are separate from fees and expenses one may incur if followed our recommendations. For example, investors in an equity security will be subject to brokerage/transaction costs and custodian fees or expenses whereas investors of open-end funds and exchange-traded funds will be subject to fees and expenses as described in their prospectus including management fee, operating expenses, distribution charges including 12b-1 fees and for open-end mutual fund, sales charges (e.g., front-end sales loads), and for exchange-traded funds brokerage/transaction costs.

**D. Charging Fees in Advance**

If, in accordance with contractual terms, we agree to terminate a contract with the institutional client prior to the end of the billing period, we generally refund any unearned fees on a pro rata basis after the termination of the contract.

**E. Compensation from Sales of Securities**

We do not expect, accept or receive compensation for the sale of securities that are the subject of our Investment Research Reports.

**F. Revenue Sharing Arrangements**

We do not have any revenue sharing arrangements with any registered investment advisers or mutual funds.

**Item 6. Performance-Based Fees and Side-by-Side Management**

We do not have performance-based fee arrangements with any qualified client pursuant to Rule 205-3 under the Investment Advisers Act of 1940, as amended.

**Item 7. Types of Clients**

The type of client to whom we generally provide investment advice to are financial institutions as more fully explained in Item 4 above many of whom are themselves registered and governed by a regulatory body.

**Item 8. Methods of Analysis, Investment Strategies and Risk of Loss**

**Investment Research Reports**

*Analysis Performed on Equities*

At the heart of our valuation system is a detailed projection of a company’s future cash flows, resulting from our analysts’ research. Analysts create custom industry and company assumptions to feed income statement, balance sheet, and capital investment assumptions into our globally standardized, proprietary discounted cash flow, or DCF, modeling templates. We use scenario analysis, in-depth competitive advantage analysis, and a variety of other analytical tools to augment this process. Moreover, we think analyzing valuation through discounted cash flows presents a better lens for viewing cyclical companies, high-growth firms, businesses with finite lives (e.g., mines), or companies expected to generate negative earnings over the next few years. That said, we don’t dismiss multiples altogether but rather use them as supporting cross-checks for our DCF-based fair value estimates. We also acknowledge that DCF models offer their own challenges (including a potential proliferation of estimated inputs and the possibility that the method may miss short-term market-price movements), but we believe these negatives are mitigated by deep analysis and our long-term approach.

We believe that a company’s intrinsic worth results from the future cash flows it can generate. The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic worth—or fair value estimate, in Morningstar terminology. Five-star stocks sell for the biggest risk-adjusted discount to their fair values, whereas 1-star stocks trade at premiums to their intrinsic worth.

Four key components drive the Morningstar rating: (1) our assessment of the firm’s economic moat, (2) our estimate of the stock’s fair value, (3) our uncertainty around that fair value estimate and (4) the current market price. This process ultimately culminates in our single-point star rating.

1. **Morningstar Economic Moat Rating**

   The concept of an economic moat plays a vital role not only in our qualitative assessment of a firm’s long-term investment potential, but also in the actual calculation of our fair value estimates. An economic moat is a structural feature that we believe positions a firm to sustain excess profits over a long period, with excess profits defined as returns on invested capital (or ROIC) over and above our estimate of a firm’s cost of capital, or weighted average cost of capital (or WACC). An economic moat is not an indicator of the investment performance of a firm. Firms without a moat, including those that have a substantial threat of value destruction related risk related to ESG, industry disruption, financial health, or other idiosyncratic issues, are more susceptible to competition. We have identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

   Companies with a *narrow moat* are those we believe are more likely than not to achieve normalized excess returns for at least the next 10 years. *Wide-moat* companies are those in which we believe excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years.

   To assess the durability of excess profits, analysts perform ongoing assessments of the moat trend. A firm’s moat trend is *positive* in cases where we think its sources of competitive advantage are growing stronger; *stable* where we don’t anticipate changes to competitive advantages over the next several years; or *negative* when we see signs of deterioration.

2. **Estimated Fair Value**

   Combining our analysts’ financial forecasts with the firm’s economic moat helps us assess how long returns on invested capital are likely to exceed the firm’s cost of capital. Returns of firms with a wide economic moat rating are assumed to fade to the perpetuity period over a longer period than the returns of narrow-moat firms, and both will fade slower than no-moat firms, increasing our estimate of their intrinsic value.

   Our model is divided into three distinct stages for operating companies. In the first stage, which can last five to 10 years, analysts make full financial projections, including revenue, profit margins, tax rates, changes in working-capital accounts, and capital spending. Based on these projections, we calculate earnings before interest, after taxes, and the net new investment to derive our annual free cash flow forecast. We define the second stage of our model as the period it will take the company’s return on new invested capital to decline (or rise) to its cost of capital. During this period, we use a formula to approximate cash flows in lieu of explicitly
modeling the income statement, balance sheet, and cash flow statement as done in the first stage. The length of this stage depends on the strength of the company’s economic moat and can last anywhere from one year (for companies with no economic moat) to 10-15 years or more (for wide-moat companies.) In the third stage, we calculate a continuing value using a standard perpetuity formula once a company’s marginal return on invested capital hits its cost of capital.

Because a dollar earned today is worth more than a dollar earned tomorrow, we discount our projections of cash flows to arrive at a total present value of expected future cash flows. Because we are modeling free cash flow to the firm—representing cash available to provide a return to all capital providers—we discount future cash flows using a weighted average of the costs of equity, debt, and preferred stock (and any other funding sources), using expected future proportionate long-term, market-value weights. For mainly financial companies, we use a free cash flow to equity model and discount free cash flows by the company’s cost of equity.

3. Uncertainty around Fair Value Estimates

Our Uncertainty Rating is intended to capture a range of likely potential intrinsic values for a company and we use it to assign the margin of safety required before investing, which in turn explicitly drives our stock star rating system. The Uncertainty Rating represents the analysts’ ability to bound the estimated value of the shares in a company around the Fair Value Estimate, based on the characteristics of the business underlying the stock, including operating and financial leverage, sales sensitivity to the overall economy, product concentration, pricing power, exposure to material ESG risks, and other company-specific factors.

Our Uncertainty Ratings for our qualitative analysis are low, medium, high, very high, and extreme.

- **Low** — margin of safety for 5-star rating is a 20% discount and for 1-star rating is 25% premium.
- **Medium** — margin of safety for 5-star rating is a 30% discount and for 1-star rating is 35% premium.
- **High** — margin of safety for 5-star rating is a 40% discount and for 1-star rating is 55% premium.
- **Very High** — margin of safety for 5-star rating is a 50% discount and for 1-star rating is 75% premium.
- **Extreme** — margin of safety for 5-star rating is a 75% and for a 1-star rating is 300% premium.

**Morningstar Star Rating for Stocks**

Once we determine the fair value estimate of a stock, we compare it with the stock’s current market price daily, and the star rating is automatically recalculated at the market close on every day the market on which the stock is listed is open. Our analysts keep close tabs on the companies they follow, and based on thorough and ongoing analysis, raise or lower their fair value estimates as warranted.

Please note, there is no predefined distribution of stars. That is, the percentage of stocks that earn 5 stars can fluctuate daily, so the star ratings, in the aggregate, can serve as a gauge of the broader market’s valuation. When there are many 5-star stocks, the stock market is more undervalued, in our opinion, than when very few companies garner our highest rating.

We expect that if our base-case assumptions are true the market price will converge on our fair value estimate over time, generally within three years (although it is impossible to predict the exact time frame in which market prices may adjust).

The Morningstar Star Ratings for stocks are defined below:

- **Five-Stars** -- We believe appreciation beyond a fair risk-adjusted return is highly likely over a multiyear time frame. Scenario analysis developed by our analysts indicates that the current market price represents an excessively pessimistic outlook, limiting downside risk and maximizing upside potential.

- **Four-Stars** -- We believe appreciation beyond a fair risk-adjusted return is likely.

- **Three-Stars** -- Indicates our belief that investors are likely to receive a fair risk-adjusted return (approximately cost of equity).

- **Two-Stars** -- We believe investors are likely to receive a less than fair risk-adjusted return.

- **One-Star** -- Indicates a high probability of undesirable risk-adjusted returns from the current market price over a multiyear time frame, based on our analysis. Scenario analysis by our analysts indicates that the market is pricing in an excessively optimistic outlook, limiting upside potential and leaving the investor exposed to Capital loss.

For more detail information about our methodology, please go to [http://global.morningstar.com/equitydisclosures](http://global.morningstar.com/equitydisclosures).

**Analysis Performed on Managed Investments**

The cornerstone of our investment research of Managed Investments is the Morningstar Analyst Rating™. A machine-learning model that uses the decision-making processes of our analysts, their past rating decisions, and the data used to support those decisions is then applied to non-analyst covered Managed Investments to create the Morningstar Quantitative Rating™

The Morningstar Analyst Rating for Managed Investments and the Morningstar Quantitative Rating for Managed Investments (the “Ratings”) are forward-looking analyses of a Managed Investment. The Ratings do not express a view on a given asset class or peer group; rather, they seek to evaluate each Managed Investment within the context of its objective, an appropriate benchmark, and/or peer group.

**Morningstar Analyst Rating™**

We have identified five key areas that we believe are crucial to predicting the future success of a Managed Investment: People, Parent, Process, Performance, and Price.

Prior to interviewing the portfolio manager, analysts perform an in-depth review of the strategy with the goal of developing a preliminary investment view and identifying any potential areas of concern. This review may include a baseline questionnaire completed by the asset manager, strategy vehicle documents like a prospectus and annual report to shareholders, recent news about the parent, strategy, or portfolio manager, holdings data, style analysis, performance attribution, risk modeling, capacity assessment, scenario analysis, and performance data through time.

Next, the analyst interviews the portfolio manager and other relevant parties, which could include key parent executives, analysts, risk managers, and traders. These interviews focus on issues identified in the pre-interview and on fleshing out our knowledge of the manager, the process, and the firm.

After consultation with their peers, analysts produce a ratings note that assesses each of the five key pillars described below. The analyst presents this note at the relevant Morningstar ratings committee and defends his or her assessment of the strategy and associated vehicles. Only when the committee is satisfied with the soundness of the judgments expressed in each area is the final rating determined and approved.

Each pillar is evaluated when assessing a Managed Investment as well as the interaction between the pillars, which we believe is crucial to understanding a Managed Investment’s overall merit:
• For actively managed strategies, People and Process each receive a 45% weighting in their analysis, while Parent receives a 10% weighting.
• For passive strategies, Process receives an 80% weighting, while People and Parent each receive a 10% weighting.
• For both active and passive strategies, Performance has no explicit weight as it is incorporated into the analysis of People and Process; Price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars.
• The impact of the weighted pillar scores for People, Process and Parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers.

For certain peer groups where standard benchmarking is not applicable, the modification by alpha dispersion is not used.

People Pillar
The overall quality of a Managed Investment’s investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a Managed Investment’s investment team requires that analysts assess several relevant items including how key decisions are made.

Parent Pillar
We believe the parent organization is of utmost importance in evaluating Managed Investments. The Managed Investment’s management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

Process Pillar
We look for Managed Investments with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

Performance Pillar
We do not believe past performance is necessarily predictive of future results. This factor receives no explicit weighting in our analysis but is referenced instead in our evaluation of People and Process. We strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a Managed Investment is delivering to our expectations.

Price Pillar
To accurately reflect actual investor experience, rated Managed Investments are directly penalized by the amount of their fee, inclusive of any performance fee charged, when we assign the rating. Fees are assessed at the level of the vehicle at which they are charged, in the case of open-end funds, for example, this occurs at the share-class level. Vehicles with multiple classes with different fees are therefore likely to have differentiated ratings reflecting the different impact of their fees on our expected net alpha.

The analyst’s work culminates in a detailed research report that justifies the rating decision, evaluates each of the five pillars, and highlights key developments in performance and portfolio holdings.

Morningstar Quantitative Rating™
Morningstar’s quantitative ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent Pillar, (iii) Quantitative People Pillar, and (iv) Quantitative Process Pillar, which are calculated monthly and derived from the analyst-driven ratings of a Managed Investment’s peers as determined by statistical algorithms. Morningstar, Inc. calculates a Morningstar Quantitative Rating for a Managed Investment when an analyst rating does not exist as part of its qualitative coverage.

Morningstar Quantitative Rating (Overall Score)
Intended to be comparable to the Morningstar Analyst Ratings. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our manager research analysts assign to Managed Investments.

Quantitative People Pillar
Intended to be comparable to the People Pillar ratings, which provides our analyst’s opinion on the Managed Investment manager’s talent, tenure, and resources. The Quantitative People Pillar is calculated using an algorithm designed to predict the People Pillar rating our fund analysts would assign to the Managed Investment. The quantitative pillar rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Quantitative Parent Pillar
Intended to be comparable to the Parent pillar scores, which provides our analyst’s opinion on the stewardship quality of a firm. The Quantitative Parent Pillar is calculated using an algorithm designed to predict the Parent Pillar score our analysts would assign to the Managed Investment. The quantitative rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Quantitative Process Pillar
Intended to be comparable to the Process Pillar rating, which provides our analyst’s opinion on the Managed Investment’s strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. The Quantitative Process Pillar is calculated using an algorithm designed to predict the Process Pillar rating our analysts would assign to the Managed Investment. The quantitative rating is expressed in both a rating and numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Analyst Ratings™ and Morningstar Quantitative Ratings™
Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, reflect our expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a rating of Gold, Silver, or Bronze reflects our expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to passive peers in the same Morningstar category. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a rating of Gold, Silver, or Bronze reflects our expectation that an investment product is superior to category peers as denoted by strong pillar scores in the context of fees. Morningstar Analyst Ratings ultimately reflect the Manager Research Group’s overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

Morningstar Quantitative Ratings are also assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that the algorithm used to predict the score our manager research analysts would have assigned to the Managed Investment calculated a rating of Gold, Silver, or Bronze. Like the Morningstar Analyst Rating, the difference between them corresponds to differences in the level of conviction in a Managed Investment’s ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

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Gold
Represents Managed Investments that our analyst has the highest conviction in for that given mandate. By giving a Managed Investment a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a Managed Investment must distinguish itself across the pillars that are the basis for our analysis. Our evaluation of these Managed Investments in the context of the fees charged at the share-class level ranks them in the top 15% of all vehicles with expected positive net-of-fee alpha in their category or relative to category median for Managed Investments that are actively managed funds or relative to category median for Managed Investments that are passively managed.

Silver
Represents Managed Investments our analyst has high conviction in, but not in all the five pillars. With those fundamental strengths, we expect these Managed Investments will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). Our evaluation of these Managed Investments in the context of the fees charged at the share-class level ranks them in the next 35% of all vehicles with expected positive net-of-fee alpha in their category or relative to category median for Managed Investments that are passively managed.

Bronze
Represents Managed Investments that have advantages that clearly outweigh any disadvantages across the pillars, giving the analyst the conviction to award them a positive rating. We expect these Managed Investments to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term. Our evaluation of these Managed Investments in the context of the fees charged at the share-class level ranks them in the bottom 50% of all vehicles with expected positive net-of-fee alpha in their category or relative to category median for Managed Investments that are passively managed.

Neutral
Represents Managed Investments in which our analysts don’t have a strong positive or negative conviction. In our judgment, these Managed Investments are not likely to deliver standout returns, but they aren’t likely to seriously underperform their relevant performance benchmark and/or peer group either. Our evaluation of these Managed Investments in the context of the fees charged at the share-class level ranks them in the top 70% of all vehicles with net-of-fee alpha less than or equal to zero in their category or relative to category median for Managed Investments that are passively managed.

Negative
Represents Managed Investment that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these Managed Investments are inferior to most competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken over a full market cycle. Our evaluation of these Managed Investments in the context of the fees charged at the share-class level ranks them in the bottom 30% of all vehicles with expected net-of-fee alpha that is less than or equal to zero in their category or relative to category median for Managed Investments that are passively managed.

Morningstar may also use one other designations in place of a rating:

Under Review
This designation means that a change that occurred with the Managed Investment or at the Managed Investment company requires further review to determine the impact on the rating.

Special Cases
- Strategic beta Managed Investment are rated in the active distribution with passives’ pillar weighting.
- Target date allocation offerings are ranked and rated by share class type (across target date funds within a series) instead of by individual share classes. Each class in a series consequently has the same rating. Target date ratings use actives’ pillar weighting, and their medalist share classes are defined as having net-of-fees alpha above 0.
- Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.
- Model portfolios are rated using the methodology for actively managed funds. For model portfolios that use a fund-of-funds approach, we use the asset-weighted underlying fund fees and, when applicable, strategist overlay fees to determine the fee. For models that invest in securities, as opposed to funds, we reach out to various parties, such as model providers to determine the fee. To derive the rating, we rank model portfolios by their expected net of fee alpha versus their category benchmark. Because firms report model portfolio data voluntarily, selection bias exists in model portfolio categories. Therefore, we use the semi-interquartile range calculated for the equivalent mutual fund categories to determine model portfolio ratings. If we are not able to determine a model portfolio’s fee, we rate the model portfolio with the same approach we use for separately managed accounts.
- Managed Investments that are in categories with no clearly defined benchmark index (primarily alternatives categories) are rated using a grid approach that considers pillar scores and fees, with the latter ranked relative to all share classes within the relevant category. To obtain a Gold rating, funds in these categories must earn a High score for both the People and Process pillar and have fees in the cheapest two quintiles of the category.

For more information about our Rating methodologies please go to http://global.morningstar.com/managedisclosures

Morningstar ESG Commitment Level
The Morningstar ESG Commitment Level expresses our analysts’ assessments of individual strategies’ and asset managers’ determination to incorporate ESG factors into their investment processes and organizations. It is assigned to both strategies and asset managers following a four-tier scale: Leader, Advanced, Basic, and Low:

- Leaders – ESG is core to their identity. They have long histories committed to ESG investing and ESG considerations are ingrained and pervasive in their investment processes, strategies, voting records, and in their own operations.
- Advanced – Among the industry’s better ESG proponents. They are deliberate in integrating ESG considerations into investment processes.
- Basic – In the early stages of ESG incorporation. Some have a well-intention approach and dedicated resources, but their proxy-voting records and disclosures are still works in progress.
- Low – Just getting started on incorporating ESG considerations into their processes, using ESG criteria in a limited or more variable way, or simply not incorporating ESG at all.

The ESG Commitment Level does not evaluate expected performance; it is focused on the extent to which asset managers and Managed Investments incorporate ESG considerations into their investment processes and decisions and on which Managed Investments and asset managers are leading the way when it comes to ESG investing.
Manager Due Diligence and Selection Services

Manager Due Diligence Analysis Process
Our manager due diligence process is consistent with the process described in the below Investment Selection section.

Investment Selection
We begin the process by developing a blueprint in consultation with the Institutional Client. During this development phase, various items are determined including, but not limited to, the universe of Managed Investments from which we are to choose, the asset classes to be addressed, the number of Managed Investment selections per asset class, the intended users of the list, and the intended account type (e.g., taxable or tax-deferred) Once the blueprint has been created, we apply quantitative screens (e.g., manager tenure, portfolio exposures, and risk and return characteristics) to the available investment universe to narrow the list. Managed Investments passing those initial quantitative screens are then subject to a qualitative analysis. During that analysis, we are assessing each Managed Investment on its own merits including looking at the Morningstar Analyst Rating or Morningstar Quantitative Rating assigned to it, giving preference to those that have a Gold, Silver, or Bronze Rating (see the Analysis Performed on Managed Investments section above for details of the Morningstar Analyst Rating, Morningstar Quantitative Rating, and the rating process). During the qualitative analysis phases, we are also assessing how the Managed Investment compares to other Managed Investments in its asset class as well among all the asset classes paying attention to diversification of investment approach within each asset class and overall.

We monitor the Managed Investments on a list typically on a quarterly basis following the same process used for the initial selection. Changes that we believe may negatively affect a Managed Investment’s long-term prospects will lead us to put that Managed Investment on watch while we continue to monitor it. Generally, a Managed Investment’s watch period is two to four quarters at which point we will make a recommendation to remove the Managed Investment from the select list or to take it off watch.

Asset Allocation Services
In consultation with the Institutional Client, we identify appropriate multi-asset indexes. We set asset class exposures consistent with their choice of benchmark index(es) along with category-level allocation targets for specific risk levels or investment-style orientations. In some cases, we determine sector-specific Managed Investment categories and indicate how those categories can be incorporated into allocations based on their Morningstar Style Box position. If included in an agreement with an Institutional Client, asset allocations are periodically reviewed and adjusted as needed.

Scorecard Scoring Framework
Scorecards use a quantitative scoring framework to compare similar Managed Investments based on investment type, active/passive, and category using a variety of characteristics that we believe impact their risk-adjusted return potential. This information can be used by Institutional Clients to enhance their Managed Investment review process and reflects the interrelationship of 12 data points that represent characteristics of a Managed Investment’s process, performance, people, parent, and price. Since performance doesn’t hinge on a single variable, our process combines interrelated factors using proprietary scoring models based on our five-pillar research framework and data-driven analysis. Scorecards are delivered monthly and include embedded screens, filters, and sorting tools to help navigate the results.

A Managed Investment’s score is the result of aggregating 12 scoring factors using a weighted average calculation. In order to combine different scoring factors, raw data values are adjusted to percentile rankings to appear on the same scale. The percentile rankings multiplied by a weight assigned to each factor and the 12 factors are added together to calculate the Managed Investment’s score. Once the Managed Investment’s score is determined, it is ranked within its peer group, and the peer group’s rankings are divided into quartiles.

Six Scorecards are made available, and each Scorecard’s rankings are determined by 12 scoring factors. The 12 scoring criteria and weights used vary across the six Scorecards. Price contributes most to the overall score as we feel it is the most reliable indicator of a Managed Investment’s future return potential. Relatively small importance is placed on past performance. If the data for a scoring factor is unavailable, the value is removed from the calculation and the remaining scoring factors are reweighted proportionally to total 100%. Managed Investments with at least 50% representation of their respective scoring factors, at least one year of performance, and placement in a peer group with three or more Managed Investments is required for a Managed Investment to appear in a Scorecard, along with additional eligibility criteria that varies depending on each Scorecard. Managed Investments in undefined categories or those whose objective does not aim to provide high risk-adjusted returns are excluded. Examples of excluded categories include those related to money market funds, commodities, alternatives and leveraged or inverse funds. Managed Investment in these categories account for a very small percentage of assets in U.S. mutual funds and ETFs.

Risk Warning
Investments in securities are subject to market, risk of loss and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. We do not represent or guarantee that our investment recommendations (including Morningstar Star Rating for Stocks and Morningstar Analyst Ratings) can or will predict future results, will successfully identify market’s highs and lows, or will protect its clients from losses. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security investment return and an investor’s principal value will fluctuate so that, when redeemed, an investor’s shares may be worth more or less than their original cost.

Our recommendations are made without taking into consideration any retail investor or investors specific facts and circumstances including potential tax consequences. We are unable to predict or forecast market fluctuations or other uncertainties that may affect the value of any investment. While we intend for our investment research to be valuable information and useful in making an informed decision, the investor is responsible for determining the appropriateness of a security based on their own facts and circumstances, including their cash flow needs, time horizon, risk appetite, and tax consequences. We encourage investors to review and take into consideration all other available information on a given security (e.g., prospectus or an equivalent).

Morningstar Star Rating for Stocks should not be used as the sole basis for investment decisions. Morningstar Star Rating for Stocks factors in an analyst’s current fair value estimate for a stock, therefore, involves unknown risks and uncertainties that may cause their estimate to differ significantly from actual results. We do not represent the Morningstar Star Rating for Stocks to be guarantees nor should they be viewed as an offer or solicitation to buy or sell a Security.

Morningstar Analyst Ratings are subjective in nature and should not be used as the sole basis for investment decisions. Morningstar Analyst Ratings are based on our analysts’ current expectations about future events and therefore involve unknown risks and uncertainties that may cause our expectations not to occur or to differ significantly from what was expected. We do not represent the Morningstar Analyst Ratings to be guarantees nor should they be viewed as an assessment of a Managed Investment’s or the Managed Investment’s underlying securities’ creditworthiness. Morningstar Analyst Ratings should not be considered an offer or solicitation to buy or sell the Managed Investment.

The Morningstar Quantitative Ratings are not statements of fact and should not be used as the sole basis for investment decisions. We do not guarantee the completeness or accuracy of the assumptions or models used in determining the ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive
pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative ratings can mean that the recommendation is subsequently no longer accurate. We do not represent the Morningstar Quantitative Ratings to be guarantees nor should they be viewed as an assessment of a Managed Investment’s or the Managed Investment’s underlying securities’ creditworthiness. Morningstar Quantitative Ratings should not be considered an offer or solicitation to buy or sell the Managed Investment.

Item 9. Disciplinary Information
We are required to disclose all material facts regarding any legal or disciplinary events that would influence a potential client to engage us. Morningstar Research Services does not have any such legal or disciplinary events to disclose.

Item 10. Other Financial Industry Activities and Affiliations
Morningstar Research Services is a wholly owned subsidiary of Morningstar. Our offerings center around the production of Investment Research Reports and Manager Due Diligence and Selection Services to financial institutions/institutional investors who themselves are registered with and governed by a regulatory body. Other than what is described in Item 4 above, we are not actively engaged in any other business activity.

Affiliations – Registered Entities
Morningstar has an investment management group that consists of various subsidiaries across the globe each being registered with and governed by the applicable regulatory body or bodies in that country ("Morningstar’s Investment Management group"). We are not part of Morningstar’s Investment Management group. We mitigate conflicts of interests between us and Morningstar’s Investment Management group by such things as:

- Maintaining separate legal entities;
- Maintaining separate reporting/organization lines;
- Maintaining physical separation (e.g., occupying separate floors);
- Maintaining technology separation;
- Maintaining a committee structure (i.e., very limited unilateral decisions); and
- Monitoring personal trading activity of employees.

Two such subsidiaries are located in the United States; they are Morningstar Investment Management LLC and Morningstar Investment Services LLC, both of whom are registered as investment advisers under the Investment Advisers Act of 1940. Morningstar Investment Services is additionally registered with the Securities and Exchange Commission as a broker-dealer and a member of the Financial Industry Regulatory Authority (FINRA).

Morningstar’s Investment Management group may engage us to perform due diligence and/or investment selection services as more fully described under the Manager Due Diligence and Selection Services section within Item 4 above. On such occasions, we will be compensated for services rendered via an intercompany charge. The services and compensation will be governed by an intercompany agreement. This compensation will likely be lower than compensation negotiated with non-affiliated financial institutions/institutional investors for same or similar services. In addition, the bonus compensation plan for employees within the Manager Selection team will be based on that of the Workplace and Retirement Solutions group within Morningstar Investment Management to align with where the team’s work has the most impact. Our employees who are engaged to provide due diligence and/or investment selection services are prohibited from using non-public/confidential information obtained because of its engagement in its Investment Research Reports and/or Manager Due Diligence and Selection Services to Non-Affiliated Clients.

Morningstar’s Investment Management group has and maintains model portfolios that are available under various investment advisory programs. Those model portfolios consist of open-end mutual funds, exchange-traded funds, equity securities and/or fixed-income securities. Investment decisions relating to these model portfolios are solely those of Morningstar’s Investment Management. We may issue Investment Research Reports on or recommend to Institutional Clients one or more of the securities Morningstar’s Investment Management group may utilize in one or more of its model portfolios. If we become aware of investment decisions related to the program, it is after such decisions have been made and trade instructions been issued. Conflicts of interest resulting from this are mitigated through the review of personal trading account activities of both Morningstar’s Investment Management group’s and Morningstar Research Services’ access persons by Morningstar’s compliance department.

Morningstar Investment Management serves as an investment adviser to investment companies registered under the Investment Company Act of 1940. To mitigate conflicts of interest, we do not prepare qualitative analysis on nor recommend as part of our Manager Due Diligence and Selection Services any investment company Morningstar Investment Management is an investment adviser to. We have affiliates who are in other countries and who produce and issue investment research on equity securities or that country’s equivalent to mutual funds (e.g., collective investment schemes). As such, our senior managers and certain supervisors within our equity and manager research teams may have supervisory responsibilities over certain employees of those non-U.S. entities ("Supervisors"). While we don’t believe such arrangements present conflicts of interests or compromises the integrity of the investment research produced by these non-U.S. registered entities (or ours), we are mindful that such arrangement does give Supervisors the potential to be exposed to yet-to-be published views and analysis and/or changes in estimates of these non-U.S. registered entity’s equity and manager research analysts (i.e., their confidential information). To mitigate sharing and/or using such confidential/non-public information, we have in place a policy prohibiting such practice and the compliance department monitors the personal trading accounts of Supervisors and their immediate family members.

Affiliations – Morningstar, Inc.
Morningstar, our parent company, is a publicly traded security (Ticker Symbol: MORN). We may produce Investment Research Reports on or recommend a Managed Investment(s) that holds a position in Morningstar’s publicly traded stock. We mitigate any actual or potential conflicts of interests by not factoring Morningstar’s publicly traded stock into our qualitative or quantitative analysis nor in our manager selection recommendations.

Morningstar has and maintains accounts which they invest in accordance with investment strategies created and maintained by Morningstar Investment Management. Those investment strategies are deployed using equity securities. We may issue Investment Research Reports on one or more of the securities Morningstar may hold in those strategies. Investment decisions relating to those accounts are those of Morningstar Investment Management, who is acting as Morningstar’s discretionary investment adviser. If we become aware of such investment decisions, it is after such decisions have been made by Morningstar Investment Management and trade instructions being issued. Conflicts of interest resulting from this are mitigated through the review of personal trading account activities of both Morningstar Investment Management and Morningstar Research Services access persons by Morningstar’s compliance department. Conversely, we do not share any yet-to-be published views and analysis and/or changes in estimates (i.e., their confidential information) with Morningstar Investment Management personnel on any security they may hold in connection with the above-mentioned investment strategies.

Morningstar may engage us to perform investment research, due diligence, or investment selection services as more fully described in Item 4 above. If we receive compensation for these services, it will likely be lower than compensation negotiated with non-affiliated financial institutions/institutional investors for same or similar services. Our employees who are engaged to provide Morningstar with these services are prohibited from using non-public/confidential information obtained because of its engagement in its Investment Research Reports and/or Manager Due Diligence and Selection Services to Non-Affiliated Clients.

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Certain exchange-traded funds use a Morningstar index as its tracking index. We mitigate any actual or potential conflicts of interests resulting from that by not producing qualitative analysis on any such exchange-traded fund as well as imposing informational barriers (both technology and non-technology), having separate organizational reporting lines between us and Morningstar’s index team, and monitoring by the compliance department.

We may make our Non-Affiliated Clients aware of various products and services offered by Morningstar or its affiliates. We do not receive compensation for that introduction. Conversely, Morningstar and its affiliates may make their clients aware of services we provide. We do not provide any compensation to Morningstar or its affiliates for that introduction, however Morningstar or an affiliate can choose to pay their employees additional sales compensation for the introduction.

Morningstar hosts educational events and conferences and may provide us the opportunity to suggest invitees or offer (proactively or upon request) discounted or waived registration fees. We mitigate any actual or potential conflicts of interest this may introduce by using pre-defined criteria to select Clients for these opportunities.

Morningstar offers various products and services to retail and institutional investors. Some of its clients may be sponsors of Managed Investments that we may recommend to our Institutional Clients or whose publicly traded stock is covered by our equity analysts. We mitigate any actual or potential conflicts of interests resulting from this fact through such measures as informational barriers (both technology and non-technology), organizational reporting lines, monitoring by the compliance department, and not factoring in such relationships with Morningstar into our qualitative or quantitative analysis.

As a wholly owned subsidiary, we use the resources, infrastructure and employees of Morningstar to provide certain support services including in such areas as technology, procurement, human resource, accounting, legal and compliance. We do not believe such arrangement present a conflict of interests and not factoring in such relationships with Morningstar into our qualitative or quantitative analysis.

Affiliations –Morningstar, Inc.”s Subsidiaries
Equity and manager research analysts based outside the U.S.A. are employed by various wholly owned subsidiaries of Morningstar (“Non-U.S. Analysts”). These Non-U.S. Analysts follow the same investment methodologies and process as we do as well as being held to the same conduct standards as our equity and manager research analysts are held to including those items noted in Item 11 below. As a result, we do not believe this structure causes actual or a potential for a conflict of interests.

Affiliations – Credit Rating Agency
We are affiliated with the DBRS Morningstar group of companies, which include DBRS, Inc., DBRS Limited a Designated Ratings Organization, DBRS Ratings GmbH, and DBRS Ratings Limited. DBRS, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (NRSRO). DBRS Morningstar’s companies are also registered with and governed by applicable regulatory body or bodies in other countries around the globe. In producing qualitative analysis on certain equity securities, we may use the publicly available credit rating and analysis issued by DBRS Morningstar. Because we use DBRS Morningstar’s publicly available information, we do not believe there is an actual or potential conflict of interest that arises from such use. Conversely, we make available to DBRS Morningstar a company’s economic moat and the underlying details for use in their determination of a credit rating issued at the company level. Information provided to DBRS Morningstar is information that we have already made publicly available; therefore, we do not believe DBRS Morningstar’s use of such information creates an actual or a potential for a conflict of interests.

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

Code of Ethics
We have in place a code of ethics pursuant to Rule 204A-1 under the Investment Advisers Act of 1940 (“Code of Ethics”). Our Code of Ethics strives to uphold the highest standards of moral and ethical conduct, including placing our clients’ interest ahead of our own. Our Code of Ethics covers all our employees as well as other persons who have access to our non-public information (collectively “Access Persons”). Our Code of Ethics addresses such topics as professional and ethical responsibilities, compliance with securities laws, integrity of investment research, and the personal trading practices. Our Code of Ethics also addresses receipt and/or permissible use of material non-public information and other confidential information our Access Persons may be exposed and/or have access to their position within Morningstar Research Services. The Code of Ethics is provided upon hire and at least annually thereafter and at each time, the Access Person must certify in writing that she or he has received, read, and understands the Code of Ethics and that they agree to or have complied with its contents.

A copy of our Code of Ethics is available to existing and prospective clients by sending written request to compliancemail@morningstar.com.

Interest in Client Transactions
We do not engage in principal transactions (transactions where we, acting in our own account or in an affiliated account, buy a security from or sell a security to a client’s account) nor do we engage in agency cross transactions (transactions where we or our affiliate executes a transaction while acting as a broker for both our client and the other party in the transaction).

Interest in Securities that we may be Recommended
Morningstar Research Services
Morningstar Research Services does not have a proprietary trading account and thus, as a firm, does not invest in any security that we may produce Investment Research Reports on or recommend under our Manager Due Diligence and Selection Services.

Morningstar Research Services’ Affiliates
Morningstar’s Investment Management group has and maintains model portfolios that it makes available under investment advisory programs. Those model portfolios use open-end mutual funds, exchange-traded funds, equity securities, or fixed-income securities. Investment decisions relating to the model portfolios are solely those of Morningstar’s Investment Management group. We may issue Investment Research Reports on or recommend to Institutional Clients one or more of the securities used in one or more of the model portfolios. If we become aware of investment decisions, it is after such decisions have been made by them and trade instructions been issued. Conflicts of interest resulting from this are mitigated through the review of personal trading account activities of both Morningstar’s Investment Management group and Morningstar Research Services access persons by Morningstar’s compliance department.

Morningstar Investment Management serves as an investment adviser to investment companies registered under the Investment Company Act of 1940. To mitigate the conflict of interest, Morningstar Research Services does not prepare/produce qualitative analysis on nor recommend as part of its Manager Due Diligence and Selection Services any investment company Morningstar Investment Management is an investment adviser to.

Morningstar, our parent company, is a publicly traded security (Ticker Symbol: MORN). We may produce Investment Research Reports on or recommend a Fund(s) that holds Morningstar or an affiliate executes a transaction while acting as a broker for both our client and the other party in the transaction).

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Morningstar has and maintains accounts which they invest in accordance with investment strategies created and maintained by Morningstar Investment Management. Those investment strategies are deployed using equity securities. Morningstar Research Services may issue Investment Research Reports on one or more of the securities Morningstar may hold in those strategies. Investment decisions relating to those accounts are those Morningstar Investment Management, who is acting as Morningstar’s discretionary investment adviser with respect to those investment strategies. If we become aware of such investment decisions, it is after such decisions have been made by Morningstar Investment Management and trade instructions being issued. Conflicts of interest resulting from this are mitigated through the review of personal trading Investment Management and trade instructions being issued. Conflicts of investment decisions, it is after such decisions have been made by Morningstar Investment Management. Those investment strategies are deployed using equity securities. Morningstar Research Services access persons by Morningstar’s compliance department.

We may issue Investment Research Report(s) on Managed Investment(s) that uses an index created and maintained by Morningstar as the Managed Investment’s tracking index. We mitigate any actual or potential conflicts of interests resulting from this through such measures as not producing qualitative analysis on such Managed Investments as well as imposing informational barriers (both technology and non-technology), having separate organizational reporting lines, and monitoring by the compliance department.

Personal Trading by Access Persons

Our Code of Ethics is designed to ensure that Access Persons and their immediate family’s personal trading activities does not interfere with our clients’ interests. While our Access Persons (and their immediate family) may maintain personal investment accounts; they are subject to certain restrictions. Most notably:

- equity analysts (and their immediate family) are prohibited from holding or transacting in a security that the analyst covers or any of that company’s close competitors, and they (and their immediate family) cannot initiate a transaction on an equity security that they don’t cover while such security is on our company-wide restricted list.
- While manager research analysts (and their immediate family) can invest in mutual funds and/or exchange-traded funds that the manager research analyst covers, they (and their immediate family) are prohibited from holding or transacting in a publicly traded security in a company that derives a substantial portion of its revenue from mutual funds and/or exchange-traded funds.

Our Code of Ethics includes policies designed to prevent Access Persons from trading based on material non-public information. Access Persons in possession of material non-public information may not trade in securities which are the subject of such information and may not tip such information to others. In certain instances, we employ information blocking devices such as restricted lists to prevent illegal insider trading. Morningstar’s compliance department monitors the activities in the personal accounts of our Access Persons upon hire and thereafter. Access Persons are required to pre-clear initial public offering, initial digital coin offering, and private placement transactions with Morningstar’s compliance department.

Item 12. Brokerage Practices

As primarily a provider of Investment Research Reports and non-discretionary Manager Due Diligence and Selection Services, we do not place trades in the market and thus do not select or recommend broker-dealers for client transactions.

Item 13. Review of Accounts

As primarily a provider of Investment Research Reports and non-discretionary Manager Due Diligence and Selection Services, we do not review accounts of our Institutional Client’s clients.

As explained in Item 4, our Institutional Client’s may engage us to perform periodic monitoring and when deemed necessary, provide updated recommendations.

Item 14. Client Referrals and Other Compensation

We may make direct or indirect payments to our Affiliated Clients for recommending our services as described in Item 4 above. If such payments occur, they will be done pursuant to Rule 206(4)-3(a)(2)(ii) of the Investment Advisers Act of 1940. We have not entered into client referral arrangements with any non-affiliated person or financial institution.

Item 15. Custody

As primarily a provider of Investment Research Reports and non-discretionary Manager Due Diligence and Selection Services, we do not take custody of any assets or funds.

Item 16. Investment Discretion

As primarily a provider of Investment Research Reports and non-discretionary Manager Due Diligence and Selection Services, we do not provide discretionary portfolio management services.

Item 17. Voting Client Securities

As primarily a provider of Investment Research Reports and non-discretionary Manager Due Diligence and Selection Services, we do accept nor have any proxy voting authority.

Item 18. Financial Information

We are required to provide you with certain financial information or disclosures about our financial condition. We do not have any financial commitment that impairs our ability to meet our contractual commitments, nor have we’ve been the subject of any bankruptcy proceedings.
This Brochure Supplement provides information about Morningstar Research Services LLC’s manager selection team, who have significant responsibility for Morningstar Research Services’ Manager Selection and Due Diligence Services.

Please contact the Compliance Department at 312.696.6000 or complianceemail@morningstar.com if you did not receive a copy of our Firm Brochure, if you have questions about the content of this Brochure Supplement. In your request, please indicate the name of the company (Morningstar Research Services) and the type of service (Manager Selection and Due Diligence.)

**Peter Di Teresa – Head of Manager Selection**  
*Business Experience and Educational Background*  
As head of manager selection, Peter leads, directs and oversees the team’s activities. Peter has headed up the manager selection team for Morningstar Research Services since 2017. Prior to that, Peter was part of Morningstar’s Investment Management group since 1995, most recently as a Portfolio Manager and Senior Investment Consultant. Born in 1963, Peter holds a B.A. from the University of Chicago and an M.A. from Harvard University.

**Joshua Charlson, CFA, CAIA - Director**  
*Business Experience and Educational Background*  
Joshua has been part of the manager selection team for Morningstar Research Services since 2017. Prior to that, Joshua was the Director of Manager Research, Alternative Strategies for three years and a Senior Analyst and Strategist in the manager research group for the seven years prior. Previously, Joshua was a Senior Editor in Morningstar’s Investment Management group for seven years. Born in 1968, Joshua has a B.A. from the University of Michigan, an M.A. and Ph.D. from Northwestern University, and is a CFA* and CAIA** charterholder.

**Daniel Farkas - Director**  
*Business Experience and Educational Background*  
Daniel has been part of the manager selection team for Morningstar Research Services since 2017. Prior to that, Daniel was part of Morningstar’s Investment Management Group since 2005, most recently as a Senior Investment Consultant. Born in 1972, Daniel has a B.A., Economics, University of Illinois and an MBA from the University of Chicago - Booth School for Business.

**Brian Killian - Director**  
*Business Experience and Educational Background*  
Brian has been part of the manager selection team for Morningstar Research Services since 2017. Prior to that, Brian was part of Morningstar’s Investment Management group since 1998, most recently as a Senior Investment Consultant. Born in 1976, Brian has a B.A. in finance and computer applications from the University of Notre Dame and a MBA with concentrations in finance and strategy, execution and valuation from DePaul University.

**Sanjiv Patel – Director**  
*Business Experience and Educational Background*  
Sanjiv is a director of manager selection. Sanjiv has been part of the manager selection team since 2019. Prior to that, Sanjiv was a senior product manager for Morningstar, Inc., a senior manager research analyst for Morningstar Research Services, and part of Morningstar’s Investment Management group. Prior joining Morningstar in 2014, Sanjiv was an Investment Analyst for BP America – Trust Investments group for seven years. Born in 1982, Sanjiv has a B.S. in Finance from the University of Illinois.

**Shannon Zimmerman - Director**  
*Business Experience and Educational Background*  
Shannon has been part of the manager selection team for Morningstar Research Services since 2017. Prior to that, Shannon was part of Morningstar’s Investment Management group as a Director of Manager Research and with Morningstar, Inc. as a manager research analyst. Born in 1964, Shannon has a B.A. in English from Rollins College, an M.A. from the University of Georgia and, a Ph.D. from the University of Georgia.

**Disciplinary Information, Other Business Activities, and Compensation**  
None of the individuals listed above have any disciplinary information to disclose.

The individuals listed above do not participate in any other investment-related businesses nor is are they engaged in any non-investment related business activities or occupation that involve a substantial amount of time or pay.

The individuals listed above do not receive compensation from anyone other than Morningstar Research Services. They do not receive compensation, including bonuses, based on what investment recommendations they or the manager selection team makes to a client. They do not receive non-cash compensation based on what investment recommendations they or the manager selection team makes to a client.

**Supervision of the Manager Selection Team**  
Peter Di Teresa is the head of the manager selection team and thus leads, directs and oversees the individuals identified above. As part of his supervisory duties, Peter oversees the investment recommendation process including ensuring the recommendations made by the above individuals to clients are consistent with the manager selection team’s documented methodology and process.

**Minimum Professional Designation Qualifications**

*The Chartered Financial Analyst (CFA) designation is an international professional certification offered by the CFA Institute. To become a CFA charterholder, candidates must pass three six-hour exams, possess a bachelor’s degree, and have 48 months of qualified, professional work experience. CFA charterholders are also obligated to adhere to a strict Code of Ethics and Standards governing their professional conduct. The CFA is a qualification for finance and investment professionals, particularly in the fields of investment management and financial analysis of stocks, bonds and their derivative assets. The program focuses on portfolio management and financial analysis and provides a general knowledge of other finance areas.

**The Chartered Alternative Investment Analyst designation is a credential offered by the Chartered Alternative Investment Analyst Association for professionals managing, analyzing, distributed, or regulated alternative investments. To become a CAIA charterholder, candidates must have a bachelor’s or equivalent degree and more than one year of business experience in the financial services industry or four years of experience in the financial services industry. Candidates must complete a self-study certification program and pass two examinations to receive the designation, and thereafter complete a self-evaluation tool every three years.*