



## Morningstar Investment Management LLC Form ADV Part 2A: Firm Brochure

### *Institutional Advisory Services*

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March 27, 2023

**This brochure provides information about the qualifications and business practices of Morningstar Investment Management 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](mailto:complianceemail@morningstar.com). The information in this brochure has not been approved or verified by the United States Securities and Exchange Commission ("SEC") or by any state securities authority.**

**Additional information about Morningstar Investment Management LLC is available on the SEC's website at [www.adviserinfo.sec.gov](http://www.adviserinfo.sec.gov).**

**Morningstar Investment Management LLC is registered with the SEC as a registered investment adviser. Registration with the SEC does not imply a certain level of skill or training. Please retain this brochure for future reference.**

All current versions of our firm brochures are available in the Part 2 Brochures section of this record on the SEC's website. You can also request a copy of our current brochure free of charge by contacting our Compliance Department at 312.696.6000, or by email to [complianceemail@morningstar.com](mailto:complianceemail@morningstar.com). In your request, please indicate the name of the company (Morningstar Investment Management) and the service brochure(s) (Retirement Plan Services for Individuals or Institutional Advisory Services) you are requesting.

### **Item 2. Material Changes**

The *Institutional Advisory Services* Firm Brochure dated March 27, 2023 contains no following material changes since our last annual update dated March 24, 2022. The *Institutional Advisory Services* Firm Brochure contains the following non-material changes since our last annual update:

Changes were made to *Item 4. Advisory Business*, *Item 5. Fees and Compensation*, *Item 8. Methods of Analysis, Investment Strategies, and Risk of Loss*, and *Item 10. Other Financial Industry Activities and Affiliations* to provide current information about the two groups within Morningstar Investment Management LLC – Morningstar Retirement and Morningstar Wealth<sup>SM</sup> – and the descriptions of services offered by Morningstar Wealth.

*Item 4. Advisory Business* was updated to note the change in name of a Morningstar Fund from Morningstar Unconstrained Allocation Fund to Morningstar Global Opportunistic Fund and to reflect our assets under management and advisement as of December 31, 2022.

*Item 8. Methods of Analysis, Investment Strategies, and Risk of Loss* was updated to reflect the current members of the Morningstar Retirement<sup>SM</sup> Investment Policy Committee and to clarify our investment process, investment selection, portfolio building and Fiduciary Services methodologies.

*Item 10. Other Financial Industry Activities and Affiliations* was updated to removed information about using some members of Morningstar's Investment Management group as "participating affiliates," as we do not currently use any affiliates or their employees to provide certain services under an intercompany participating affiliate agreement. We also added information about a new Morningstar Retirement team consisting of employees of our affiliate located in Toronto, Canada.

*Item 14. Client Referrals and Other Compensation* was updated to reflect the Advisers Act rule change from Rule 206(4)-3(a)(2)(ii) to Rule 206(4)-1 for the payment of direct or indirect cash or non-cash payments to parties who recommend our services and to note that disclosures are provided to solicited clients at the time of the solicitation to make them aware of the arrangement between us and the solicitor, that the solicitor has a financial interest in recommending us to the client, other material conflicts of interest, and the terms of any compensation paid to the solicitor as a result of the referral.

*Item 17. Voting Client Securities* was updated to note that we identify, on an annual basis, certain categories of proxy votes that will be reviewed by our proxy committee instead of following the recommendations of a third-party vendor. We also noted there may be specific instances where we refrain from voting a proxy when we believe it is in the best interests of our investors.

The Brochure Supplement accompanying this Firm Brochure was updated since the last annual update to note when a listed employee serves on an Investment Policy Committee related to Morningstar Investment Management's advisory services and to reflect individuals with the most responsibility for investment decisions.

We made other edits where necessary to correct grammar or punctuation, to provide clarification or further information, for consistency in terminology or content, or to improve the readability of the brochure.

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## Item 4. Advisory Business

### Firm Information

Morningstar Investment Management LLC is a Delaware limited liability company that was incorporated in 1999. Morningstar Investment Management 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 30% of Morningstar's outstanding shares. Because of that ownership, Mr. Mansueto is an indirect owner of Morningstar Investment Management.

Morningstar Investment Management is registered with the SEC under Section 203(c) of the Investment Advisers Act of 1940, as amended ("Advisers Act"). Morningstar Investment Management has filed the appropriate notices to conduct business in all 50 states, the District of Columbia, Guam, and the Commonwealth of Puerto Rico. Morningstar Investment Management is registered with the U.S. Commodity Futures Trading Commission as a Commodity Pool Operator ("CPO") and is a member of the U.S. National Futures Association.

Morningstar Investment Management is part of Morningstar's Investment Management group, a global investment team composed of investment analysts, portfolio managers, and other investment professionals. The Investment Management group consists of Morningstar's subsidiaries that are authorized in the appropriate jurisdiction to provide investment management and advisory services. The Investment Management group's investment and operations teams span the globe, with 9 country offices and primary offices in Chicago, London, and Sydney.

This brochure focuses on the products and services we provide to institutional clients. You can obtain a copy of our brochure describing our products and services for individuals (managed account and advice services for retirement plan participants) by following the instructions above.

### Advisory Services We Offer – Overview

Morningstar Investment Management offers various investment advisory services that focus on our core capabilities in asset allocation, investment selection, and portfolio construction to financial or other institutions including, but not limited to, asset management firms, banks, broker/dealers, consultants, endowments, foundations, insurance companies, investment advisers, investment fiduciaries, plan sponsors of retirement plans, providers of retirement plan services, trusts, and other business entities (collectively "Institutional Clients" or individually, an "Institutional Client").

Morningstar Investment Management consists of two groups – Morningstar Wealth<sup>SM</sup> and Morningstar Retirement<sup>SM</sup>, each of whom offer certain advisory services.

The advisory service below is offered by both Morningstar Wealth and Morningstar Retirement:

#### *Institutional Asset Management*

For Institutional Clients who sponsor registered or pooled investment products, we serve as a portfolio manager, portfolio construction adviser, or sub-adviser. We provide recommendations for asset class allocation targets and/or selection of underlying holdings to fulfill each asset class allocation target. Underlying holdings may include, but are not limited to, open-end mutual funds, exchange-traded funds ("ETFs"), and collective investment trusts. The universe of underlying holdings is generally defined by the

Institutional Client and can include investment products that are affiliated with that Institutional Client. This service typically includes ongoing responsibilities such as monitoring the underlying holdings and reviewing and updating asset allocation percentages and/or underlying holdings as necessary.

We are an investment adviser to Morningstar Funds Trust, registered with the SEC as an open-end management investment company under the Investment Company Act of 1940, as amended. We have overall supervisory responsibility for the general management and investment of the fund portfolios within the Morningstar Funds Trust ("Morningstar Funds"), which are managed in a multimanager structure. Subject to the review and approval by the Morningstar Funds Trust's board, we set each Morningstar Fund's overall investment strategy. We are also responsible for the oversight and evaluation of each Morningstar Fund's sub-advisers. The Morningstar Funds will be used as the underlying holdings for certain model portfolios, most notably mutual fund model portfolios, offered by Morningstar Investment Management and our subsidiary, Morningstar Investment Services LLC. The Morningstar Funds include the Morningstar Alternatives Fund, Morningstar Defensive Bond Fund, Morningstar Global Income Fund, Morningstar International Equity Fund, Morningstar Multisector Bond Fund, Morningstar Municipal Bond Fund, Morningstar Total Return Bond Fund, Morningstar U.S. Equity Fund, and the Morningstar Global Opportunistic Equity Fund. More information about the Morningstar Funds is at <http://connect.rightprospectus.com/Morningstar>.

### *Wealth*

The advisory services below fall under Morningstar Wealth:

#### *Model Portfolios and Separately Managed Accounts*

For Institutional Clients who offer a proprietary advisory program, or a platform that makes investment strategies available for use by other financial institutions, we create model portfolios and separately managed accounts (collectively, "Portfolios") for use through such programs or platforms. The Portfolios are typically designed for use by a financial professional with their retail investor clients, and can include risk- or target date-based asset allocation portfolios, portfolios designed to address a certain financial planning need or goal, or relatively focused stock or bond portfolios. We generally provide sales support on behalf of the Institutional Client by educating financial professionals who use the program or platform about the strategies we provide. In providing this service, we act as either a discretionary investment manager or a non-discretionary model manager. We select and monitor the asset allocation and underlying holdings of each Portfolio based on a universe of investments defined by the Institutional Client. We typically provide ongoing monitoring of the Portfolios, along with rebalancing and reallocating recommendations. As an investment manager, we invest each investor's account in their chosen Portfolio(s), taking into consideration any requested reasonable restrictions, and submit trade instructions to the investor's custodian. The investor's financial professional or the investor is responsible for suitability, choice of custodian, and other services as detailed in the agreement between the Institutional Client and us. As a model manager, the Institutional Client or the financial professional using the advisory program or platform has discretion over the accounts invested in each Portfolio and has the ability to deviate from our recommendations.

Institutional Clients that offer an employer-sponsored retirement plan through certain retirement service providers have the ability to offer our time- or risk-based model Portfolios as investment options to their plan participants through their plan:

- The Target-Date Series is a range of Portfolios that take a holistic view of an investor's total wealth and consists of multiple target-

date vintages, including vintages for someone already in retirement.

- The Asset Allocation Series is a range of core, diversified Portfolios that span the risk profile spectrum to help meet investors' varied life-stage needs.

These Portfolios are typically intended for use through financial professionals who provide educational or advisory retirement plan services to the Institutional Client. Once an Institutional Client chooses to offer the Portfolios as investment options through their retirement plan, we will enter into an agreement with the Institutional Client through which we are appointed as an investment manager to the plan as defined in Section 3(38) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). As investment manager, we have the discretionary power and authority to select and update the underlying investment options in the Portfolios. In addition, we have the power and authority to instruct the service provider to implement any transactions with respect to the plan and its assets as necessary. We provide ongoing monitoring of the Portfolios.

In addition, our subsidiary, Morningstar Investment Services LLC, offers Portfolios on a discretionary and non-discretionary basis. Morningstar Investment Management's investment professionals provide portfolio construction and ongoing monitoring of those Portfolios on behalf of Morningstar Investment Services.

The Portfolios, most notably those utilizing mutual funds, may have underlying holdings that include one or more of the Morningstar Funds. The Morningstar Funds became accessible through Morningstar Managed Portfolios in November 2018. Each Morningstar Funds' summary prospectus, prospectus, statement of additional information ("SAI"), and other regulatory filings are available at <http://connect.rightprospectus.com/Morningstar>.

#### *Asset Allocation Services*

We provide Institutional Clients and their financial representatives tools for identifying their clients' investment goals and risk tolerance (such as risk tolerance questionnaires), and a mechanism to match those goals and risks with an appropriate asset allocation strategy. Asset allocation services are typically used by our Institutional Clients in their investment products, wrap programs, variable annuity asset allocation programs, or similar programs. If included in an agreement with an Institutional Client, asset allocation models are periodically reviewed and adjusted as needed. We may provide Institutional Clients with rebalancing triggers and recommendations on when the allocations for asset classes should be revisited or adjusted.

#### *Investment Analytics, Monitoring, and Comparative Analysis Reports*

We offer Institutional Clients investment performance and style monitoring reports. These reports range from a one-page snapshot view of multiple investments, such as those investments in a defined contribution plan lineup to multi-page, in-depth reports on a single investment that provides information on various aspects of the investment such as profile, style and sector analysis, total return/risk summary, performance, expense, portfolio metrics, top holdings, and an optional written analysis of the investment. To fulfill any monitoring responsibilities, we follow the same comprehensive due diligence process that we use to facilitate our investment selection research in these reports.

#### **Morningstar Retirement<sup>SM</sup>**

Morningstar Retirement is committed to helping people improve their financial health and prepare for retirement by offering investment advice and managed accounts, custom model portfolios, and fiduciary services to plan

providers, employers, and retirement plan participants. The advisory services below fall under Morningstar Retirement:

#### *Custom Model Portfolios*

We construct custom asset allocation model portfolios for use with employer-sponsored retirement plan accounts using the investment options available in a plan's lineup. Model portfolios can be time-based, risk-based, or a combination of time- and risk-based. Model portfolios, including target-date glide paths where relevant, are customized to the specific plan, and can take into account a wide range of factors including the presence of defined benefit assets, company stock holdings, savings rates, and account balances. We provide monitoring of the model portfolios (and glide paths), making recommendations to change investment allocations, and/or to add, remove, or modify the model portfolios' underlying investment options when necessary. Our recommendations and investment decisions are limited to those investment options available under the client's retirement plan lineup.

#### *Fiduciary Services*

We provide Institutional Clients with retirement plan services that include the construction, monitoring, and/or management of plan lineups. These services typically include automated reporting capabilities, marketing and sales support, and an online reporting delivery mechanism. We provide documentation of the process used to select, review, monitor, and update the funds chosen. We offer a workforce profile questionnaire designed to help a plan sponsor identify the investment sophistication, funding status, investment goals, and/or risk tolerance of the retirement plan or its participants. We also typically provide methodology documents, an investment policy statement, quarterly fund and plan performance reports, annual summary reports, and a quarterly market summary.

In providing these services, we serve as a fiduciary, as defined in section 3(21)(A) ERISA, as amended, and may additionally serve as an investment manager, as defined in section 3(38) of ERISA.

We construct a list of lineup options (including, but not limited to, collective investment trusts and/or mutual, money market, and/or stable value funds) from the universe of investment options defined by the Institutional Client. We provide asset-class requirements for the lineup, with specific investment options identified for each asset class, for use in developing a lineup for a defined contribution or defined benefit retirement plan. This process is designed to provide the Institutional Client with investment choices that will result in a lineup that is appropriately diversified with a sufficient broad range of risk/return characteristics.

Under our standard 3(21) service, we serve as a fiduciary with respect to the investment selection and monitoring we provide, but the Institutional Client retains responsibility for investing plan assets in accordance with our recommendations. We provide ongoing monitoring of the specific investments in the approved investment list and monitor individual plans to ensure they are meeting our asset-class requirements and investing in approved funds. Typically, if we recommend modifications to a lineup, we provide notice to the Institutional Client who has discretion to implement our recommended changes.

For our "flexible" 3(21) service, we offer the services outlined under our standard 3(21) service but allow the Institutional Client the flexibility to choose investments from our approved investment list along with non-approved investment options for their lineup. Our fiduciary support covers the use of investment options from our approved list only. Under this service, we do not provide any fiduciary coverage on the end lineup.

In some cases, Institutional Clients delegate discretionary management responsibilities to us. For our standard 3(38) service, we serve as a fiduciary with respect to the investment selection and monitoring we provide and we act as an investment manager for the plan, with full authority to select, remove and replace investment options from the plan lineup. We provide periodic monitoring of the specific investments in the approved investment list and monitor individual plans to ensure they are meeting our asset-class requirements and investing in approved funds.

For our “flexible” 3(38) service, we offer the services outlined in our standard 3(38) service but allow the Institutional Client the flexibility to request some variability in our standard process, such as the ability to include more approved investment options in asset classes than we allow under our standard service. This service is designed to help avoid too much disruption as Institutional Clients convert their plans to our service.

We offer Morningstar® Plan Advantage<sup>SM</sup>, an online platform designed to help retirement plan sponsors served by financial professionals of Institutional Clients (1) identify a category-level plan lineup, (2) choose a plan provider from those available through Morningstar Plan Advantage (choice of plan provider can be further limited by the Institutional Client), and (3) access 3(21) or 3(38) fiduciary services as part of a bundled offering. Once enrolled, plan sponsors and their designated plan advisor can review their lineup and access reports, view notifications, and learn more about plan lineup changes.

#### *Managed Accounts, Advice, and Guidance*

We offer services to Institutional Clients for use with individual retirement investors in their employer-sponsored retirement plans or other retirement products, like individual retirement accounts or health savings accounts earmarked for retirement (each a “retirement account”). These services are intended for citizens or legal residents of the United States or its territories and are offered through retirement plan sponsors and/or plan providers, plan administrators, retirement product providers, and/or other investment advisers (each a “service provider.”) These services typically include guidance, advice and/or managed account options, along with an online platform to access those services. Guidance includes general and educational information and tools to help retirement investors manage their retirement account. Under Guidance, the retirement investor is responsible for determining the suitability of investments, implementing changes to their retirement account, and monitoring their account on an ongoing basis. Advice offers each retirement investor a target retirement income goal, projected retirement income amount, recommendations on savings rate and retirement age, personalized asset allocation strategy, and professional investment selection. Under Advice, the retirement investor is responsible for the implementation of any changes to and the monitoring of their retirement account. Under Managed Accounts, we will manage the retirement investor’s account on an ongoing basis, in addition to the items provided under Advice. Our account management includes ongoing monitoring, automatic account rebalancing and implementation of changes, quarterly progress reports, and an annual progress report. We use the investment options available in the retirement plan or product to construct a portfolio and, when applicable, monitor model portfolios designed for retirement investors across a broad range of risk exposure levels.

Advisor Managed Accounts is a product name for Managed Accounts or Advice that allows investment advisers, consultants, or asset managers to incorporate their own asset allocation and fund selection capabilities into our offering. Under this service, the investment adviser, consultant, or asset manager is responsible for building plan-level portfolios from each plan or product’s investment options or non-core investment options, if available

through the service provider. The plan-level portfolios are used in our portfolio assignment methodology to create hundreds of retirement investor-level portfolios that span the equity spectrum. If we engage an asset manager as a sub-adviser (“Sub-Adviser”) to provide portfolio construction services for Advisor Managed Accounts, we are responsible for the investment-level portfolios created for users of our services and there is no advisory relationship between you, your participants or product users, and the Sub-Adviser. Each retirement investor is then assigned to a portfolio appropriate for their retirement goals. As part of Managed Accounts, each retirement investor receives a target retirement income goal, projected retirement income amount, and recommendations on savings rate and retirement age. We manage the retirement investor’s account on an ongoing basis, which includes ongoing monitoring, automatic account rebalancing and implementation of changes, quarterly progress reports, and an annual progress report.

If made available by the plan sponsor or service provider, retirement investors have the option to complete an annuity questionnaire. Through this questionnaire they can indicate whether they would like to receive a recommendation for how much of their retirement account could be invested in an annuity while still aligning with our investment strategy. We do not recommend, endorse, or sell any specific annuity products as part of this allocation recommendation and do not provide advisory or discretionary investment management services to assets invested in an annuity. If requested by the plan sponsor or service provider, we will integrate access to an annuity marketplace or provider into our platform to help facilitate the retirement investor’s purchase of an annuity, if they decide to do so. In such instances, the annuity or annuities available are chosen by the plan sponsor or service provider and we have no role in selecting those annuities. An annuity allocation recommendation is only available through the Managed Accounts service.

We offer advisory services to Institutional Clients who offer their own investment advice or managed account programs to their clients. In most cases, we serve as the independent “Financial Expert” as defined within the Department of Labor’s Advisory Opinion 2001-09A dated December 14, 2001 (commonly referred to as the “SunAmerica Opinion.”) We use the investment options available in a participant’s retirement plan or product to construct and, when applicable, monitor model portfolios designed for retirement investors across a broad range of risk exposure levels. We may also use information provided by independent third parties such as mutual fund data or index providers in the construction of advice for the program.

#### *Personalized Target Date Fund Service*

We offer a personalized target date fund service to Institutional Clients for use with retirement investors. This service includes a personalized asset allocation strategy and professional investment selection through an online platform. The asset allocation strategy utilizes one or more of the Institutional Client’s target date fund vintages, is based on the retirement investor’s financial situation and retirement goals, and includes ongoing monitoring and automatic account rebalancing and implementation of allocation changes.

#### **Customized Services**

At an Institutional Client’s request, we will take under consideration a request to provide them with a customized version of the above services or a different type of advisory services that would utilize our core capabilities in asset allocation, investment selection, or portfolio construction. Given the customized nature, the Institutional Client can impose constraints/restrictions on such things as security types, asset classes, or proprietary security

requirements and/or wish to collaborate with us on such things as investment methodology and screening criteria.

### Wrap Fee Programs

We do not sponsor a wrap fee program, but we do provide portfolio management services to a wrap fee program offered by our subsidiary, Morningstar Investment Services LLC, through the Morningstar Managed Portfolios program.

### Assets Under Management

As of December 31, 2022, the discretionary assets under management for Morningstar Investment Management (rounded to the nearest \$100,000) were:

Retirement Services to Individuals: \$20,507,900,000  
Investment Management Services to Institutional Clients:  
\$31,407,900,000

Total Asset Under Management: \$51,915,800,000

The non-discretionary assets under advisement for Morningstar Investment Management (rounded to the nearest \$100,000) were \$159,525,900,000.

## Item 5. Fees and Compensation

### Fees and Compensation – Overview

We typically negotiate our fees, payment terms, and payment schedules on an individual basis with each Institutional Client. The services we provide, the specific fees for such services, and the contract term are governed by the contractual agreement between us and our Institutional Client. Institutional Clients may not receive all of the services listed above. Our fees vary depending on the services selected and could include a fixed fee, a basis-point fee, and/or a technology licensing fee. Fees for some services take into consideration such factors as the number of services being provided and service specific variables such as the universe of investments, variables in monitoring frequency, delivery type, investment types, and frequency of written analysis.

#### *Institutional Asset Management*

Our Institutional Asset Management fees are negotiable, but generally include an asset-based fee and can include a minimum annual fee. The asset-based fee typically ranges from 4 to 15 basis points of the assets being managed or consulted upon while the minimum annual fee is \$100,000 - \$200,000. The actual fee depends on a range of variables including our role in providing the services, the type of security we are providing services for, and the amount of assets involved. The fee is typically charged monthly in arrears.

As the investment adviser to the Morningstar Funds Trust ("Trust"), we are compensated by the Trust based on assets within the Morningstar Funds for our investment management activities in accordance with the Investment Management Agreement between the Trust and us. We are entitled to receive an annual management fee calculated daily and payable monthly equal to the following percentage of a Morningstar Fund's average daily net assets:

Morningstar Fund	Management Fee
Morningstar U.S. Equity Fund	0.67%
Morningstar International Equity Fund	0.83%
Morningstar Global Income Fund	0.35%
Morningstar Total Return Bond Fund	0.44%
Morningstar Municipal Bond Fund	0.44%
Morningstar Defensive Bond Fund	0.36%

Morningstar Multisector Bond Fund	0.61%
Morningstar Global Opportunistic Equity Fund	0.47%
Morningstar Alternatives Fund	0.85%

More information about the Morningstar Funds' fees and expenses can be found in the prospectus at <http://connect.rightprospectus.com/Morningstar>.

### *Morningstar Wealth*

#### *Model Portfolios and Separately Managed Accounts*

Portfolio fees are typically non-negotiable and range from 0 – 55 basis points. The actual fee depends on our role in offering the service (including whether we act as a model manager or have discretion over client portfolios, asset size, the complexity involved, whether Morningstar Funds are included in the Portfolios, and any other services we provide to the Institutional Client. The fee is typically charged monthly and may be charged in advance or arrears. If, in accordance with the contractual terms, the Institutional Client terminates the agreement they have with us prior to the end of the billing period, we will refund any unearned fees on a pro rata basis after the termination of the contract.

For any Portfolio in which one or more of the underlying holdings is a Morningstar Fund, which includes the Portfolios offered through employer-sponsored retirement plans, no investment management fee is charged with respect to the Morningstar Funds. As disclosed above, in accordance with the Investment Management Agreement between us and Morningstar Funds Trust, we receive compensation from Morningstar Funds Trust based on the assets invested in the Morningstar Funds for the investment management activities we perform for the Morningstar Funds. Since we receive compensation for this activity, we don't charge a separate investment management fee with respect to the Morningstar Funds in a Portfolio. Therefore, it's important to note that for those Portfolios that include Morningstar Funds and other securities (such as third-party mutual funds or ETFs), the investment management fee is *only* applicable to the investment management activities carried out for the non-Morningstar Funds securities.

#### *Asset Allocation Services*

Our Asset Allocation Services fees are negotiable, but generally range from \$50,000 to \$500,000 annually. The actual amount charged depends on a range of variables including the terms of distribution, number of sets, type and scope of the models requested (including the number of asset classes used in the asset allocation models), and whether the client receives other advisory services from us. The fee is typically charged annually in arrears. In addition to the fee, payment terms and schedules are negotiable.

#### *Investment Analytics, Monitoring, and Comparative Analysis Reports*

Our Investment Analysis, Monitoring, and Comparative Analysis Report fees are negotiable, and vary widely. A flat fee is typically charged per report. The actual amount charged depends on a range of variables including the type of service being sought, the type of securities involved, the intended purpose for our service, the type of output being sought from us, and the intended use of the Morningstar name. The fee is typically charged annually and is due upon delivery of the report(s). In addition to the fee, payment terms and payment schedules are negotiable.

### *Morningstar Retirement<sup>SM</sup>*

#### *Custom Model Portfolios*

Our Custom Model Portfolio fees are negotiable, but generally include a minimum and an asset-based fee. Asset-based fees generally range between 3 and 8 basis points. Minimum fees typically vary from \$100,000 to \$300,000. The actual fees depend on a range of variables including our fiduciary role,

services used, asset size, and whether services are opt-in or opt-out. The licensing and/or minimum fee is typically charged in arrears. The asset-based fee is generally charged quarterly by applying the pro-rated basis point rate to the average assets in a retirement account during the quarter.

#### *Fiduciary Services*

Our 3(21) and 3(38) Fiduciary Services fees are negotiable, but generally include a minimum and an asset-based fee. Asset-based fees generally range between 2 and 8 basis points. Minimum fees typically vary from \$100,000 to \$450,000. The actual fees depend on a range of variables including our fiduciary role, service used, asset size, and whether services are opt-in or opt-out. The fee is typically charged quarterly in arrears based on assets held at calendar quarter-end or the average assets in the service over the quarter.

Our Morningstar Plan Advantage fees are negotiable, but generally include a minimum and an asset-based fee that typically ranges between 3 and 8 basis points annually. The actual fee depends on a range of variables including our fiduciary role, services used, and asset size. The fee is typically charged quarterly in arrears by applying the pro-rated basis point rate to the average assets in a plan during the quarter.

#### *Managed Accounts, Advice, and Guidance*

Managed Accounts, Advice, and Guidance fees are negotiable, but generally include a minimum and/or licensing fee, and an asset-based fee. Minimum and/or licensing fees typically vary from \$100,000 to \$800,000. Asset-based fees for Managed Accounts typically range from 10 to 50 basis points annually. The actual fees depend on a range of variables including our fiduciary role, services used, asset size, and whether services are opt-in or opt-out. The licensing fee is typically charged annually in advance. The asset-based fee is typically charged quarterly in arrears by applying the pro-rated basis point rate to the average assets in a retirement account during the quarter.

Please note, in instances where a Sub-Adviser has been engaged to undertake portfolio construction for these services, the portfolios they create will typically consist of associated investment products in which the receive compensation based on the amount of assets invested.

#### *Personalized Target Date Glide Path Management*

Personalized Target Date Glide Path Management fees are negotiable, but generally include a one-time set-up fee, a minimum fee, and an asset-based fee. The set-up fee typically ranges from \$200,000 to \$500,000. The annual minimum is generally in the range of \$200,000 \$500,000. The annual asset-based fee typically ranges from 4.5 to 7 basis points. The actual fees depend on a range of variables including the asset manager size and the overall fees charged. The set-up fee is typically charged annually in advance. The asset-based fees are typically charged quarterly in arrears by applying the pro-rated basis point rate to the assets in the retirement account enrolled in the service.

#### **Payment**

Payments, payment terms and payment schedules are negotiated and governed by the contractual agreement we enter into with each Institutional Client. We typically send an invoice on a periodic basis (e.g., monthly or quarterly), although in some instances, we bill annually. For services we provide to an affiliate, fees are charged through an intercompany charge. Fixed and licensing fees are typically paid in advance of services being provided, and basis-point fees are typically charged in arrears.

#### **Other Costs in Connection with Our Advisory Services**

Our fees are separate from fees and expenses charged by the investment products (including redemption fees or asset- or transaction-based trading fees), fees and expenses charged by the Institutional Client for their products (including any revenue sharing arrangements that they have with the investment option's investment adviser and/or distributor), or fees that are charged by a third party, such as a proprietary advisory program, financial advisor, platform, custodian, transfer agent, plan provider, or recordkeeper. The investment options' fees and expenses are described in the prospectus or an equivalent document. These fees will generally include a management fee, other investment expenses, and possibly a distribution fee (e.g., 12b-1). In some cases, an investment option may also charge an initial or deferred sales charge. Annuities typically have additional fees, such as surrender charges, mortality and expense risk charges for death benefits or payout options like guaranteed income for life, administrative fees, underlying fund expenses related to investment sub-accounts, and other charges for special features, like guaranteed minimum income benefits, principal protection, or stepped-up death benefits. Neither Morningstar Investment Management nor any of our employees receive transaction-based compensation for the investment recommendations we make.

#### **Fees Charged in Advance**

Our services can be terminated as outlined in the contractual agreement between Morningstar Investment Management and the Institutional Client. Termination of services and refunds of fees, if any, are governed by the contractual agreement between the parties, which is negotiated on an individual basis. Upon termination, any earned, unpaid fees by the Institutional Client are due and payable. If, in accordance with contractual terms, the Institutional Client terminates their contract prior to the end of the billing period, we will refund any unearned fees on a pro rata basis after the termination of the contract.

#### **Compensation from Sales of Securities**

We do not expect, accept or receive compensation for the sales of securities, including asset-based sales charges or service fees from the sale of open-end mutual funds.

You may have the option to purchase investment products we recommend or similar services through other investment advisers or financial professionals not affiliated with us. Because our services are not exclusive, the fee for our services may be higher than fees charged by other financial firms who provide services similar to ours or if you paid separately for investment advice and other services. In addition, because the underlying holdings of our portfolios are not exclusive to the services described herein, you may buy securities (e.g., mutual funds, exchange-traded funds, equity securities, etc.) outside of this service without incurring our fees.

#### **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 Advisers Act.

#### **Item 7. Types of Clients**

Our clients include advisory programs or platforms of third-party advisory or platform providers, entities such as financial institutions, third-party



investment advisers, broker/dealers, investment companies (including the Morningstar Funds Trust), and other business entities, consultants, plan providers, product providers, and sponsors who offer investment advice programs to individual participants in defined contribution plans such as 401(k), 457, and 403(b) retirement plans, individual retirement plan participants, health savings accounts, and individuals who are in retirement. Please see our Retirement Services for Individuals brochure, available on the SEC website, for further information about Morningstar Retirement's Managed Account, Advice, and Guidance program that provides advisory services directly to retirement investors.

We do not require a minimum account size for our institutional investment advisory services, and we generally do not impose other conditions for using our institutional advisory services.

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

### **Investment Philosophy**

Our investment philosophy is driven by the investment principles that are promoted throughout our organization. The principles are intended to guide our thinking, behavior and decision making. These principles have been inspired by a number of the most experienced and successful investors in the last century. These principles also reflect and align with the history and foundation of Morningstar. The investment principles are:

- We put investors first
- We're independent-minded
- We invest for the long term
- We're valuation-driven investors
- We take a fundamental approach
- We strive to minimize costs
- We build portfolios holistically

Building upon our investment principles, our investment philosophy is built on the belief that portfolios should maintain a risk profile commensurate with the desired long-term asset allocation guidelines we provide to the client. We focus extensively on the portfolio structure to maintain a careful balance between being allocated similarly to the portfolio benchmarks and one that reflects our assessment of the value available in the current market environment. We select managers that we believe manage fund assets with a consistent and disciplined process that can provide for sustainable long-term results. We prefer managers with a prudent, logical, and repeatable process and remain keenly focused on the consistency of the implementation of their investment disciplines.

To align with our business structure, we have two Investment Policy Committees. The investment advice used in the products and services referenced in this brochure from Morningstar Investment Management is provided by investment teams. Information on key members of these investment teams is included in our Form ADV Part 2B Brochure Supplement for Institutional Advisory Services. For Advisor Managed Accounts, the registered investment adviser responsible for portfolio construction has their own Brochure Supplement that you should obtain and review.

### **Global Investment Policy Committee**

Morningstar Wealth's Global Investment Policy Committee and its regional governance bodies are responsible for oversight of the investment methodologies across some of our Institutional Asset Management, Model Portfolios and Separately Managed Accounts, Asset Allocation Services, and some of our Investment Analytics, Monitoring, and Comparative Analysis

Reports products and services. Members of the Wealth Investment Policy Committee may include officers, chief investment officers, managing directors, or managers of Morningstar Investment Management or its affiliates. The regional governance bodies include regional investment policy committees, asset allocation committees, investment selection committees and portfolio construction (peer review) committees. Global best practice working groups also exist with the goal of sharing methodologies and research across regions. These groups focus on specific investment areas such as valuation models driven by our capital markets research and methodologies used for asset allocation, investment selection, portfolio construction for different investment strategies and advice.

### **Morningstar Retirement<sup>SM</sup> Investment Policy Committee**

The Morningstar Retirement Investment Policy Committee is responsible for oversight of the investment methodologies across Morningstar Retirement's products and services including some of our Institutional Asset Management, Managed Accounts, Advice, and Guidance, Custom Model Portfolios, Fiduciary Services, and some of our Investment Analytics, Monitoring, and Comparative Analysis Reports. Members of the Morningstar Retirement Investment Policy Committee includes Morningstar Investment Management's chief investment officers, portfolio managers, investment analysts, and the director of automated portfolios solutions.

### **Model Portfolios and Separately Managed Accounts, Institutional Asset Management, and Asset Allocation Model Portfolios**

#### *Investment Process*

Our investment process starts with scouring the globe for opportunities. Instead of hewing closely to an index-defined universe, we look broadly, investigating asset classes, sub-asset classes, sectors, and securities in markets around the world. Our capital markets research extends to more than 200 equity and 150 fixed-income asset classes. We also track around 30 world currencies.

We apply deep valuation analysis supported by in-depth fundamental research to find opportunities around the globe.

Alongside this analysis, which looks at both absolute and relative valuation, we also consider investor sentiment and positioning, which adds contrarian elements to our process and tells us how the market consensus views an investment idea we're considering. We prefer to invest in ideas contrary to the market consensus because one needs to be different to be able to outperform.

We also look closely at each asset class's risk, which can be complex, multifaceted, and vary over time. We believe that one of the best ways to control for risk is to buy fundamentally strong assets that seem underpriced.

Our in-depth valuation analysis and contrarian indicators, when brought together, are the key ways we generate investment ideas. These ideas might be names to include in a stock portfolio or our best thinking on reward for risk at the asset class-level. In addition, our valuation-driven asset allocation process paired with our in-house investment selection skill allows us to holistically build portfolios for our clients for the long term. The Investment Management group, as a global team, works to understand markets and opportunities, monitor risk in existing portfolios, and vet ideas to make investment changes. We use this ongoing investment process to manage a variety of equity and multi-asset portfolios for our Institutional Clients.

### *Investment Selection*

Finding investment opportunities isn't just about great ideas; it's also about selecting great investments for our clients. Investments may be individual stocks, or active managers and/or passive exchange-traded products in a multi-asset portfolio. Our research-driven approach to selecting investments is designed to help investors reach their goals and objectives.

When building multi-asset portfolios, we need to evaluate the active investment managers and/or passive funds we use to implement our investment strategies. Our investment selection process begins with analysis from Morningstar and its affiliates, which covers hundreds of thousands of investment offerings globally, including mutual funds, closed-end funds, separate accounts, exchange-traded products, individual stocks, and hedge funds. We then build upon that analysis with reviews by our internal investment team, which includes not only quantitative screens and assessments, but also one-on-one conversations with portfolio managers as part of our fundamental due diligence.

In our due diligence, we assess whether their investment team is qualified, experienced, and talented; that they follow a consistent and disciplined investment process; that their organization is strong and stable; and that they operate professionally and ethically.

We study managers' holdings using our proprietary tools and analytics to assess how well their strategy may work in combination with those of other managers. And we consider managers' ability to outperform in different market environments. Rather than following simple style analytics or style neutrality blends, we seek process diversification and try to avoid the pitfalls of over-diversification often found in fund-of-fund investment strategies.

Once we have selected active managers, we tend to keep them in place for the long haul. We believe hiring independent managers to run high-conviction strategies is a far better approach to multimanager portfolios.

As for passive vehicles, our selection process begins with the thousands of exchange-traded products in the Morningstar database and includes the work of Morningstar and its affiliates' ETF analyst team. Our own analysts perform qualitative work that can't be found in an automated service. ETFs are often less expensive than their open-end mutual fund counterparts but assessing them has to go beyond this fact. We closely examine the risk characteristics that define ETFs—including tracking to the index, trading volume, bid/ask spread, and premium/discount—to help ensure the goals are realistic and the liquidity is what we expect. As with other funds, we assess ETFs within a portfolio context to achieve access to a particular market segment or sub-asset class.

Individual stock selection relies heavily on our asset class research to identify attractive segments of the market (sectors, countries, or factors like quality) and a review of the valuations and fundamentals of the underlying stocks. We rely heavily upon Morningstar's Equity Research group in addition to our own proprietary insights.

Specific to our Institutional Asset Management and Asset Allocation Model Portfolio services, the portfolios we build for an Institutional Client are typically constrained to a universe of investment options defined by our client, which include their affiliated investment products in some instances. Our analysis will still include quantitative analytics and fundamental research on the investment options available. We draw on Morningstar's comprehensive database of fund and security analytics as well as utilizing portfolios information provided by our Institutional Client, if applicable. In some

instances, we work closely with our Institutional Client to identify and evaluate manager candidates for possible addition to or removal from the available investment universe.

### *Building Portfolios*

Armed with investment ideas, our global team works together to holistically build portfolios suited to each strategy we offer or the objectives of our clients. Portfolio construction is about ranking and risk management. We seek to gain the largest exposure to our best ideas, while building robust portfolios designed to stand up to challenging investment environments or investment errors.

This judgment-driven approach also allows us to evaluate the complexity and multifaceted nature of investment risk. We view risk as the permanent loss of capital. Our valuation-based approach (that is, seeking underpriced assets and avoiding overpriced assets), fundamental diversification, and forward-looking approach to viewing asset class co-movements (that is, those that buffer gains and losses), all help mitigate risk in the portfolios we build.

To prepare investors for the future, we seek to construct robust portfolios designed to perform well in different environments rather than being considered "optimal" based on expected results or a specific environment. We avoid forecasts and building strategies based on our ability to predict specific environments. Instead, we aim to prepare for different environments through constructing portfolios that will hold up under many possible environments—even ones that we haven't seen before. In effect, this involves trade-offs of aggregate reward for risk and a calibration of the probability and impact of negative outcomes.

Asset allocation guidelines for multi-asset portfolios are developed by our Asset Allocation Committee, which comprises most of the investment professionals in Morningstar's Investment Management group. Our investment professionals serve in different asset-class specialties on the committee. The committee jointly decides on organization-wide portfolio positioning policy, and strategy teams and portfolio managers adapt the positioning decision, as applicable, to their particular strategies and client portfolios. Teams of our portfolio managers are supported by the broad array of investment professionals within the Investment Management group, who contribute to manager research, asset-class research, investment-process enhancement, and the development and maintenance of portfolio management tools used in providing this service. All portfolios are reviewed by a team of peers before we deliver them to our Institutional Client.

### *Managing Portfolios*

Once we've holistically built portfolios, we manage them. This part of the process is simply continuing to find opportunities, thinking through ways those opportunities might be included in our portfolios, and watching markets closely for any signs that would call for adjustments within the portfolio. Portfolio management is not a stop/start process. We constantly review our positions, seeking to maximize reward for risk. Each strategy we manage has a set of investment guidelines that outline the investment objectives, risk levels, and investment constraints. These are monitored to stay within the defined ranges.

As valuation-driven investors, we primarily focus on price changes relative to fair value through time. Given that markets are dynamic, we reassess the portfolio given the changes in investment ideas, aggregate risks, and portfolio exposures. This iterative process reconsiders the opportunity set, with a constant eye on fundamental diversification and portfolio allocations.



Turnover and trading reduce returns for investors and therefore any changes should be expected to add value by a comfortable margin. Investment decisions happen in the real world rather than on paper—transaction costs and taxes are real. This means being biased toward inaction and long-term holdings, keeping turnover and transaction costs as low as possible.

Our global investment team works around the clock to understand markets and opportunities, monitor risk in existing portfolios, and vet ideas to make investment changes. This ongoing investment process powers every portfolio managed by the entities within Morningstar's Investment Management group.

We have processes and risk controls in place at multiple levels of the investment process to ensure that our portfolios are created in a manner consistent with their risk and return objectives. We evaluate risk at both the asset class model level and the portfolio level. At the asset class level, we monitor easily observable metrics such as standard deviation, skew, kurtosis, historical beta and overall tracking error relative to our stated benchmark. Our standard deviation and covariance matrix figures are estimated by a proprietary factor analysis system that ensures consistency across multiple asset classes and time periods. We delve deeper by examining conditional value-at-risk and conducting scenario analysis testing under different market conditions.

At the portfolio level, we conduct a detailed style analysis of our underlying funds using holdings information, quantitative regressions, and manager meetings. The underlying styles allow us to determine the effective rolled up portfolio asset class exposures and compare them to our asset allocation targets. Further, we analyze each manager's style consistency to make sure we monitor and adjust for huge swings in our effective asset class exposures. This analysis ensures that we are aware of, and comfortable with, our effective asset class exposures. Additional analysis is done routinely to measure our fund portfolio duration, tracking error, sector exposures and betas.

While actively managed portfolios will exhibit certain biases in terms of asset class weightings or security characteristics relative to their blended benchmarks at times (based on our intended investment decisions and the actions of the underlying managers), they are constrained by setting minimum and maximum allocations to different asset classes, as stated in our investment policy guidelines. Establishing allowable ranges for asset classes helps enable the strategy to take advantage of opportunities and avoid risks at the asset class level, but also keeps the portfolios tethered to their blended benchmarks.

Ongoing monitoring of the underlying position weights is critical to keeping the portfolio exposures as intended. Each fund is assigned a target position and a "deviation threshold," which governs the degree to which a fund may sway from its target. Each fund has a different degree of latitude, based on both its weight in the portfolio and the volatility of the assets in which it typically invests. If a fund deviates from its target weight, we evaluate whether the accounts that contain the fund need to be adjusted (i.e., rebalanced) to bring the alignment back in order.

For registered or collective investment products we manage on behalf of an Institutional Client, we review and revise portfolio allocation targets on a continuous basis to ensure that asset class targets outlined in the prospectus are maintained. Reviews are implemented to ensure that the underlying investments in the portfolio don't exceed allocations noted in the product's prospectus or breach other restrictions.

#### *Morningstar Funds Trust Subadvisor Oversight and Multi-style Management*

We are responsible for hiring, terminating, and replacing sub-advisers to the Morningstar Funds, subject to board approval. Before hiring a sub-adviser, we perform due diligence on them including, but not limited to, quantitative and qualitative analysis of their investment process, risk management, and historical performance. We are responsible for the general supervision of the sub-advisers as well as allocating each Morningstar Fund's assets among the sub-advisers and rebalancing the portfolio as necessary, the timing and degree of which will be determined by us.

At times, allocation adjustments among sub-advisers may be considered tactical with over- or under-allocations to certain sub-advisers based on our assessment of the risk and return potential of each sub-adviser's strategy. Sub-adviser allocations are also influenced by each sub-adviser's historical returns and volatility, which are assessed by examining the performance of strategies managed by the sub-advisers in other accounts that we believe to be similar to those that will be used for a Morningstar Fund.

#### **Asset Allocation Services – Capital Market Assumptions and Risk Tolerance Questionnaires**

As part of our Asset Allocation Services, we typically offer a combination of Asset Class Model Portfolio(s), Risk Tolerance Questionnaire(s) ("RTQ"), and our Capital Market Assumptions ("CMAs"). Our construction method for Asset Class Model Portfolios is described above. This section will focus on our CMA and RTQ methods.

##### *Capital Market Assumptions*

We provide forward-looking CMAs for both taxable and tax-deferred account types. Our CMAs consist of expected return, standard deviation and correlation among asset classes based on our proprietary equity, fixed income, currency and risk models. In our CMAs, we use valuation-implied returns, which are based on the idea that asset class returns can be decomposed into underlying corporate and economic fundamentals and the valuations impact near-term returns. Our research team develops and enhances our capital market models on an ongoing basis to reflect the latest best practices and innovations. We analyze the available opportunity set of asset classes and constructs long-term expected returns, standard deviations, and correlation coefficients for each.

For equity valuation-implied returns, we use a supply-side approach to forecast equity returns. The supply-side model is based on the idea that equity returns can be decomposed into underlying economic and corporate fundamentals. Our approach separates the expected return of each equity asset class into four key return drivers:

- 1) **Inflation:** Our long-term inflation expectations are based on several consensus and professional long-term inflation forecasts, as well as central banks' medium- to long-term inflation targets where inflation targeting is part of the monetary policy mandate.
- 2) **Total Yield:** We base our estimates of future total yield on an analysis of the historical payout rates and total payout yields for a given asset class. We estimate total yield for each equity asset class at both the country and sector level.
- 3) **Growth:** The growth term measures the change in corporate cash flows per share excluding the impact of repurchases. Our long-run growth expectations are based on expected growth of the asset class based on underlying fundamentals.

- 4) **Change in Valuation:** We use several valuation models to estimate the fair value of equity asset classes and assumes reversion to fair value over a 10-year period. Specifically, our valuation models rely on several forward-looking measures of normalized earnings such as profit margin, return on book-equity, and inflation-adjusted average earnings over the business cycle.

For fixed-income valuation-implied returns, we use a building-block approach to forecast returns of fixed-income asset classes. The key inputs into our fixed-income model are:

- 1) **Inflation:** The inflation forecast is the same as the one used in our equity model.
- 2) **Real Rate:** The real rate of return is the expected return of cash after inflation. We forecast real rates based on an examination of long-run historical real-rate data and consideration of the macroeconomic environment for each fixed-income asset class.
- 3) **Term Spread:** We base our forecast of the term spread on the long-run shape of the yield curve, current market data, and surveys. The expected shape of the yield curve also determines our forecast of the roll return of a fixed-income asset class.
- 4) **Credit Spread:** We forecast default and recovery rates across credit ratings and industries. Our model takes into account the impact of rating upgrades and downgrades (credit migration) on credit bond prices.

For currency valuation-implied returns, the currency return is our forecast of the change in the spot exchange rate. In general, for any asset not denominated in the reference currency, the valuation-implied return of the asset is based on the expected return in local currency plus the expected currency return. The currency valuation-implied return has two main components: 1) the inflation differential between the local currency and the reference currency, and 2) the reversion of real exchange rate to its fair value. The inflation differential is the difference between the expected inflation rate of the local and reference currencies, where the inflation forecast is based on the same methodology as the one discussed in the equity section above. In the very long run (i.e., at the unconditional horizon), we expect the inflation differential to be the sole driver of changes in the spot rate. The change in the real exchange rate is estimated based on multiple deflators (including CPI and PPI) to account for potential differences in the importance of the tradable versus non-tradable sector in a given economy. These price-based measures of real exchange rates are adjusted for differences in export quality and productivity differentials, accounting for potential differences in the value of goods not reflected in the price indexes. The expected change in the real exchange rate is generally based on the assumption that the real exchange rate will revert to a long-run average.

#### *Risk Tolerance Questionnaire*

A risk tolerance questionnaire is a tool designed to measure an investor's self-reported perceptions of their general willingness and ability to withstand the volatility inherent in investing in capital markets. Our measure is based on three self-reported factors: (1) time horizon, (2) feelings about the trade-offs between expected returns and expected volatility, and (3) beliefs about the investor's anticipated emotional reactions to changes in their portfolio's value, in particular drawdowns. Using a unit weighted sum of the responses to the questions within this questionnaire, two overall scores are generated. The first is a score in regard to the investor's time horizon, which serves as a proxy

for the investor's ability or capacity to take on risk. The second score reflects an investor's overall risk preferences. These two scores can be used independently, and/or they can be systematically mapped to a spectrum of risk tolerance profiles ranging from conservative to aggressive. The spectrum of risk tolerance profiles and scores can be represented as distinct profiles, such as Very Conservative, Conservative, Moderately Conservative, Moderate, Moderately Aggressive, and Very Aggressive.

Ultimately, the investor and/or their financial professional has the final decision in determining the investor's portfolio, which may differ from the risk tolerance profile or scores and be based on additional information not captured by the risk tolerance questionnaire. Our risk tolerance questionnaire is a measurement tool for helping a financial professional discover information about the investor's time horizon, risk and return preferences, and their anticipated responses to volatility. This information can—and should—help initiate and facilitate conversations that assist the financial professional in gaining a broader understanding of the investor's financial situation, including additional information about an investor's assets, anticipated cash-flows, needs, goals, and other relevant information. Based on this more complete understanding of the investor, financial professional should be able to develop a suitable investment strategy. Risk tolerance questionnaire scores alone should not be the predominant indicator used to match an investor to a portfolio or investment products.

Although the risk tolerance questionnaire scoring process is objective, subjectivity cannot be completely eliminated when using such measurement tools. For example, some investors may struggle to understand the questions or may not have clearly defined risk preferences. There is no guarantee that this risk tolerance assessment tool or its scoring method perfectly assesses a person's tolerance to risk or attitudes about gains and losses. In addition, although the financial professional may have directly or indirectly used the results of a risk tolerance questionnaire to inform a suggested asset allocation, there is no guarantee that the resulting asset mix appropriately reflects an investor's ability to withstand investment risk.

#### **Investment Analytics, Monitoring, and Comparative Analysis Reports**

For Institutional Clients that request investment analytics, monitoring, or comparative analysis reports, we begin the process by defining the scope of the report(s) in consultation with the Institutional Client. During this phase, various items are determined including, but not limited to, the universe of investments or asset classes from which we are to work from, the number of investments, the intended user(s) of the report(s), the type of display for the report(s), and the data points or written analysis to be included. If the Institutional Client requests ongoing monitoring of a universe of investments, we will determine how often report(s) are to be generated. We then utilize our resources to create the requested reports. Our reporting services typically are one-time projects in which we do not provide ongoing reviews or updates.

#### ***Morningstar Retirement<sup>SM</sup>* Custom Model Portfolios**

For our Custom Model Portfolios service, the portfolios we build for an Institutional Client are typically constrained to a universe of investment options defined by our client, which include their affiliated investment products in certain situations. Our analysis will include quantitative analytics and fundamental research on the investment options available. We draw on Morningstar's comprehensive database of fund and security analytics as well as utilizing portfolio information provided by our Institutional Client, if applicable.

We believe that asset allocation policy is one of the most important determinants of a portfolio's risk and return characteristics over time. When constructing a model portfolio, we believe it is critical to take advantage of potential diversification benefits over the long run. The primary objective of our investment selection process is to find the best combination of investment options that will maximize alpha (excess return above a benchmark) for any given level of tracking error (risk/standard deviation of the alpha), while hitting the appropriate target asset allocation.

We use a five-step investment process that relies on a number of complex optimization routines to find the right mix of asset classes and managers to meet our objective. We use the following five-step process to construct an investment portfolio for our custom models:

#### *Step 1: Develop Asset Class Inputs*

Asset class performance expectations are critical in developing a diversified portfolio that aims to help meet an individual's retirement income goal. We forecast expected risk and returns for each asset class we are considering. To do that, we gather and analyze a broad range of data points, including historical data, current market information, and the correlations between asset classes. More details on this step are provided above, in the Capital Market Assumptions section.

We use historical data for these benchmarks/proxies in an attempt to forecast the expected return, standard deviation, and cross-correlation of the asset classes. We use several statistical techniques to extend the returns data for all domestic equity asset classes back to 1926. Fixed income and non-U.S. equity asset classes go back to 1970, due to significant structural changes in the fixed income market that made the interest rate environment since 1970 inherently different from previous periods. We then use a "building-blocks" approach to help derive expected returns for asset classes. The return building blocks are based on forward-looking assumptions about an asset's underlying economic and corporate fundamentals. We use historical data to help forecast standard deviation. Since most data series only extend back to the 1970s, we use the ratio method to extend the standard deviation estimates of the shorter-lived asset class benchmarks so that they incorporate relevant economic events. The ratio method attempts to extend the standard deviation estimate for certain asset class benchmarks using a short benchmark (an asset class benchmark that does not have historical data over the full, relevant time period starting from 1926 for domestic equities and 1970 for fixed income and non-U.S. equities) and a long proxy (an index that has historical data over the full, relevant time period and is economically similar to the short benchmark). The ratio method leads to an estimate of what the standard deviation of the short benchmark would have been had it existed over the full, relevant period.

We use correlation coefficients derived from the historical returns of the asset class benchmarks, going back from 1970 to the present. Correlation coefficients must be extended for series that do not have history for the full relevant period. In an attempt to create this history, we use a sophisticated statistical process that extends asset class benchmarks that do not have complete data histories but do have a relatively high correlation coefficient with another proxy (or benchmark). This estimate is an approximation of what the correlation coefficient between the two series might have been if both had existed over the longer time period.

#### *Step 2: Create Asset Allocation Models*

Once we've identified the available data, we process the data using a series of optimization routines. These optimization routines serve as a blueprint for how we combine the asset classes to help achieve an optimal portfolio for a

given level of risk. We take the additional step of testing the asset class models under a wide range of market conditions and then adjust them based on their performance. This helps us build a portfolio that is better aligned with investor expectations. Our model portfolios include both equity and non-equity asset classes that are chosen to represent a broad range of investment categories available in a plan sponsor's retirement plan menu.

Our asset allocation process requires that there be significant benefit (generally through increased diversification) to adding the asset class to the model portfolios. In addition, investment options within the investment/plan menus must provide significant exposure to the desired asset class in order to be selected. The asset classes that are ultimately used will depend on the available investment options that are considered for the construction of the fund-level model portfolios. In other words, we will only recommend asset classes that can be fulfilled by an investment option or combination of investment options within the plan.

This also applies to optional specialty asset classes such as emerging markets equity, real estate, direct real estate, TIPS, high-yield bonds and foreign bonds. In order to be considered in the investment option-level portfolios, an optional asset class must have an available investment option, which exhibits sufficient exposure to its specialty asset class.

The foundation of our asset class model portfolio construction is mean-variance optimization (MVO); a mathematical process for calculating the asset class mix that can provide a portfolio with the maximum expected return for any given level of risk. Conversely, the portfolio may also provide the minimum risk for any given expected return. MVO requires three inputs for each asset class: expected returns, expected standard deviations, and expected cross-asset class correlations.

Although the conceptual foundation of MVO is considered to be solid and its use has greatly enhanced the portfolio management process, it can produce portfolios that are not suitable for real-life application. This is primarily because the inputs are statistical estimates (created by analyzing current and historical data), and therefore are subject to estimation error. As a result, MVO can result in over-allocation in some asset classes and under-allocation in others, along with frequent shifts between asset classes.

We use a variety of methods to minimize the effects of various MVO shortcomings by applying practical considerations to the results and constraining certain allocations to limit the amount of over-weighting or underweighting to certain asset classes.

In addition, we employ a statistical technique called "resampling", which combines MVO and a Monte Carlo simulation. Monte Carlo simulation generates thousands of variations of the original MVO inputs. By incorporating multiple possible scenarios for asset class performance, resampling considers a wider range of outcomes and can create more diversified portfolios, which are less sensitive to imperfections in performance forecasts. We also conduct sensitivity analysis to ensure that the portfolio recommendations are consistent under a variety of market scenarios.

#### *Step 3: Analyze Investment Options*

Investment screening is particularly important when working with investment menus that have many options for an investment option-level model portfolio from which to choose. Once we've built the asset allocation targets for the portfolio, we determine which investment options from the lineup to use to meet our asset class targets and our standards for quality. Our selection process relies on both quantitative and qualitative measures. The selection

criteria we use to narrow the available universe include manager experience, performance record, manager history, alpha, style consistency, fund type, and fund fees. Here is an overview of the some of the key steps:

Investment options with less than 36 months of history for actively managed funds and 12 months of history for index funds, sector funds; target-date funds; and risk-based funds will not be recommended.

Once investment options pass the initial screening, we then peer group all remaining funds for further analysis. The peer grouping process begins by evaluating investments based on their Morningstar Category (if available). Returns Based Style Analysis ("RBSA"), which looks at the "behavior" of an investment option rather than its actual holdings, is used to determine the appropriate category, because it takes a longer-term view of an investment option's style and consistency, which is important for peer grouping. The category is validated through a series of regression analyses against sets of benchmark returns. The Morningstar Category determines which set of benchmarks is used in the initial regression. Based on this initial regression result, R-square, and benchmark exposures, the investment option may be sent for further regression analysis to better determine the appropriate peer group. If the R-square of the final regression is greater than or equal to 65, then the peer group is assigned. If through all sets of regression analysis, the investment option does not achieve an R-square of 65 or greater, then the investment option is unclassified and may not be used.

If an investment option is not a public fund or does not have a Morningstar Category, the same process is followed, but the initial set of benchmarks used in the regression analyses is a general set. Again, the investment option goes through a series of regression tests to determine the best peer group fit.

One of the quantitative inputs we use when constructing fund-level portfolios is a proprietary measurement known as forward-looking alpha ("FLA"). This measure helps us identify managers that we believe will add alpha and help drive the long-term positive performance of their portfolios.

FLA uses historical data to forecast how well an investment option is likely to perform in the near-term future. Unlike traditional methods of calculating alpha, FLA is based on alpha over two time periods (12 months and 60 months), and rewards managers for consistent performance over both the short and long term. By using these two time periods, we believe that they are better able to predict how a manager might perform in the future.

From the investment options that pass all of the prior screening criteria above, we will form a "main" list, and ultimately a "select" list of the funds that are included in the final fund optimization process. However, arriving at the select list is a two-tiered screening process. To form the main list, index funds are ranked by their tracking error. The top two funds in each peer group (with the lowest tracking error) form the main list. When there aren't enough index funds available, the actively managed fund with the lowest tracking error is chosen instead. The two index funds on the main list are then ranked by expense ratio, and the one with the lowest expense ratio is included in the select list. Actively managed funds are evaluated based on their information ratio and FLA. The three funds in each peer group with the highest information ratio and FLA form the main list. Active funds are then ranked on R-square relative to a single peer-group primary benchmark, the number of years the fund outperformed its customized benchmark from the RBSA results over the past five years, and a customized consistency score from the RBSA results. One fund from the "highest information ratio" main list and one fund from the "highest FLA" main list, each with the highest average score, form the select list.

In addition to using the above quantitative steps based, we may also consider qualitative measures such as an investment option's holdings, style changes, style drift over time, manager changes, and SEC actions. These qualitative steps are mainly used when the quantitative results are questionable due to low statistical significance, quantitative results differing from expectations, or simply to ensure that the quantitative techniques are accurate. For example, this analysis may help confirm the peer group and style analysis, confirm that the processes in place that generated past returns are still relevant, and gives us an opportunity to apply human judgment to the process.

#### *Step 4: Construct the Portfolio*

Once we determine the asset class models and which funds from the plan's lineup will be included in the portfolio, our portfolio construction team then determines what combination of these funds will help us reach our asset class weights. The team also considers the combination of funds that we think will help drive the portfolio's performance in the future.

Using the select list, we construct the fund-level model portfolios using a proprietary alpha-tracking error optimization process. The primary objective is to find the best combination of investment options (for each of seven risk levels) that will maximize the FLA for any given level of tracking error, while hitting the asset class allocation targets.

This alpha-tracking error optimization is similar to MVO described earlier. MVO is conducted using as inputs the expected return, standard deviation, and correlations of the asset class returns. The alpha-tracking error optimization, however, is conducted using the FLA and tracking errors of each investment option. The asset class exposures of the available investment options are determined using HBSA.

HBSA calculates the exposure of a fund based on the characteristics of each of its underlying securities. The most recent portfolio available in our database is used for this analysis. In addition, there are certain tolerances, constraints, and maximum fund allocations.

The alpha-tracking error frontier offers an entire spectrum of efficient allocations among all funds for the target asset allocation. We select the appropriate portfolio based on multiple iterations of evaluating possible outcomes, starting with a higher emphasis on alpha (i.e., portfolios with higher excess returns). If the portfolio is found to be outside these tolerances, the emphasis on alpha is lowered and a new set of portfolios is generated for evaluation.

The final step is to generate portfolios that place all the emphasis on the tracking error, to help ensure the asset allocation targets are met. If at this point the portfolios generated are not within the tolerances set, including hitting the asset allocation targets, then the investment menu would not qualify for our advice services. This multiple iterative process helps ensure that for each portfolio the investment options chosen maximize the potential portfolio alpha within the tolerances for tracking error while hitting the asset allocation targets.

We first attempt to build fund-level portfolios at the highest level of complexity/granularity. The large-, mid-, and small-cap asset classes are split into growth and value; aggregate bonds are split into long- and short-term bonds. If we are unable to hit the asset class targets at the highest complexity, then a second attempt is made at a lower complexity. The process continues until the asset class targets are met (within the tolerances), while minimizing tracking error and maximizing alpha. If an

investment menu fails at all of the asset class complexities, we will not be able to construct fund-level portfolios.

#### *Step 5: Monitor the Portfolio*

Once the portfolio is constructed, we will monitor and re-evaluate the investments on an ongoing basis to ensure it is still aligned with asset allocation targets and diversification objectives.

When a new fund is added to an investment menu, we reevaluate the new investment mix and determines if new asset class and fund-level model portfolios are necessary. When a fund that is used in a portfolio is dropped from a plan menu or closes, the plan's portfolios will be immediately rebalanced, as it would not be possible to implement the existing fund-level portfolios.

We monitor fund lineups on a quarterly basis to determine if changes are needed. We review and rebalance the fund-level portfolios quarterly. We've established a range of  $\pm 5\%$  based on the most recently delivered fund-level allocations to prevent large fluctuations in investment option allocations from quarter to quarter. If a more attractive alternative is present, an investment option will be phased out over time rather than in one quarter, to minimize large portfolio reallocations on a quarterly basis. This approach also helps to minimize short-term redemption fees to investors, should they exist. All asset class model portfolios are updated annually, as we review and update the MVO inputs (expected returns, standard deviations, and cross-correlation).

#### *Glide Path Construction*

Our approach to constructing the glide path is based on a significant number of assumptions.

At a high level, our approach to determining the glide path is based on using the financial assets (i.e., the 401k plan balance) as a "completion portfolio" that is optimized based on the other assets owned by the investor and the risk attributes of those assets (a concept referred to as background risk). Determining the glide path effectively means determining the appropriate stock/bond split for different participants, a process we generally refer to as "portfolio assignment". Our approach towards portfolio assignment considers an individual's total wealth, of which human capital is a dominate asset for younger individuals.

When building a glide path, we determine the optimal allocation for each participant individually, and then aggregate the individual allocations into an aggregate cohort portfolio (e.g., into a 2040 Target Date portfolio). These cohort portfolios can then be viewed in combination to form the glide path. The actual portfolio selected to represent a given cohort can be based on a number of different factors, and it is possible for us to create different glide paths for different groups of employees (e.g., hourly versus salary, union versus non-union). This enables to determine the relative difference for different employee groups and cohorts. It is worth noting that our glide path approach is not static, and the actual portfolios will change over time based on the risk characteristics of the defined contribution plan participants in that cohort.

### **Fiduciary Services**

#### *Investment Selection for Investment Lineups*

For our Fiduciary Services, the lineups we build for an Institutional Client are typically constrained to a universe of investment options (typically a subset of the entire universe of investment options publicly available for purchase by investors) defined by our client, which include their affiliated investment

products in certain situations. We have no ability to choose the investment options that are made available under our Institutional Client's products and contracts and may have more favorable opinions of certain investment options which are not included in the defined universe of investment options. Our analysis includes quantitative analytics and fundamental research on the investment options available, holdings-based style analysis to determine an investment's style over time. We draw on Morningstar's comprehensive database of fund and security analytics as well as utilizing portfolio information provided by our Institutional Client, if applicable.

When analyzing investment options or managers for use in a lineup, our goal is to determine their true investment style, identify what we believe to be best-in-class managers, and identify the factors contributing to their performance and risk characteristics with the aim of assessing whether their performance appears to be sustainable over time.

We start with a propriety peer grouping analysis using the available investment options. Once investment options have been placed into their appropriate peer groups, our methodology begins with a quantitative review process. First, we apply a series of screens designed to flag funds that exhibit characteristics that are apt to hinder long-term performance in order to efficiently filter a large universe of investment options to focus our efforts on a more manageable opportunity set. Second, we use a multitude of statistics to begin to assess the overall quality of an investment option. We gather current and historical data points to evaluate investment style, structure, and performance and consider key factors that include fees, management tenure, style consistency, alpha, volatility, fund size, asset class exposure, and holdings concentration.

We conduct further style analyses on managers that pass our initial screens to identify nuances of their strategies. Just as important as selecting qualified managers is determining how well an investment option will fit with other investments in the lineup. We want each investment to fill a distinct stylistic role within a plan lineup, so we carefully assess how it can be expected to complement other options we are recommending in adjacent styles. In general, we want to have a number of strategies investing in a specific space while employing different investment approaches.

To accomplish this, we rely largely on a holdings-based style analysis to build a picture of an investment option's style positioning based on its underlying holdings. This means drilling down to examine the asset class exposure within the investment option. We evaluate overall diversification to ensure that the investment option is not exposed to undue security or sector specific risk. The goal is to provide a selection of investments that are likely to meet their investment mandate, but also to provide options that differ in their pursuit of that objective.

After an extensive quantitative review, we review an investment from a qualitative perspective. The purpose here is to allow our investment professionals to gain conviction in their investment thesis by developing a firm fundamental understanding of the strategy. Our professionals draw from their extensive experience in evaluating investment managers to analyze the people and process behind the investment. In doing so, our goal is to anticipate how an investment option is likely to be positioned in the future, which helps us build expectations of performance and capability of consistently playing a specific portfolio role.

In our fundamental assessment, we review a number of characteristics of the investment option and its manager that could be relevant to how well it can fill the role for which it is being considered. Those include reviewing the

manager's performance and risk record against his or her peers in the same style—not just at the manager's current fund but also any other investment vehicles they've managed in the past. We analyze the subtleties of the manager's investment process to understand what drives performance. We observe which types of markets the investment option fares best in and which types are trouble for its style. We also determine what it is about their style that explains the performance pattern.

We assess whether a manager's investment process leads to a more aggressive or more conservative performance profile relative to its style peers, and how a manager's process might lead to persistent over- or underweights in certain sectors. We also assess how performance, both absolute and relative to a peer group, has changed as a manager's assets have grown.

We use many factors to evaluate funds depending on the specific situation and the questions we are trying to answer including investment sub-style, manager skill, impact of asset growth on performance, sources of investment ideas, investment decision-making process, actions in previous market environments, manager ownership, process repeatability, and performance attribution.

Our qualitative assessment of a fund will draw on Morningstar's forward-looking Morningstar Medalist Rating™, when available, for additional perspective in evaluating factors such as those noted above.

#### *Lineup Design and Construction*

The area of behavioral finance has shown that investors don't always behave rationally and that the manner in which a problem is posed can impact individual actions. We are mindful of simple heuristics employed by participants in making investment-related decisions and design lineups that attempt to drive better action on the part of investors. When constructing a lineup, we consider issues around choice overload, naïve allocations, and loss aversion. We strive to select investments to fill a distinct stylistic role within a lineup, and carefully assess how each investment can be expected to fit with other investments. We strive to choose funds that are clearly different from one another, rather than similar or redundant. The goal is to establish a specific role for each investment option in the lineup that minimizes holdings overlap and maximizes diversification.

#### *Managing Lineups*

We formally review investment options in our investment lineups quarterly. The majority of our watch-list notifications (a notice to indicate an investment option is under extra scrutiny due to factors such as performance, risk, straying from its stated investment style, or management changes) and approval changes occur on a regular quarterly schedule. However, we are always monitoring our approved investment options and if something occurs intra-quarter that we believe merits immediate action, we will take action outside of the normal review schedule.

When an investment option is removed by one of our investment professionals, a memo to the plan is produced outlining the rationale for such a decision, and for Institutional Clients of our 3(21) services, a timeframe is typically noted for a plan to make a particular change. If the plan opts out of the replacement investment option or fails to choose a replacement investment option from the approved list of investment options, the plan is terminated from the service. A negative consent process for changes can also be implemented wherein an investment option change is automatically implemented if the plan does not take any action within a specified window of time. For Institutional Clients of our 3(38) services, we will direct the plan's provider to implement the change as detailed in the memo.

For Institutional Clients utilizing our Fiduciary Services website, notices are sent to the plan sponsor via the website portal. For those Institutional Clients who opt to own communications to plan sponsors, they are responsible for creating their own notifications, but we will provide memos outlining our rationale for any change decision.

### **Managed Accounts, Advice, and Guidance**

#### *Investment Process*

In providing Managed Accounts and Advice, we start with the five-step investment process detailed above in the Custom Model Portfolios section to build model portfolios. In providing Guidance, we use the first two steps of the investment process described above in the Custom Model Portfolio section to create an asset allocation model. Data incorporated in the recommendations include the plan's or product's investment lineup and for retirement plans, plan design requirements such as plan limits and matching formulas.

For these services, the portfolios we build are typically constrained to a universe of investment options defined by our Institutional Client, which include their or Sub-Adviser's affiliated investment products in certain situations. Our analysis will still include quantitative analytics and fundamental research on the investment options available. We draw on Morningstar's comprehensive database of fund and security analytics as well as utilizing portfolios information provided by our Institutional Client, if applicable.

We use a combination of model portfolios and customization as part of a larger portfolio construction and fund implementation process. For Managed Accounts and Advice, we generate hundreds of unique model portfolios (ranging from conservative to aggressive) for each retirement plan or product using a customized approach to blending traditional asset allocation models with liability-driven investing and decumulation strategies. Which asset classes and sub-asset classes are used to build these model portfolios is dependent on the specific investment lineup for each retirement plan or product. We always try to build the model portfolios with the greatest number of sub-asset classes, but this is contingent on whether the investment options available can fulfill each asset class.

Each retirement investor that receives investment advice as part of Managed Accounts or Advice is assigned into one of up to 589 model portfolios for the account we advise on ("retirement account"). The large number of model portfolios is to address the personalization that is needed by retirement investors. These model portfolios account for not only varying equity/fixed-income allocations but also how close the individual is to retirement. As the individual nears retirement, the sub-asset allocation changes to reflect a liability-driven investment overlay used in the model portfolios for a participant near or in retirement. Any change within the model portfolios is reflected at the individual level as soon as the retirement investor is reevaluated each quarter.

In creating recommendations, we believe that the more information the retirement investor provides to us, the better the investment strategy we are able to deliver. We collect information the plan provider, plan sponsor, or other service provider is able to provide to us, which is pre-populated into the user interface. The retirement investor is prompted to provide any additional data that wasn't available from other sources. After collecting those key pieces of data, the user is presented with an initial strategy as a starting point. The retirement investor can model many scenarios by changing variables such as retirement age, desired retirement income, and savings rate. We will dynamically update the retirement investor's retirement strategy to reflect



any changes made. The retirement investor is also encouraged to enter, and/or use an account aggregator to enter, additional information for savings earmarked for retirement such as out-of-plan assets or benefits for themselves or their spouse/partner ("outside assets") in order to further personalize the recommendations. They can provide detail regarding the investments or select from one of the pre-defined investment styles. We do not provide investment specific advice on outside assets but provide an asset allocation recommendation for outside assets as a whole and will take those into consideration when determining the investment strategy for the retirement account. The portfolio recommendation for the retirement account will take into consideration the amount of advisable retirement account relative to outside assets as well as the equity/fixed composition of those outside assets.

We start with all of the available retirement investor-specific data and then makes assumptions about certain pieces of information. A retirement investor can review and refine some of these assumed data points through the user interface. These assumptions can have a significant impact on the strategies we will create for them and are related to social security income, salary growth, retirement age, inflation rates, estimated taxes, retirement income goal, and risk capacity. We combine this information with other factors into a proprietary software program that can provide investment recommendations and a projection of different outcomes. Using this model, we develop an investment strategy tailored to each retirement investor's investment goals.

For those retirement investors that are accumulating for retirement, our investment strategy is generally based on information such as their retirement account balance, expected retirement age, contribution rate and other preferences. If a retirement investor has already retired, and our Institutional Client makes available our In-Retirement services, our strategy is based on information such as their current account balance, additional cash flows and life expectancy. This retirement strategy may include some or all of the following:

*Retirement Income Goal (accumulation phase).* We define the retirement income goal as the projected amount of money that the retirement investor will need during retirement. We calculate this amount based on current income, adjusted to reflect the estimated dollar value at retirement age. Typically, we use an amount equal to 100% of take-home pay, however, some plan or service providers request we use a different rate. We then project the value of that amount at retirement age to determine the retirement income goal. A retirement investor using our user interface has the option to change this projected retirement income amount.

*Income Outlook (accumulation phase).* We define the income outlook as a projection of the annual income that the retirement investor may receive during retirement. We base this on an annualized view of the investment wealth accumulated, combined with social security benefits and any pension or other income the retirement investor might receive.

*Total Retirement Income (in-retirement phase).* For those plans that offer our In-Retirement service, we define total retirement income as the projected amount of money, typically at some level of probability that the retirement investor can expect to receive on an annual basis in order to maintain income throughout retirement.

For our Advice services, many of our Institutional Clients offer a similar experience to retirement investors either through our user interface or their proprietary user interface.

We believe in long-term strategic asset allocation based on an individual's risk capacity. Changes in an investor's financial situation, such as the addition of outside retirement accounts, pension benefits, or contribution rates, can result in a change to their model portfolio assignment. In addition, changes to their personal situation, such as the addition of a spouse or partner or a different retirement age, could also impact the model portfolio assignment. For Managed Accounts, we will typically review portfolios on a quarterly basis to determine if market shifts require a rebalancing of the portfolio. Retirement investor wealth re-forecasting occurs on an annual basis for our Managed Accounts service. For Advice, we encourage retirement investors to re-enter our user interface on a periodic or as-needed basis, in order to review their information and receive an updated strategy. At a minimum, we recommend that a retirement investor's portfolio is rebalanced on an annual basis. At this point, the retirement investor is one year closer to retirement, and we will shift them along their glide path.

Our projections are provided based upon an investor's personal financial situation using our total wealth approach and an optional risk tolerance questionnaire. We use MVO, resampling the mean-variance outputs using a Monte Carlo simulation, and our process incorporates liability-relative optimization. We solve for a specific probability of success when determining the sustainable retirement income. The Monte Carlo simulation uses our long-term capital market assumptions when projecting the future returns for the various asset classes. For risk capacity, we use the FinaMetrica risk profiling methodology, which is built using 'psychometrics', a combination of psychology and statistics. The retirement investor's result will be a score ranging from 0 (very low risk group) to 100 (very high risk group). This score accounts for a 20% weighting in our target equity determination for the retirement investor's investment strategy, with the other 80% weighting coming from our total wealth determination.

Approximately 20,000 cases are used to routinely test engine functionality to help ensure our recommendations are in line with our expectations. The test data consists of real retirement investor information as well as generated cases, and covers a gamut of possible ages, balances, salaries, and other optional data points. Running these cases and analyzing the results help ensure we are confident in the advice we provide participants.

#### *Key Assumptions*

**Social Security** - We can incorporate Social Security for both the retirement investor and their spouse. This can be calculated using an estimate based on calculations/formulas from the Social Security Administration or input by the participant. To calculate the estimate, a participant/spouse must have 35 years of contributions. If the participant/spouse has more than 35 years of service remaining, all projections are forward-looking. If the participant/spouse has fewer than 35 years of service remaining, the difference in contributions is back-calculated. Social Security payments are inflated using a simulated cost-of-living allowance designed to replicate the actual Social Security Administration formulas and are applied at the maximum benefit age as defined by the Social Security Administration. Participants can override the estimate by including information from their Social Security statement. In addition to standard payments, we account for reduction in payments while working in retirement, increases in benefits for the spouse 50% rule and increased benefits for the surviving spouse 100% rule. The program assumes the participant/spouse completes all applications required to collect the maximum benefit. We treat Social Security as similar to income from fixed-income investments. We also take Social Security into consideration while analyzing income replacement. We default to the age at which the participant will receive full benefits from the Social Security

Administration. Participants can adjust the benefit amount and start age if desired, however, the start age must be between the ages of 62 and 70.

**Salary Growth** - To estimate future salary, we use a salary growth curve based on academic research rather than assuming a single, fixed growth rate. This curve takes into account the fact that salaries tend to grow most rapidly for young employees, peak around age 51, and then slightly decline later in life.

**Retirement Age** - We assume a default retirement age of 67, or the participant's current age plus one year if they are older than 67. Participants have the option to change this to a different retirement age.

**Income Projections** - A participant's income projection is the level of annual income we project the participant has at least a 70% chance of achieving and is calculated for both the participant's current strategy and our proposed strategy. We use forecasts for investment returns, portfolio risk, and correlation for each of the 12 asset classes and an average expense ratio for each asset class to estimate investment fees. The projections consider different scenarios for life span, based on standard published mortality tables (based on the Society of Actuaries Individual Annuity Mortality (IAM) table). We assume that the participant's risk capacity (and corresponding asset allocation) will change over time, generally growing more conservative as they approach retirement, and that their savings rate will not change.

**Estimated Tax** - We estimate federal and state income, and capital gains taxes based on marginal tax rate calculations. Tax data is updated annually based on U.S. Internal Revenue Code (IRC) and similar state tax data. We use income data for the participant, as well as for a spouse/partner, to estimate federal and state tax exposure. Tax exposure is appropriately reduced for pretax deferrals, tax-deferred capital gains, and yield and distribution of Roth proceeds. Based on the information we know about the participant, we provide an estimate of tax exposure, but may not include all tax considerations.

**Inflation Assumptions** - When projecting the growth of various income sources and expenses, we use a variety of different inflation rates. These rates are reviewed and updated annually by our research team. Different inflation rates are used for different projections and major expenses. We believe that our multifaceted approach to calculating inflation results in more realistic and more accurate projections compared with using one set rate.

**IRS Limitations and Application of Penalties** - We incorporate all IRS contribution limits, eligibility requirements, and withdrawal penalties into the retirement strategies.

**Brokerage Accounts** - Some plan sponsors allow retirement investors to maintain a brokerage account within their retirement plan. If allowed this option, the retirement investor will be responsible for managing and monitoring those assets. We do not manage brokerage account assets; however, if the retirement investor provides us with detailed information on the holdings within the brokerage account, our methodology will consider these holdings in developing an appropriate investment strategy for their retirement account. If the retirement investor does not provide detailed information, our methodology will assume that the balance in the brokerage account is 45% stocks and 55% fixed income.

Our Advisor Managed Accounts methodology is the same as our Managed Accounts and Advice methodology described above, except that we do not use our Custom Model Portfolios investment process to build the model portfolios. The model portfolios are built by our Institutional Client; with the

exception of Sub-Advisers, we do not review their portfolios, nor do we have the ability to make any changes to those portfolios. If applicable under Advisor Managed Accounts, the plan sponsor or product provider is responsible for choosing the Sub-Adviser. However, we must agree to engage and are responsible for ongoing monitoring of the Sub-Adviser. In making portfolio recommendations, we are limited to those portfolios created by the Sub-Adviser but have discretion to reject or edit those portfolios if we feel necessary. The model portfolios created by a Sub-Adviser will typically consist of associated investment products in which they receive compensation based on the amount of assets invested. These investment products generally must be added to the retirement plan or product lineup by the plan sponsor or product provider. You should be aware that the use of affiliated investment products gives the Sub-Adviser an incentive to build model portfolios using those investments.

#### *Enrollment*

Plan and product providers have the option to make one or more websites available to retirement investors for enrollment in Managed Accounts. You should be aware that the streamlined version of our enrollment process does not consider all information relevant to a retirement investor's financial situation, including some of the information discussed in this section. (The streamlined process takes into account age, retirement plan or product type, and the balance, investment allocation, and contributions for their retirement account as provided by the retirement plan or product provider.) Retirement investors can access our full enrollment process at any time by logging into the Morningstar® Retirement Manager<sup>SM</sup> platform through their Plan or product provider's website. The full enrollment process allows retirement investors to provide us with additional information about their retirement situation and goals so that we can further customize their retirement strategy. If the retirement investor has additional retirement assets outside their retirement account, have a spouse or partner they'd like us to consider, want to restrict certain securities from being used in their retirement account, or want to change suggestions made in the streamlined enrollment process (i.e., savings rate), or if they want to see how changes would impact their retirement strategy, we encourage them to use our full enrollment process instead of the streamlined process.

#### *Personalized Target-Date Fund Service*

With the Personalized Target-Date Fund Service, we start with a basic set of retirement investor inputs to generate a personalized asset allocation target. This target is then fulfilled by allocating to target-date funds available within the retirement investor's retirement plan or product lineup. Our choice of funds is constrained to the universe of our Institutional Client's affiliated target-date funds.

#### **Risk of Loss and Strategy Risk**

Investments in securities are subject to market risk, risk of loss, and other risks and will not always be profitable. There is no assurance or guarantee that the intended investment objectives of our recommendations will be received. We do not represent or guarantee that our investment recommendations can or will predict future results, will successfully identify market highs or lows, or will result in a profit or protect clients from loss. Past performance of a security may or may not be sustained in the future and is no indication of future performance. A security's 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. We are unable to predict or forecast market fluctuations or other uncertainties that may affect the value of any investment.

Asset allocation and diversification are investment strategies which spread assets across various investment types for long-term investing. However, as with all investment strategies, these strategies do not ensure a profit and do not guarantee against losses.

Capital market assumptions are forecasts which involve known and unknown risks, uncertainties, and other factors which may cause the actual results to differ materially and/or substantially from any future results, performance, or achievements expressed or implied by those projections for any reason. Past performance does not guarantee future results.

Income projections used in our Guidance, Advice, and Managed Account services are based on hypothetical performance data and do not represent actual or guaranteed results. Projections may vary over time and with each use of our service.

Our recommendations are made without taking into consideration potential tax consequences and we do not provide tax advice. Potential tax consequences may exist. We encourage you to consult with a tax professional about these and other tax consequences.

### Information Sources

Our global resources used in the formulation of our advisory services go down to our roots—the data and analysis from Morningstar that form the base of our investment process. This expansive, in-house network of global data and investment analysis spans asset classes and regions to help drive timely new ideas. Morningstar or its affiliates have more than 700 analysts and make data available on more than 600,000 investment options. The extensive data, analysis, and methodologies from these resources, along with external research reports, data, and interviews with investment managers are combined with financial publications, annual reports, prospectuses, press releases, and SEC filings to serve as the basis of our primary sources of information.

For some of our services, we combine this information with other factors—including actuarial data, stock market exposure, probability analysis, and mean-variance optimization—into a proprietary software program to analyze a complex set of market data and variables that results in an advanced model that can provide investment recommendations and a projection of different outcomes.

### Security Type Risks

#### *Mutual Funds*

Investments in mutual funds involve risk, including loss of principal as a result of changing market and economic conditions and will not always be profitable.

#### *Money Market Funds*

A money market fund may impose a fee upon the sale of shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below a required minimum because of market conditions or other factors. An investment in a money-market vehicle is not insured or guaranteed by the Federal Deposit Insurance Corporation ("FDIC") or any other government agency. For most money market funds, their sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time. Although some money market funds seek to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. It is possible to lose money by investing in money market funds.

#### *Stable Value Funds and Guaranteed Investment Contracts ("GICs")*

The interest rate on a stable value fund or GIC is typically only guaranteed for a certain amount of time and may vary with changing market conditions. Withdrawal fees or penalties, sometimes substantial, may be charged if you decided to move money out of a stable value fund or GIC. Stable value funds and GICs are less likely to provide long-term protection against inflation, as compared to other options.

#### *Exchange-traded Funds*

ETFs, like all investments, carry certain risks that may adversely affect their net asset value, market price, and/or performance. An ETF's net asset value (NAV) will fluctuate in response to market activity. Because ETFs are traded throughout the day and the price is determined by market forces, the market price you pay for an ETF may be more or less than the NAV. Because ETFs are not actively managed, their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to not match the performance of its underlying index. Like other concentrated investments, an ETF with concentrated holdings may be more vulnerable to specific economic, political, or regulatory events than an ETF that mirrors the general U.S. market.

#### *Annuities*

An annuity is a tax-deferred investment structured to convert a sum of money into a series of payments over time. Annuity contracts have limitations and are not viewed as short-term liquid investments. An insurance company's fulfillment of a commitment to pay a death or living benefit, a schedule of payments, a fixed investment amount guaranteed by the insurance company, or another form of guarantee depends on the claims-paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount(s). The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount(s). The insurance company offering an annuity will charge several fees to investors, including annual contract charges that compensate the insurance company for the cost of maintaining and administering the annuity contract, mortality and expense risk charges based on a percentage of a subaccount's assets to cover costs associated with mortality and expense risk, and administration fees that are based on a percentage of a subaccount's assets to cover the costs involved in offering and administering the subaccount. An annuity investor can also be charged a front-end load by the insurance company on their initial contribution, ongoing fees related to the management of the fund, and surrender charges (which can be substantial) if the investor makes a withdrawal prior to a specified time. If the annuity subaccount is invested in a money-market fund, the money market fund is not FDIC-insured, may lose money, and is not guaranteed by a bank or other financial institution. Annuities can be complicated, and an investor should carefully read the insurance company's offering material to understand how a specific annuity's return will be determined.

Variable Annuities have a rate of return that varies with underlying investment options in the market, and do not include a guarantee from the insurance company that you will earn a return.

Fixed annuities have a predetermined rate of return an investor earns and a fixed income payout that is guaranteed by the issuing investment company and may be immediate or deferred. Payouts may last for a specific period or for the life of the investor. Investments in a deferred fixed annuity grow tax-deferred with income tax incurred upon withdrawal, and do not depend on the stock market. Fixed annuities typically do not have cost-of-living payment adjustments and are regulated by state insurance commissioners.

Fixed indexed annuities, also called equity index annuities, are a combination of the characteristics of both fixed and variable annuities. Fixed indexed annuities offer a predetermined rate of return like a fixed annuity, but they also allow for participation in the stock market, like a variable annuity. Fixed indexed annuities are typically riskier and offer the potential for greater return than fixed annuities, but less so than a variable annuity. Investments in a fixed indexed annuity grow tax-deferred with income tax incurred upon withdrawal and are regulated by state insurance commissioners.

#### *Target-Date Funds*

An investment in a target date fund is not guaranteed, and investors may experience losses, including losses near, at, or after the target date. There is no guarantee that a target-date fund will provide adequate income at and through an individual's retirement.

#### **Methodology Updates**

Our CMA, asset allocation, and investment policy committees typically meet monthly. These committees have oversight for their respective areas of expertise. If any of these committees makes an adjustment, the changes are thoroughly reviewed and tested before being implemented. These changes are manifested in participant portfolios through expected future returns, and asset allocations. CMAs are updated on an annual basis. We also update our methodologies with updated tax limits on an annual basis. Asset allocation and advice methodologies are updated only when there is a regulatory change that requires an update or when research we have completed warrants enhancing our asset allocation process or advice methodology.

#### **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. We do not have any material legal or disciplinary events to disclose.

#### **Item 10. Other Financial Industry Activities and Affiliations**

Morningstar Investment Management is a wholly owned subsidiary of Morningstar. Our offerings center on advisory services in our core capabilities of asset allocation, investment selection, and portfolio construction that we offer to individual investors and institutions (including the services described in this brochure.)

Our portfolio managers and their team members who are responsible for the day-to-day management of our portfolios are paid a base salary plus a discretionary bonus. The bonus is fully or partially determined by a combination of the investment management business unit's overall revenue and profitability, Morningstar's overall annual revenue and profitability, and the individual's contribution to the business unit. For most portfolio managers and their team members that work on Morningstar Wealth's Portfolios, part of their bonus is also based on select Portfolio investment performance and risk metrics versus both a corresponding benchmark over specified three-, five-, and/or seven-year periods and appropriate peer groups. Benchmarks are used as a measure of investment performance and are chosen by senior personnel and approved by the Global Investment Policy Committee's Regional Investment Policy Committee. To mitigate the conflict of interest that could arise from partially basing an employee's bonus on performance of a select Portfolio or Portfolios, all investment decisions made within a Portfolio must be peer reviewed by a regional governance body within the Regional Investment Policy Committee, which includes asset allocation committees, manager selection committees, and portfolio construction (peer review) committees.

For many of our advisory services, the universe of investment options from which we make our investment selections is defined by our Institutional Client. In some cases, this universe of investment options includes proprietary investment options of the Institutional Client. To mitigate any actual or potential conflict of interests presented by this situation, we subject all investment options to the same quantitative and qualitative investment selection methodology, based on several factors, including performance, risk, and expense so that the proprietary nature of an investment option does not influence our selection.

We may provide consulting or advisory services to Institutional Clients that offer registered or pooled investment products, such as mutual funds, variable annuities, collective investment trusts, or model portfolios. To mitigate the conflict of interest presented by our role in these investment products, we exclude such investment products from the universe of investment options from which we make our recommendations to other clients.

We receive compensation for our research and analysis activities (e.g., research papers) from a variety of financial institutions including large banks, brokerage firms, insurance companies, and mutual fund companies. In order to mitigate any actual or potential conflicts of interest that may arise from this service, we ensure that our research and analytical activities are non-biased and objective given our business relationships. Employees who provide research and analysis for clients are separate from our sales and relationship manager staff in order to mitigate the conflict of interest that an employee may feel pressure to present results in such a way as to maintain existing or gain new business. In addition, as noted above, all investment decisions for Morningstar Wealth's Portfolios service must be peer reviewed by a regional governance body within the Regional Investment Policy Committee. Methodology updates which impact investment recommendations or decisions for Morningstar Retirement's services are peer reviewed by the Morningstar Retirement Investment Policy Committee. This serves to mitigate conflicts of interest by providing checks and balances so that no employee can act unilaterally in making recommendation decisions.

Morningstar Investment Management is registered as a Commodity Pool Operator with the Commodity Futures Trading Commission. Some of Morningstar Investment Management's employees are registered with the National Futures Association as principals or associated persons.

Our investment professionals provide portfolio construction and ongoing monitoring and maintenance for the portfolios within Morningstar Investment Services' Wealth Platform and to third-party Institutional Clients on Morningstar Investment Services' behalf. While the same or similar portfolios are offered by us to our Institutional Clients, we do not believe these responsibilities create any material conflicts of interest for our clients. In order to mitigate any perceived conflict of interest, when we offer discretionary services for Morningstar Wealth's Portfolios, transactions for our clients are placed at the same time as transactions for Morningstar Investment Services' discretionary clients as part of block trades. We have procedures in place to ensure that trades are allocated in such a manner as to not favor one client over another. When we offer Portfolios on a non-discretionary basis to third-party Institutional Clients, our Institutional Clients receive trade recommendations just after trades are placed for discretionary clients, due to our heightened fiduciary responsibilities to our discretionary clients. In addition, all non-discretionary clients are notified of transaction recommendations after the close of the trading day, so that no one such client has an advantage over another.

When we, along with Morningstar and/or our other affiliates offer services to the same client, we have the option to enter into a bundled agreement with the client that encompasses all or part of those services. Additional fee(s) for such product(s) or service(s), if required, will be set forth in our agreement with the client. In these situations, clients pay a fee directly to us and each such affiliate for its products or services or as part of a joint fee schedule which encompasses all services.

#### *Affiliations – Investment Management Group Registered Entities*

Morningstar has an Investment Management group that consists of various subsidiaries across the globe that are each registered with the applicable regulatory body or bodies in that country. Morningstar Investment Management LLC consists of two groups – Morningstar Wealth<sup>SM</sup> and Morningstar Retirement<sup>SM</sup>. We share resources with this global group, as described earlier in this brochure. Another member of this group, Morningstar Investment Services LLC, is our subsidiary and is also an investment adviser registered under the Advisers Act. Morningstar Investment Services is additionally registered with the Securities and Exchange Commissions as a broker-dealer and a member of the Financial Industry Regulatory Authority (FINRA). Morningstar Investment Services offers model portfolios and separately managed accounts through its role as the sponsor of an investment advisory program known as the Wealth Platform and through third-party financial institutions, plan sponsor services, and retirement plan services for institutional and retail clients.

In some cases, our senior management members have management responsibilities to these other affiliated entities. We do not believe that these management responsibilities create any material conflicts of interests for our clients.

The Morningstar Wealth and Morningstar Retirement groups have set up service teams composed of employees of our affiliate and located at our affiliate's office in Mumbai, India. In addition, Morningstar Retirement has a team composed of employees of our affiliate located at our affiliate's office in Toronto, Canada. We compensate our affiliates for services rendered via intercompany charges. The services and compensation will be governed by intercompany agreements. This compensation will likely be lower than compensation negotiated with non-affiliated firms for the same or similar services. To mitigate any conflict of interest between us and our affiliates we have established dual reporting lines for employees on these teams so that such employees report up to employees of Morningstar Investment Management. We've also established information security boundaries and technology separation to protect our non-public information and Morningstar's compliance department monitors the personal trading activity of these employees.

#### *Affiliations – Other Registered Entities*

Morningstar Research Services LLC is not part of the Investment Management group but is also a wholly owned subsidiary of Morningstar and an investment adviser registered under the Advisers Act. Morningstar Research Services' offerings center around the production of investment research reports and investment consulting services to financial institutions/institutional investors who themselves are registered with and governed by a regulatory body. Conflicts of interests between us and Morningstar Research Services are mitigated by such things as the maintenance of separate legal entities and reporting/organization lines, and the utilization of physical (i.e., separate floors) and technological separation. Morningstar Research Services also maintains a committee structure so as to limit any unilateral decisions. Morningstar's compliance department

monitors the personal trading activities of Morningstar Research Services' employees.

In some situations, we engage Morningstar Research Services to perform investment manager due diligence and/or selection services on our behalf as a sub-adviser or consultant. The notification to and authorization by the Institutional Client to our engaging Morningstar Research Services as a sub-adviser is addressed in our agreement with the Institutional Client. On such occasions, we compensate Morningstar Research Services 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 the same or similar services. Morningstar Research Services' employees who are engaged to provide manager due diligence and/or selection services are prohibited from using non-public/confidential information obtained because of their engagement in its investment research reports and/or investment consulting services to clients, including us.

Morningstar Research Services provides information to the public about various securities, including managed investments like open-end mutual funds and ETFs, which include written analyses of these investment products in some instances. Although we use certain products, services, or databases that contain this information, we do not participate in or have any input in the written analyses that Morningstar Research Services produces. While we consider the analyses of Morningstar Research Services, our investment recommendations are typically based on our separate and independent research and analysis of the available investment product.

Morningstar Research Services may issue investment research reports on securities we hold in our portfolios or recommend to our clients, but they do not share any yet-to-be published views and analysis and/or changes in estimates (i.e., their confidential information) with us on these securities. Other than the use of their publicly available analysis as part of our review process, we do not solicit the input of Morningstar Research Services prior to making investment decisions or recommendations (unless we engage them as a sub-adviser as noted under the 2<sup>nd</sup> paragraph of the *Affiliations – Other Registered Entities* section), nor do we have access to their analysis prior to its public dissemination. We mitigate any actual or potential conflicts of interest that could arise from the access of their analysis prior to publication through measures such as informational barriers (both physical and technological), maintaining separate organizational reporting lines, and monitoring by the compliance department.

Morningstar Research Services prepares qualitative analysis on separately managed accounts and model portfolios. To mitigate conflicts of interest, Morningstar Research Services does not prepare qualitative analysis on, nor recommend any separately managed account or model portfolio we offer.

Some of Morningstar Research Services' clients are sponsors of funds or associated with other securities that we may recommend to our Institutional Clients. We mitigate any actual or potential conflicts of interests resulting from this fact through such measures as informational barriers (both physical and technological), maintaining separate organizational reporting lines, and monitoring by the compliance department. In addition, we do not factor in the relationship between Morningstar Research Services when analyzing investments or making recommendations.

Morningstar Investment Management serves as an investment adviser to investment companies registered under the Investment Company Act of

1940, as amended, and to other pooled investment products. To mitigate conflicts of interest, Morningstar Research Services does not prepare qualitative analysis on nor recommend as part of their investment consulting services any investment company we are an investment adviser to.

#### *Affiliations – Morningstar, Inc.*

Our parent company, Morningstar, Inc., is publicly traded (Ticker Symbol: MORN). We may recommend an investment product that holds a position in publicly traded shares of Morningstar's stock. Such an investment in Morningstar's stock is solely the decision of the investment product's portfolio manager. We have no input into a portfolio manager's investment decision nor do we require that the investment products we recommend own shares of Morningstar. An investment product's position in Morningstar has no direct bearing on our investment selection process. We mitigate any actual or potential conflicts of interest by not factoring Morningstar's publicly traded stock into our qualitative or quantitative analysis nor in our recommendations.

Morningstar offers various products and services to the public. Some of Morningstar's clients are service providers (e.g., portfolio managers, advisers, or distributors) affiliated with a mutual fund or other investment option. We may have a contractual relationship to provide consulting or advisory services to these same service providers or we may recommend the products of these service providers to our advisory clients. To mitigate any actual or potential conflicts of interest, we do not consider the relationship between Morningstar and these service providers when making recommendations. We are not paid to recommend one investment option over another, including products of service providers with which Morningstar has a relationship.

Morningstar provides information to the public about various investment products, including managed investments like open-end mutual funds and ETFs. In some cases, this information includes written analyses of these investment products. Although we use certain products, services, or databases of Morningstar, we do not participate in or have any input in the written analyses that Morningstar provides its licensees. While we consider the analyses of Morningstar, our investment recommendations are typically based on our separate and independent research and analysis of the available investment product.

Morningstar hosts educational events and conferences and, in some instances, provides us with 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 introduces by using pre-defined criteria to select Clients for these opportunities.

Morningstar offers various products and services to retail and institutional investors. In certain situations, we recommend an investment product that tracks an index created and maintained by Morningstar. In such cases, the investment product sponsor has entered into a licensing agreement with Morningstar to use such index. To mitigate any conflicts of interest arising from our selection of such investment products, we use solely quantitative criteria established by our advisory client to make such selection, or, in the alternative, Morningstar's compensation from the investment product sponsor will not be based on nor will it include assets that are a result of our recommendation to our advisory client to invest in those investment products. In other cases, some of Morningstar's clients are sponsors of funds that we recommend to our clients. Morningstar does not and will not have any input into our investment decisions, including what investment products will be recommended for our recommended portfolios. We mitigate any actual or potential conflicts of interest by imposing informational barriers (both physical and technological), maintaining separate organizational reporting lines, and

monitoring by the compliance department. In addition, we do not factor in the relationship between Morningstar when analyzing investments or making recommendations. 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 physical and technological), maintaining separate organizational reporting lines between, and monitoring by the compliance department.

In some instances, we create portfolios that track an index created and maintained by Morningstar. Morningstar does not and will not have any input into our investment decisions, including what investment products will be included in our portfolios. We mitigate any actual or potential conflicts of interest by imposing informational barriers (both physical and technological), maintaining separate organizational reporting lines, and monitoring by the compliance department.

Morningstar has and maintains accounts which they invest in accordance with investment strategies created and maintained by us. Those investment strategies are deployed using equity securities. As we have discretion over these accounts, Morningstar's accounts are traded at the same time as our and Morningstar Investment Services' other discretionary client accounts in order to ensure that Morningstar's accounts are not treated more favorably than our client accounts. Some of Morningstar's accounts are used as the subject of newsletters offered by Morningstar. In order to ensure that Morningstar's newsletter subscribers are not treated more favorably than our clients, which would result in a breach of our fiduciary duty, we do not report trades in Morningstar's accounts invested in our strategies to newsletter subscribers until after our client accounts have been traded or our non-discretionary clients have been notified.

As a wholly owned subsidiary, we use the resources, infrastructure, and employees of Morningstar and its affiliates to provide certain support services in such areas as technology, procurement, human resources, accounting, legal, compliance, information security, and marketing. We do not believe this arrangement presents a conflict of interests to us in terms of our advisory services. Employees of Morningstar that provide support services to us have the option to maintain their Financial Industry Regulatory Authority ("FINRA") security licenses under Morningstar Investment Services' limited broker/dealer registration, if appropriate for their current job responsibilities. We believe no conflict of interest exists due to the maintenance of these security licenses.

We have the option to make our clients aware of various products and services offered by Morningstar or its affiliates. We do not receive compensation for that introduction. Morningstar and its affiliates also have the option to make their clients aware of various products and services offered by us. Morningstar and its affiliates do not receive any compensation from us for that introduction, unless it falls under a solicitation arrangement, as described in Item 14 below.

Morningstar Wealth includes investment advisory services from Morningstar's Investment Management group, portfolio management software Morningstar Office<sup>SM</sup>, investment data aggregator ByAllAccounts<sup>®</sup>, and the individual investor experience across Morningstar.com<sup>®</sup>. Daniel Needham, our co-president, has management responsibilities for Morningstar Wealth. We do not believe that these management responsibilities create any material conflicts of interests for our clients, but we mitigate any actual or potential conflicts of interests resulting from that by imposing informational barriers where appropriate and undertaking compliance monitoring of the Investment Management group.



*Affiliations – Morningstar, Inc.’s Subsidiaries*

Equity and manager research analysts based outside the United States are employed by various wholly owned subsidiaries of Morningstar. These analysts follow the same investment methodologies and process as Morningstar Research Services, as well as being held to the same conduct standards. As a result, we do not believe this structure causes actual or a potential for a conflict of interest.

*Affiliations – Credit Rating Agency*

We are affiliated with the DBRS Morningstar group of companies, which include DBRS, Inc., DBRS Limited, DBRS Ratings GmbH, and DBRS Ratings Limited. DBRS, Inc. is registered with the 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 our analysis of certain securities, we use the publicly available credit rating and analysis issued by DBRS Morningstar. Because of our use of DBRS Morningstar’s ratings and analysis is limited to that which is publicly available, we do not believe there is an actual or potential conflict of interest that arises from such use.

## **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 Advisers Act (“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 officers and 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, our fiduciary duty, and 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 given their position. 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 [compliance@morningstar.com](mailto:compliance@morningstar.com).

### **Interest In Client Transactions**

Our Access Persons have the option to maintain personal investment accounts and purchase or sell investments in those accounts that are the same as or different from the investments we recommend to clients. Because we generally recommend mutual funds and ETFs, our Access Persons’ personal investing activities should not conflict with our advisory activities or the timing of our recommendations. In addition, our Code of Ethics is designed to ensure that Access Persons’ personal trading activities will not interfere with our clients’ interests, while allowing our Access Persons to invest in their own accounts.

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 Recommend**

Morningstar Investment Management has and maintains a number of seed accounts (accounts used to establish a strategy we offer or track), many of which follow strategies we offer to clients. We place block trades for our accounts, therefore trade requests for our seed accounts are placed at the same time as trades are placed for those client accounts invested in the same strategy and for which we have discretion. Block trades are allocated in such a manner as to ensure that our seed accounts do not receive more favorable trades than our clients’ accounts. Client accounts that we manage on a discretionary basis and thus, our seed accounts, are traded just before we provide model portfolio trade recommendations to other clients using our U.S. managed portfolios. However, our model portfolio clients receive trade recommendation after the close of the trading day, so that no one model portfolio client is favored over another.

## **Personal Trading By Access Persons**

Our Code of Ethics is designed to ensure that Access Persons’ personal trading activities does not interfere with our clients’ interests. While our Access Persons have the option to maintain personal investment accounts, they are subject to certain restrictions. 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 are prohibited from trading in securities which are the subject of such information and tipping 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 (and any accounts in which they have beneficial ownership) upon hire and thereafter. Access Persons are required to pre-clear IPO, initial digital coin offerings, and private placement transactions with Morningstar’s compliance department.

## **Item 12. Brokerage Practices**

Where we exercise investment discretion, we will generate trade instructions for each portfolio that requires investment, reallocation or rebalancing and forward those instructions to the appropriate institution as designated by the client. As a result, we do not have the ability to make decisions regarding which broker is used to execute the transactions nor the timing of when the trade is executed. This could result in different pricing of client trades. We do not participate in any soft dollar practices.

To generate additional income or to earn credits that offset expenses, the Morningstar Funds reserves the right to lend its portfolio securities to unaffiliated broker/dealers, financial institutions or other institutional investors pursuant to agreements requiring that the loans be secured continuously by collateral, marked-to-market daily and maintained in an amount at least equal in value to the current market value of the securities loaned. The aggregate market value of securities lent by a Morningstar Fund will not at any time exceed 33 1/3% of the total assets of the Morningstar Fund. All relevant facts and circumstances, including the creditworthiness of the broker-dealer or institution, will be considered in making decisions with respect to the lending of securities subject to review by the Morningstar Funds Trust’s Board of Trustees. Currently, six of the nine Morningstar Funds participate in a securities lending program.

The cash collateral received from a borrower as a result of a Morningstar Fund’s securities lending activities will be invested in cash or high quality, short-term debt obligations, such as securities of the U.S. government, its agencies or instrumentalities, irrevocable letters of credit issued by a bank that meets the Morningstar Fund’s investment standards, bank guarantees or money market mutual funds or any combination thereof.

Securities lending involves two primary risks: “investment risk” and “borrower default risk.” Investment risk is the risk that a fund will lose money from the investment of the cash collateral received from the borrower. Borrower default risk is the risk that a fund will lose money due to the failure of a borrower to return a borrowed security in a timely manner. There also may be risks of delay in receiving additional collateral, in recovering the securities loaned, or a loss of rights in the collateral should the borrower of the securities fail financially. In the event a Morningstar Fund is unsuccessful in seeking to enforce the contractual obligation to deliver additional collateral, then the Morningstar Fund could suffer a loss.

### Item 13. Review of Accounts

If included in our contract with the Institutional Client, we will provide ongoing monitoring of the underlying holdings in investment portfolios and reallocation or rebalancing of investment portfolios. The frequency and nature of our reviews and rebalancing is governed by our contract with each Institutional Client.

In instances where we act as a discretionary investment manager for Morningstar Wealth’s Portfolios, financial advisors of the Institutional Client or financial advisors using the Institutional Client’s platform are typically responsible for periodically reviewing client accounts.

We do not provide periodic reviews or ongoing monitoring of retirement accounts where we solely provide our Guidance or Advice services. We recommend such retirement investors return to our site every six months to receive an updated strategy, or sooner if they have had any significant changes in their personal or financial situation. We also recommend they return to our site whenever there has been a change in the available investment options in their plan lineup.

Retirement accounts enrolled in our Managed Accounts service are typically rebalanced to the asset allocation target or reallocated on a quarterly basis as necessary, and portfolio allocations will be adjusted on an annual or as-needed basis to account for changes in age and any other significant personal or financial changes that we have been informed about. Our methodology has a built-in mechanism to help prevent unnecessary trading, and therefore will not propose any changes to investment strategies if the adjustments are relatively small. Retirement investors are responsible for notifying us of changes in their personal and financial information, investment objectives, and investment restrictions so that we can make the necessary adjustments to their investment strategy.

We may provide periodic reports to our Institutional Clients on the investment portfolios and the underlying holdings or retirement plan or product lineup if included in our contract with the Institutional Client. We do not prepare periodic reports as part of Advice or Guidance.

Our model portfolios and valuation models are reviewed on at least an annual basis. Investment-specific model portfolios for a retirement plan or product are reviewed on at least an annual basis.

### Item 14. Client Referrals and Other Compensation

We may make direct or indirect cash or non-cash payments to our affiliates or to unaffiliated third parties for recommending our services. If such payments occur, they will be done pursuant to Rule 206(4)-1 of the Advisers Act. Clients referred by third party solicitors may in some cases pay a higher fee than clients who contract with us directly. Through disclosures, which are spoken or given to Clients at the time of the solicitation, Clients solicited by an unaffiliated person are made aware of the arrangement between the

solicitor and us (and therefore that the solicitor has a financial interest in recommending us to Client), any other material conflicts of interest, and the terms of any compensation paid directly or indirectly to the solicitor as a result of their referral.

### Item 15. Custody

We do not serve as a custodian of client assets. However, in cases where we have the ability to debit fees directly from client accounts, we are deemed to have custody of client assets under Rule 206(4)-2 of the Advisers Act, even if we do not act as a custodian. The Institutional Client is responsible for selecting the custodian for assets.

### Item 16. Investment Discretion

In some cases, we have complete investment discretion in managing investment portfolios, retirement plans, or registered funds for our Institutional Clients and Morningstar Funds Trust. In other cases, we provide information or make investment recommendations to an investment committee, board, plan sponsor, or other person(s) within an institution designed to help them make investment choices, but the institution has the discretion to accept, reject, or modify our recommendations.

As described in our Retirement Services for Individuals firm brochure, we typically have complete investment discretion in managing retirement accounts through Morningstar Retirement’s Managed Accounts service. In other cases, we make investment recommendations to retirement investors through our Advice or Guidance programs, but the retirement investor has the discretion to accept, reject, or modify our recommendations.

The extent of our investment discretion is set forth in our contract with the Institutional Client or retirement investors using our Managed Account Advice, or Guidance services.

### Item 17. Voting Client Securities

For the majority of our institutional advisory service arrangements, we do not have the authority to and will not vote proxies. In such situations, proxies or other solicitations will be sent directly to the Institutional Client and we will not provide information or advice in regard to questions an Institutional Client has about a particular solicitation.

We do not advise or act for Institutional Clients in legal proceedings, including class actions or bankruptcies, involving recommended securities.

The Morningstar Funds have authorized us to vote proxies on their behalf. In turn, in accordance with the sub-advisory agreement entered into between us and each sub-adviser, we have delegated proxy voting authority to the sub-adviser. We have implemented policies and procedures with respect to the portion of the Morningstar Funds that are not managed by a sub-adviser.

#### *Proxy Voting Policy and Procedures*

Rule 206(4)-6 of the Investment Advisers Act of 1940, as amended, places a number of requirements on investment advisers with proxy voting authority. These requirements are:

- Adopt and implement written policies and procedures that are reasonably designed to ensure that proxies are voted in the best interest of clients. Such procedures must include how to address material conflicts that may arise between our interests and those of our clients;
- Disclose how clients may obtain information about how proxies were voted with respect to their securities; and

- Describe to clients our proxy voting policies and procedures and, upon request, furnish a copy of the policies and procedures.

#### *Proxy Voting Committee*

In efforts to mitigate conflicts of interest, we have in place a Proxy Voting Committee ("Committee"). This Committee consists of both non-voting and voting members (collectively, "Committee Members"). Committee Members include members of the investment team serving in a voting role and member(s) of compliance and operations team serving in a non-voting role. The Committee is responsible for tasks such as:

- Developing, implementing and updating policy and procedures intended to ensure voting of proxies is conducted in a manner that is in the best interests of Morningstar Funds investors;
- Assessing whether proxy voting should be internally, externally by a third-party vendor, or a combination of the two;
- Oversight of a third-party vendor, when applicable;
- Making voting decisions and ensuring votes are cast on time, when applicable;
- Maintaining documents material to the voting decision; and
- Implementing appropriate proxy voting disclosures and maintaining records of communications received from Morningstar Funds investors requesting information on how proxies were voted and our responses.

#### *Proxy Voting Process*

Proxy statement notifications are received by an independent third-party vendor when a proxy statement has been issued on a security that currently underlies a portion of a Morningstar Fund managed by us. This third-party vendor provides additional services such as facilitating vote submissions on our behalf and provides access to e-ballot and meeting information.

We identify, on an annual basis, certain categories of proxy votes to be reviewed by our proxy committee. In these instances, the vote will be determined on a case-by-case basis based on the Investment Management group's global proxy voting principles. Upon receipt of a proxy statement, the investment team member with the primary oversight responsibility for the security will review the proxy statement and any additional soliciting materials it is aware of that the issuer has filed and will communicate their recommendation, support for the recommendation, and other pertinent information to the Committee.

The voting Committee Members will review the proxy issue and the recommendation and will cast their vote as to whether they agree or disagree with the recommendation. If the other voting Committee Members agree with the recommendation, the proxy will be voted in that manner. If there is not a super-majority, the Committee will hold a meeting to discuss the proxy and reach a resolution.

There may be instances where we will refrain from voting a specific proxy when we believe it is in the best interests of our Morningstar Fund investors.

#### **How you can Obtain Proxy Voting Information**

At any time, you may request information on how we voted proxies and/or request a copy of our proxy voting policies and procedures. Requests can be submitted by calling 877-626-3227, sending an e-mail to [compliancemail@morningstar.com](mailto:compliancemail@morningstar.com), or writing to Morningstar Investment Management LLC at 22 West Washington Street, Chicago, IL 60602 ATTN: Director of Mutual Fund Compliance.

#### **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 and fiduciary commitments to clients, have we been the subject of any bankruptcy proceeding.