

# 2024 ERISA Advisory Council

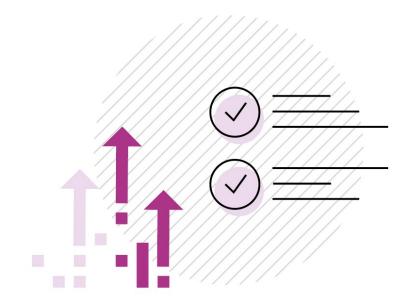
Evaluating and Benchmarking Target-Date Funds Morningstar Investment Management, LLC

September 2024

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## Agenda

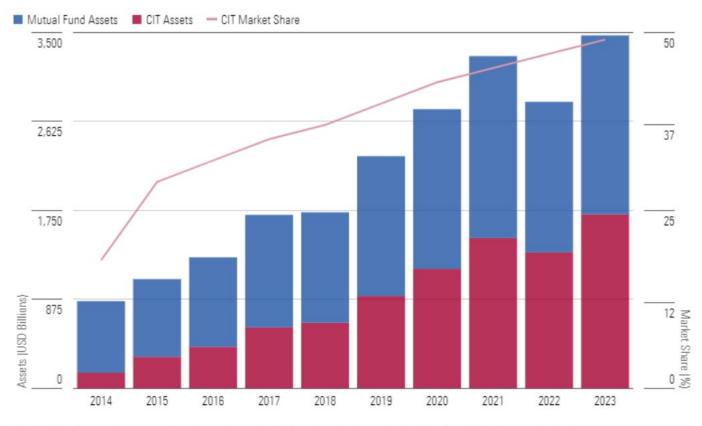
- Benchmarking Target-Date Funds
- Evaluating and Analyzing Target-Date Funds
- Reports and Methodologies



## **Target-Date Funds**

Assets in Target-Date Funds has reached nearly \$3.5 trillion without counting the more than \$500 billion in Custom Target-Date Funds

### **Total Target-Date Assets**



Source: Morningstar Direct and surveyed data. Totals do not include custom target-date strategies. Data as of Dec. 31, 2023.



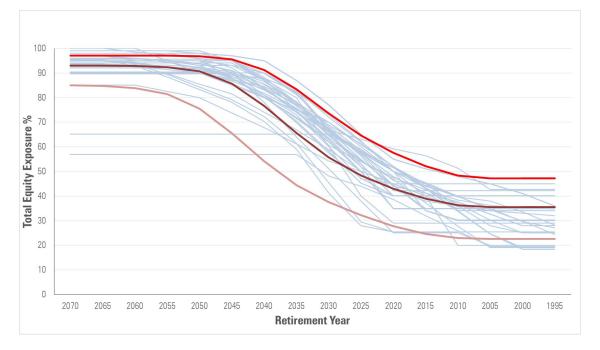
## 2022 Custom Target Date Fund (cTDF) Study

The cTDFs analyzed represent \$516 billion in DC assets, with the median plan size of \$4.7 billion. The median plan has 43% of plan assets residing in a cTDF solution. Forty-seven percent of plans also offer a defined benefit plan.

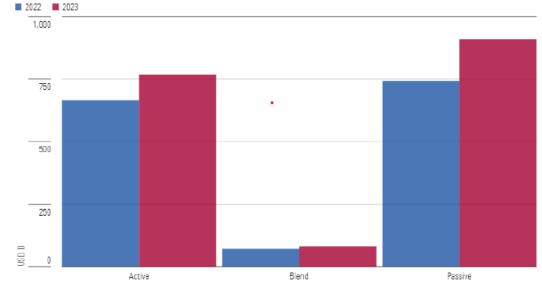
## **Benchmarking Target-Date Funds**

Target-date funds are by no means a uniform investment type. Depending on the glide-path philosophy, the sub-asset classes used, the nature and quality of the underlying investments, and a host of other factors, target-date funds can display markedly different risk and return characteristics. With its broad expertise in evaluating individual mutual funds and mutual fund families, Morningstar hopes to create a clearer picture of the target-date universe.

2024 Target Date Funds Equity Glide Paths vs Morningstar Lifetime Allocation Indexes. Source: Morningstar Direct. Data as of December 31, 2024



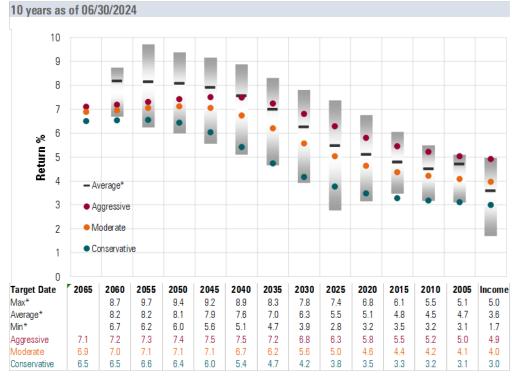




Source: Morningstar Direct and author's calculation. Data as of Dec. 31, 2023.

## **Target-Date Funds Returns**

Morningstar categories for target-date funds are designed to group similar types of target-date funds based on their investment objectives, typically linked to an investor's expected retirement year. These categories allow for easier comparison of funds with similar goals and asset allocation approaches. Target-date funds are assigned to a category based on the target date in the fund's name, which generally indicates the year the investor is expected to retire. However, there continues to be a wide dispersion in returns for funds in the same category as illustrated in the exhibit below, which shows the 10-year total return range for the Morningstar target-date categories as of June 30, 2024.



Source: Morningstar Investment Management LLC and Morningstar Direct. Indexes are not available for direct investment. \*All share classes of target-date mutual funds and CITs tracked by Morningstar, Inc. Morningstar Lifetime Allocation indexes are used for Aggressive, Moderate and Conservative glidepaths.

## **Target-Date Funds Benchmarks**

The largest target-date funds were launched before specific benchmarks existed, leading each fund manufacturer to develop unique methodologies, resulting in significant variability across fund families. There are a few established target-date indexes providers, but there is no uniform, industry-wide accepted method of benchmarking target-date investments. The S&P Target-Date Indexes are the most popular, with 51% of all Mutual Funds and CITs using the series as their primary prospectus benchmark

Target-Date Benchmark	% of TDFs Using the Benchmark	# of Funds	
S&P Target Date Indexes	51	3169	
Custom/Blended Benchmark	11	680	Source: Morningstar Direc
Dow Jones Target Date Indexes	9	534	
S&P 500	7	448	
Morningstar® Lifetime Allocation IndexesSM	5	332	
Not listed	4	276	
Russell 1000 Index	4	262	
Bloomberg US Agg Bond TR USD	4	223	
MSCI ACWI	2	113	
Russell 3000 Index	1	81	
MSCI USA EXTENDED ESG FOCUS NR USD	0	27	
Bloomberg US Universal TR USD	0	12	
Bloomberg Multiverse TR USD	0	10	
Bloomberg 1-3 Yr US Treasury TR USD	0	10	
S&P Global BMI NR USD	0	7	
BBgBarc US Aggregate	0	7	
Bloomberg US Treasury US TIPS TR USD	0	6	
Bloomberg MSCI US Agg ESG Focus TR USD	0	3	
Total	100	6200	

### Primary Prospectus Benchmark For Target-Date Mutual Funds and CITs

**CRNINGSTAR** Retirement For illustrative purposes

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Bloomberg US Universal TR USD	0	12
Bloomberg Multiverse TR USD	0	10
Bloomberg 1-3 Yr US Treasury TR USD	0	10
S&P Global BMI NR USD	0	7
BgBarc US Aggregate	0	7
Bloomberg US Treasury US TIPS TR USD	0	6
Bloomberg MSCI US Agg ESG Focus TR USD	0	3
Fotal	100	6200

### Primary Prospectus Benchmark For Target-Date Mutual Funds and CITs

## **Selecting a Target-Date Benchmark**

In the paper titled "Selecting a Target-Date Benchmark" Morningstar Investment Management, LLC proposes key qualitative and quantitative aspects to consider when selecting a target-date benchmark. Qualitatively, an appropriate target-date benchmark should align with the fund's glide path philosophy, asset class composition, and methodology for determining intra-stock and intra-bond allocations. Quantitatively, Morningstar proposes three measures to help identify a best-fit benchmark: Average Absolute Difference in Glide Paths, Average Historical Tracking Error, and Average Forward-Looking (or Current) Tracking Error. These metrics offer a relatively simple way to assess the suitability of a benchmark.

### We expand upon the CFA Institute's curriculum's list identifying

### the six qualitative characteristics of a good benchmark by adding three additional factors in italics:

•	Unambiguous
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- Investable
- Measurable
- Appropriate
- Reflective of current investment opinions
- Specified in advance
- Robust overall glide path methodology
- Robust opportunity set of individual asset classes
- Robust methodology for determining the detailed intra-stock and intra-bond asset class allocations

### Examples of our three quantitative measures applied to the Vanguard Target Retirement funds.

Name	Average Absolute Glide Path Equity Differential	Average Annual Tracking Error (%)	Average Forward-Looking Tracking Error (%)
Morningstar Lifetime Aggressive	10.81	1.49	1.78
Morningstar Lifetime Moderate	2.52	1.01	0.67
Morningstar Lifetime Conservative	14.44	1.83	2.45
DJ Target Indexes	11.15	1.65	1.88
DJ US Target Indexes	10.61	2.41	3.26
S&P Target Date Indexes	2.29	0.77	1.16
S&P Target Date Through Indexes	4.24	1.53	1.25
S&P Target Date To Indexes	7.35	1.77	1.61

"You should consider how well the TDF's characteristics align with eligible employees' ages and likely retirement dates. It also may be helpful for plan fiduciaries to discuss with their prospective TDF providers the possible significance of other characteristics of the participant population, such as participation in a traditional defined benefit pension plan offered by the employer, salary levels, turnover rates, contribution rates and withdrawal patterns."

U.S. Department of Labor "Target Date Retirement Funds – TIPS for ERISA Plan Fiduciaries"

## Our Approach to Building Target-Date Indexes Begins with the Participants

We conduct an in-depth analysis of the US participants and their characteristics to design a 3 target-date indexes customized to provide unique equity glide path. We leverage our own capital market assumptions to optimize the asset allocation of the indexes and represent the various asset classes that are used to build target-date funds.

We consider a wide range of average data for participants in 401 (k) plans to design the glide paths for the Morningstar Lifetime Allocation Indexes.





Presence of Defined Benefit Assets

Company Stock Holdings



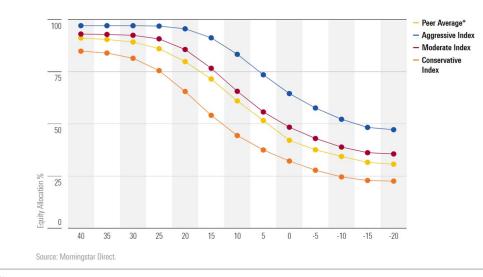


**Account Balances** 





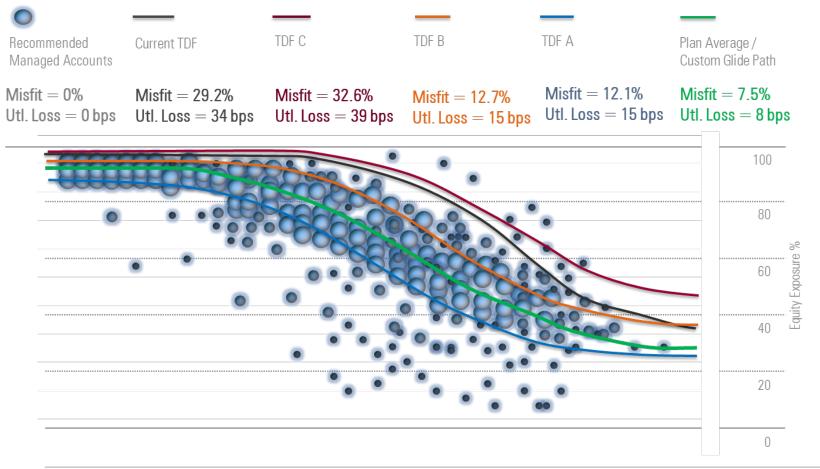
Human Capital





## Using Participant Data to Determine a Plan's Optimal Equity Glide Path

In the paper titled "Stop Guessing", Morningstar presents a framework for using relevant participant data to help determine which type of QDIA is most appropriate for a plan, including which glide path best fits the demographic data of the plan participants.



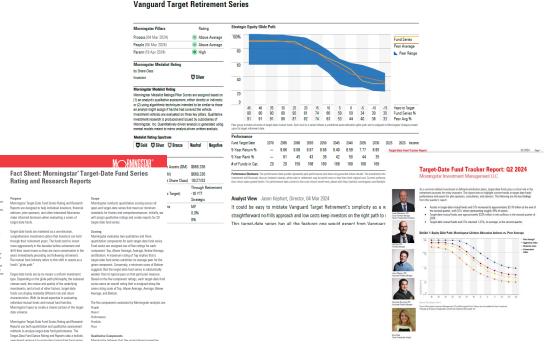
## **Analyze Performance from Multiple Perspectives**

Each approach to benchmarking target date funds provides a limited view, and we believe the best way to see the full picture is by looking at performance from multiple perspectives. Importantly, we think it is imperative to understand what each perspective captures and what it misses. For instance, peer comparisons may not provide much insight into the underlying managers' results if the asset allocation differs significantly from peers. To provide the full view, Morningstar Investment Management offers comprehensive quarterly performance reports, that include custom benchmarks, performance attribution, peer comparisons, risk-adjusted results, among other things. The purpose for these reports is to provide plan sponsors with a clear understanding of what is driving performance for the target date funds.

2024 target-date strategy landscape | morningstar medalist ratings Morningstar Medalist Ratings

#### Morningstar Medalist Ratings for Target-Date Mutual Funds, Analyst-Covered

		Pillar Rating 🛧	Pillar Rating 🛧 Upgrades 🗸 Downgrades		
Strategy Name	Morningstar Medalist Rating	People	Process	Parent	
American Funds Target Date Retirement	👽 Gold	<ul> <li>High</li> </ul>	<ul> <li>High</li> </ul>	<ul> <li>High</li> </ul>	
T. Rowe Price Retirement	👽 Gold	<ul> <li>High</li> </ul>	<ul> <li>High</li> </ul>	<ul> <li>High</li> </ul>	
T. Rowe Price Retirement Blend	👽 Gold	<ul> <li>High</li> </ul>	<ul> <li>High</li> </ul>	<ul> <li>High</li> </ul>	
BlackRock LifePath Index	👽 Gold	<ul> <li>High</li> </ul>	Above Average	Above Average	
Fidelity Freedom Index	👽 Gold 🛧	● High ↑	Above Average	Above Average	



The best way to measure your investing success is not by whether you're beating the market but by whether you've put in place a financial plan and a behavioral discipline that are likely to get you where you want to go.

- Benjamin Graham, The Intelligent Investor



## **Measuring Outcomes**

Performance is only one aspect of benchmarking target-date funds. From the plan sponsor and participant perspective, the target date solution is successful if participants use it and use it correctly. Holistically speaking, these solutions are successful if a participant is using the plan to prepare for their retirement goals; the target date strategy is just one component of that, and it must be considered in tandem with any defined-benefit assets, savings rates, Social Security, and out-of-plan assets.

### **Retirement Goal**

Replace 100% pre-retirement take-home income until life expectancy + five years in 70% of the forecasted outcomes.

### Personalized Financial Plan







Retirement Age



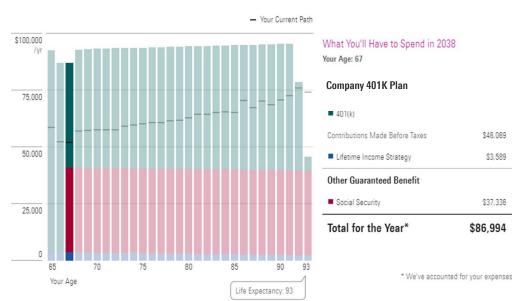
Savings Rate

Portfolio Management



Annuities





### Here's how you'll fund your retirement each year if you follow our recommendations.

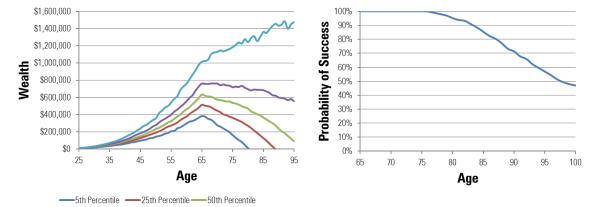


### **Measuring Outcomes**

Using standard assumptions around retirement, Morningstar runs simulations to measure the success rates of target-date portfolios on an after-fee basis. We present estimated probability of success at various ages, defined as a positive remaining balance at the respective age. We also offer reports that identify how participants are using the QDIA offering in their plan.

We expect the average investor in our Lifetime Allocation Funds to have more than enough wealth to fully fund a successful retirement without having to decrease consumption. Source: Morningstar calculations.

This report identifies Target Date Fund and core menu usage trends across a plan, breaks down the demographical details of participants, and helps the plan sponsor to evaluate the value of a plan's current investment offerings and QDIA. Holistically speaking, these solutions are successful if a participant is using the plan to prepare for their retirement goals; the target date strategy is just one component of that, and it must be considered in tandem with any defined-benefit assets, savings rates, Social Security, and out-of-plan assets.

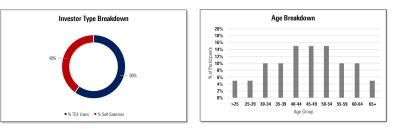


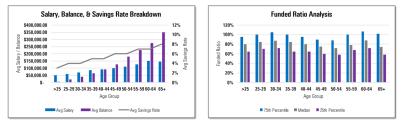
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Sample Plan Analysis

#### Plan Demographics

#### All Participants:





## **Important Disclosures**

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All investments involve risk, including the loss of principal. There can be no assurance that any financial strategy will be successful. Morningstar Investment Management does not guarantee that the results of their advice, recommendations or objectives of a strategy will be achieved.

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### Research on The Impact of Managed Accounts on Participant Savings and Investment Decisions

A total of 60,825 retirement plan participants were included in Morningstar Investment Management's study, "The Impact of Managed Accounts on Participant Savings and Investment Decisions." Participants were selected for use based on available information and various filters and include those participants that used the Morningstar Retirement Manager managed accounts service between the dates of January 5, 2007 and June 4, 2018.

In no way should any performance shown be considered indicative or a guarantee of the future performance of an actual defined-contribution plan participant's portfolio with the same investment option or viewed as a substitute for an investment option recommended to an individual participant. Actual results of an individual participant may differ substantially from the historical performance shown for an investment option and may include an individual participant incurring a loss. Past performance of future results.

Performance returns were calculated using a time-weighted, geometrically-linked rate of return formula. Returns for periods over one year are annualized.

Morningstar Investment Management does not guarantee that the results of their advice, recommendations, or the objectives of an investment option will be achieved.

## **Important Disclosures**

In no way should the results of this analysis be considered indicative or a guarantee of the future performance of an actual participant using Morningstar Retirement Manager or considered indicative of the actual performance achieved by an individual participant using Morningstar Retirement Manager.

To download the full research paper, please go to: https://www.morningstar.com/lp/impact-of-managed-accounts.

Slide 31 This figure quantifies the change in savings rates for participants prior to and after using the Morningstar Retirement Manager managed accounts service. (Total savings rates include employee deferrals and employer matching contributions. If an employer matching contribution rate was not available for a plan, an assumed match rate of 50% on the first 6% of deferrals was assumed.) The majority of participants who were not on track increased their savings rate (71.5%) while the majority of participant who were on track did not change their savings rates (64.8%). Changes in savings rates were not constant across age ranges, with younger participants having larger average changes than older participants. Total savings rates increased more than employee deferral rates because Morningstar Retirement Manager considers whether a participant is achieving the maximum employer match and recommends a deferral rate increase up to the employer match amount regardless of whether the participant is on track to meet their retirement goals.

Slide 32: This figure quantifies the percentage of participants who received the maximum employer match prior to and after using the Morningstar Retirement Manager managed accounts service. Only plans that offered an employer match were included in this analysis. On average, 12% more not-on-track participants received the maximum employer match, when a match was available, versus 1% of on-track participants

Slide 33: The amount of annual income a participant could receive in retirement was determined by calculating the expected geometric return for each participant's portfolio prior to and after using the Morningstar Retirement Manager managed accounts service using the portfolio's asset class exposures. The difference between these results was then projected forward to the participant's assumed retirement at age 65. Participants are grouped by (i) age, (ii) self-directors versus allocation-fund users, (iii) whether they are "on track" or "off track" for meeting the retirement goal, and (iv) annual managed account investment management fee. Each portfolio's fund allocation and the participant's savings rate are assumed to remain constant over time and a retirement age of 65 is assumed. In reality, these would likely change over time and would differ by individual participants.

For this calculation, forty (40) basis points was used as a proxy for the average fee assessed by a managed account provider. This analysis does not account for all portfolio costs such as fees, taxes, or expenses other than the annual investment management fee. If included, these fees would lower the potential amount of additional wealth at retirement shown in this analysis.

Overall, an average 25- to 34-year-old participant in this scenario could potentially realize an additional \$5,548 in annual retirement income. (In this age group, not-on-track self-directors could realize an additional \$3,212 by enrolling in managed accounts; Not-on-track allocation-fund users could realize an additional \$3,279, and on-track self-directors could realize an additional \$3,418. On-track allocation-fund users were found to potentially realize \$496 less by using managed accounts than by using an allocation fund).

## **Important Disclosures**

The average amount a participant could realize in annual retirement income by enrolling in managed accounts with an annual 40 basis-point investment management fee varies across age groups, with an average 35- to 44year-old having the potential to realize an additional \$2,566 and an average 45- to 54-year-old has the potential to realize an additional \$690. A 55- to 65-year-old could potentially realize \$66 less by using managed accounts

Slide 34: Equity allocations for portfolios before and after a participant enrolled in the Morningstar Retirement Manager managed accounts service were estimated. After using managed accounts, there were considerable changes in risk levels for some participants, in particular a subset of self-director users who were invested primarily or entirely in fixed income prior to enrolling in managed accounts. Such participants were generally invested too conservatively and had a significant increase in their equity allocations after enrolling in managed accounts. In addition, a significant number of participants, especially older participants, ended up in more conservative portfolios after enrolling in managed accounts.

Morningstar Quantitative Ratings<sup>TM</sup> are used as a proxy for fund quality for this analysis. Morningstar Quantitative Ratings are statistical ratings that range from Gold, Silver, Bronze, Neutral, or Negative. Higher ratings reflect Morningstar's conviction in a fund's ability to outperform its peer group and/or benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Using these ratings, the weighted average "quality" of a portfolio was estimated. Prior to enrolling in the Morningstar Retirement Manager managed account service, Allocation-fund users had an average fund quality score of 3.8 while self-director users had an average fund quality score of 3.7. After enrolling in managed accounts, the average fund quality score for users was 3.9.

### Morningstar Quantitative Rating<sup>™</sup>

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent Pillar, (iii) Quantitative People Pillar, (iv) Quantitative Performance Pillar, (v) Quantitative Price Pillar, (and (v) Quantitative Process Pillar (collectively the "Quantitative Fund Ratings").

The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

• Morningstar Quantitative Rating: Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar Calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds. For information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds, please go to: https://www.morningstar.com/content/dam/marketing/shared/research/methodology/778136\_Morningstar\_Analyst\_Rating\_for\_Funds\_Methodology.pdf for information about Morningstar Analyst Rating that Morningstar's fund analysts assign to funds. 19 Important Disclosures

• Quantitative Parent Pillar: Intended to be comparable to Morningstar's Parent Pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent Pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to the fund. The quantitative rating is expressed as Positive, Neutral, or Negative.