Morningstar Medalist Rating™

April 2023

Frequently Asked Questions

What is changing?

Morningstar is uniting its two forward-looking managed investment ratings—the Morningstar Analyst Rating and the Morningstar Quantitative Rating—into a single rating: the Morningstar Medalist Rating.

For investors who are keen to better understand the drivers of our ratings, we will introduce a new datapoint "Analyst Driven %" so there is clarity on the proportion of analyst involvement in each rating, rather than a Q designation on any overall rating of a managed investment. In the same spirit, we will also release a new datapoint "Data Coverage %" for Medalist Rating that will disclose the total amount of input data available when the rating was struck.

For pillars that are rated and written by analysts in funds that carry the Morningstar Quantitative Rating, we will remove the Qs from the pillar scores so they better reflect analyst inputs.

An updated methodology document is <u>available here</u> on <u>Morningstar's Signature Research page</u>.

What is not changing?

The process of how we assign the <u>Morningstar Analyst Rating</u> or <u>Morningstar Quantitative Rating remains the same</u>. With the launch of the Medalist Rating, the presentation of the ratings and united name will now more clearly display the mix of analyst and algorithm input to each investment's rating.

We will continue to indicate pillar ratings and/or analysis not written by analysts with a Ω .

The Managed Investment Report will continue to contain both analyst-written text and automated text based on analyst involvements as well as any Morningstar Reports that contain the Morningstar Analyst or Quantitative Rating. We will be updating the disclosures for all reports that contain the Morningstar Analyst or Quantitative Rating to the new Morningstar Medalist Rating.

Why the change now?

2021 marked the 10- and 5-year anniversaries of the Morningstar Analyst Rating and Morningstar Quantitative Rating respectively, and both ratings have enjoyed an efficacious track record over this time.

Over 40% of the ratings issued by the Morningstar Quantitative Rating today — approximately 157,000 ratings — depend on all

three analyst-rated pillars (People, Process, and Parent) from related strategies, and 71,000 ratings are dependent on at least one analyst-rated pillar. Only about a quarter of our ratings — 91,000 managed products — rely entirely on machine learning to score the People, Parent, and Process pillars, and our quantitative rating model was built to continually learn from how our analysts rate funds.

In an environment where managed investment products are growing fast at 11% per annum globally, the single ratings system will allow us to leverage the best of our qualitative and quantitative insights to provide timely and efficacious ratings for investors.

When will the ratings change take effect?

This change will debut across all Morningstar platforms on May 2, 2023.

Where will the Morningstar Medalist Ratings be available?

The Morningstar Medalist Ratings will be available in all Morningstar products and platforms that currently carry the Morningstar Analyst Rating and the Morningstar Quantitative Rating. This includes Morningstar.com, Morningstar Direct, Morningstar Office, data feeds, as well as other products and platforms such as Advisor Workstation and Research Portal (previously known as Advisor Research Center (ARC)).

In what region(s) is the Morningstar Medalist Rating available?

We are rolling out the Morningstar Medalist Ratings globally and they are available in all regions and markets where Morningstar Analyst Rating or Morningstar Quantitative Rating are available.

What is the scale of the Morningstar Medalist Rating?

The Morningstar Medalist Rating follows the same ratings scale as the Morningstar Analyst Rating and the Morningstar Quantitative Rating —Gold, Silver, Bronze, Neutral, and Negative.

For investors who wish to better understand the analyst involvement within the rating, we will introduce a new datapoint "Analyst Driven %" so there is clarity on the proportion of analyst involvement in each rating. We will continue to indicate which pillar ratings and/or analysis not written by analysts with a Ω .



What are the criteria for a fund to receive a Morningstar Medalist Rating?

To receive a Morningstar Medalist Rating, the managed investment must be an open-end fund, an ETF, a SMA, or a model portfolio that resides in a Morningstar Category that is eligible to receive forward-looking ratings.

(We exclude certain types of funds from ratings if they are used primarily for trading or speculation. These types of funds are separately categorized and therefore we apply the exclusion at the category level. There are relatively few such funds and categories in practice. Please see Appendix D of the Methodology document for more detail.)

How many funds receive the Morningstar Medalist Rating?

By uniting the Morningstar Analyst Rating and the Morningstar Quantitative Rating into the Morningstar Medalist Rating, we expect the combined forward-looking rating to apply to over 400.000 share classes.

Do you plan to replace the Morningstar Rating with the Morningstar Medalist Rating?

No. The Morningstar Rating is a backward-looking, quantitative rating that is based on funds' trailing risk-adjusted returns versus their Morningstar Category peers. It seeks to reliably sort funds based on their past performance.

By contrast, the Morningstar Medalist Rating is a forward-looking rating seeking to identify funds that have the best chance of outperformance in the future. It assesses funds' investment merits and differentiate between them so as to capitalize on opportunities and build more-cohesive portfolios.

How will investors / clients access historical ratings data?

The historical Morningstar Analyst Rating and the Morningstar Quantitative Rating will be available in the time series history of Morningstar Medalist Rating, in the products where time series history is available. The historical Ratings and Pillar Ratings values will not change from the Morningstar Analyst Rating and Morningstar Quantitative Rating, however they will only be available under the Morningstar Medalist Rating historical data points. Historical Pillar Ratings will have a superscript Ω if the assessment was not assigned by an analyst.

Will investors / clients be able to tell what is assigned by an analyst or what is quantitatively derived?

Currently, a Morningstar Quantitative Rating is denoted with a superscript Q on the overall rating. With the launch of the Medalist Rating, we will be removing the Q designation on any overall rating of a managed investment. For a pillar rating and/or analysis, a superscript Q will indicate if that assessment was not assigned by an analyst. Please see the example display below for the designations for the overall rating and pillars.

An example of how the Morningstar Medalist Ratings will present in a screener tool within Morningstar products. Investors will be able to easily see which pillars (People, Process, and Parent) derive from analysts and which are assigned quantitatively.

Managed Investment Name	Morningstar Medalist Rating	Morningstar Medalist Rating - Parent Pillar	Morningstar Medalist Rating - Process Pillar	Morningstar Medalist Rating - People Pillar
Sample Fund 1	℧ Gold	High	High ^o	High ²
Sample Fund 2	Negative	Low ⁰	Low ^o	Below Average ⁰
Sample Fund 3	□ Silver	Above Average	Above Average	Above Average
Sample Fund 4	© Bronze	Above Average	Average	Above Average
Comple Eund E	Mandral	Austraga	Austrage	Averagel

Whenever possible, we map over analyst decisions to extend the power of our analyst ratings. This is true in the methodology today, and will continue with the launch of Medalist Ratings. Currently, we are mapping at least one pillar for roughly 75% of the Morningstar Quantitative Ratings, but in the current product view, you cannot see this mapping, or inheritance, in the pillar ratings and/or assessments. With the release of Medalist Ratings, the pillars will continue to inherit an analyst's assessment, and investors and clients will now be able to see the superscript Q on the pillars that were not inherited from an analyst. Additionally, to provide transparency into the data coverage for the model, we will introduce the following data points:

- Analyst Driven %: will display the percentage of analyst input into the overall rating assignment, including direct analyst coverage and inheritance of an analystrated pillar.
- Data Coverage %: will display the percentage of available input data for rating calculation at the Pillar level.

What does inheritance mean?

In some circumstances, Morningstar will map pillar ratings assigned to vehicles that are not covered directly by analysts. This is achieved by mapping the pillar ratings that analysts have assigned to vehicles they cover to uncovered vehicles that are related in some way to the vehicles they cover.

These relationships can take a few forms, such as when an uncovered vehicle follows the same strategy as a covered vehicle; when an uncovered vehicle is managed by the same team that



runs a covered vehicle; or when an uncovered vehicle shares the same parent firm as a covered vehicle.

What actions will clients need to take for this update?

Product specific impact details will be shared with clients as soon as they are finalized, and shared through our standard 120-day, 90-day, 60-day and 30-day communications. Depending on how the client is currently consuming the Morningstar Analyst Rating or Morningstar Quantitative Rating, they may need to adjust their saved items or processing to consume the new Morningstar Medalist Rating upon its release on May 2, 2023. If a client is using a report that includes the Morningstar Medalist Rating, they will also need to update the disclosure.

Are we diluting analyst involvement in funds that are qualitatively rated today?

No, in fact it is quite the contrary. With the rollout of the Morningstar Medalist Rating, we seek to maximize the impact and visibility of our qualitative analyst inputs by systematically mapping and applying pillar scores and analyst-written analysis to their related strategies. It should be noted that over 40% of the ratings issued by the Morningstar Quantitative Rating today — approximately 157,000 ratings — depend on all three analyst-rated pillars (People, Process, and Parent) from related strategies, and 71,000 ratings are dependent on at least one analyst-rated pillar.

Will the launch of the Morningstar Medalist Rating affect the number of strategies under qualitative analyst coverage?

No. We continue to make coverage decisions based on our independence and research breadth to ensure that our qualitative coverage drives the Morningstar Medalist Ratings and to provide the necessary building blocks to construct client portfolios and achieve effective portfolio diversification. We aim to ensure there are sufficient qualitatively rated investment options across all asset classes and specialty subsectors, in which analysts continue to play a key part in identifying promising ideas through discovery meetings and their research expertise. Analysts have full flexibility to cover a broad spectrum of both large and smaller strategies and we consider active and passive options across all asset classes. Client demand is also an important consideration when assessing

a strategy for inclusion in our coverage. Qualitative coverage still needs to be presented and approved at local coverage committees, and we anticipate the rollout of the Morningstar Medalist Rating can offer scope to further enhance and optimize our coverage decisions.

Will the launch of the Morningstar Medalist Rating change the timing and frequency of Rating reviews?

No. The timing of each piece of the methodology will continue to update on regular schedule. For example, the alpha distributions will remain on a semi-annual and as needed basis. Pillars assigned directly by analysts will update roughly every 1-2 years, or as needed, depending on the pillar. Pillars assigned by an algorithm will update monthly.



Data Point Definitions

On May 2, 2023, the following new datapoints will populate to support the Medalist Rating.

Morningstar Medalist Rating

The Morningstar Medalist Rating for funds is the summary expression of our forward-looking analysis of investment strategies as offered via the specific vehicles under coverage. Vehicles can include but are not limited to open-end funds, closed-end funds, exchange-traded funds, and separately managed accounts domiciled throughout the world. We assign Morningstar Medalist Ratings at the share-class level for the vehicles that we cover in order to accurately capture the impact of fee differences on expected net-of-fee alpha between different classes of the same vehicle. Our own research and academic studies have repeatedly shown that the ability of a strategy to outperform is eroded as fees become higher. We therefore believe it is essential that our analysis include as precise an evaluation as possible of the fees of each specific vehicle under coverage. For open-end funds, for example, this means that share classes of the same fund that charge different amounts may receive different Morningstar Medalist Ratings.

The Morningstar Medalist Rating for funds is expressed on a five-tier scale running from Gold to Negative. For actively managed funds, the top three ratings of Gold, Silver, and Bronze all indicate that our analysts expect the rated investment vehicle to produce positive alpha relative to its Morningstar Category index over the long term, meaning a period of at least five years. For passive strategies, the same ratings indicate that we expect the fund to deliver alpha relative to its Morningstar Category index that is above the lesser of the category median or zero over the long term. The Medalist Rating does not express a view on a given asset class or peer group; rather, it seeks to evaluate each strategy and associated vehicle within the context of an appropriate benchmark and peer group.

Ratings for active strategies should be interpreted as follows, where performance expectations refer to performance over a holding period of at least five years, and where alpha is calculated relative to the standard Morningstar category index:

Gold

These are our top recommendations within their Morningstar Categories. Our evaluation of their key pillars in the context of the fees charged at the share-class level ranks them in the top 15% of

all investments with expected positive net-of-fee alpha in their category.

Silver

These sit just below Gold but are also among our strongest investment ideas within their Morningstar Categories. Our evaluation of their key pillars in the context of the fees charged at the share-class level ranks them in the next 35% of all vehicles with expected positive net-of-fee alpha in their category.

Bronze

We do not expect these investments to perform as well as Gold or Silver offerings, but we still expect them to deliver positive net-offee alpha. Our evaluation of their key pillars in the context of the fees charged at the share-class level ranks them in the bottom 50% of all vehicles with expected positive net-of-fee alpha in their category.

Neutral

We expect these investments to deliver net-of-fee alpha that is less than or equal to zero. Our evaluation of their key pillars in the context of the fees charged at the share-class level ranks them in the top 70% of all vehicles with net-of-fee alpha less than or equal to zero in their category.

Negative

These are the worst investments within their Morningstar Categories in terms of our expected net-of-fee alpha. Our evaluation of their key pillars at the price level for the rated vehicle and associated share class(es) ranks them in the bottom 30% of all vehicles with expected net-of-fee alpha that is less than or equal to zero in their category.

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

Under Review

This designation means that a change at a rated strategy requires further review to determine the impact on the rating.

Morningstar Medalist Rating - Parent Pillar

We believe the parent organization is important in evaluating both active and passive funds. Although other factors may have more immediate impact, they would not be sustainable without backing from the asset-management firm. Further, the asset manager and its management set the tone for key elements of our evaluation,



including capacity management, risk management, recruitment and retention of talent, and firmwide policies, such as incentive pay, that drive or impede the alignment of the firms' interests with those of fund investors.

Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship. The former tend to operate within their circle of competence, do a good job of aligning manager interests with those of investors in their funds, charge reasonable fees, communicate well with strategy investors, and treat investors' capital as if it were their own. Firms oriented to putting their own interests too much to the fore might be characterized by their view of investors as sales opportunities — they tend to offer faddish products in an attempt to gather assets and have higher charges and incentive programs that do a poor job of aligning managers' interests with those of investors. Although relatively few firms fall obviously at one extreme or another, determining where an asset manager falls on the spectrum is a key part of our parent research approach.

Key areas of evaluation include:

- Recruitment and retention of talent
- Organizational structure
- Capacity management
- Organizational and business strategy
- Quality of product lineup
- Alignment of interests with investors
- Regulatory compliance
- Investment/group culture

Morningstar assigns pillar ratings to vehicles in one of three ways:

Directly, by Analysts

Pillar ratings assigned by analysts to vehicles they cover, based on their qualitative assessment. When analysts cover a vehicle, they assign all three pillars—People, Process, and Parent.

Indirectly, by Analysts

Pillar ratings assigned to vehicles that are not covered directly by analysts. This is achieved by mapping the pillar ratings that analysts have assigned to vehicles they cover to uncovered vehicles that are related in some way to the vehicles they cover.

These relationships can take a few forms, such as when an uncovered vehicle follows the same strategy as a covered vehicle, when an uncovered vehicle is managed by the same team that runs a covered vehicle, or when an uncovered vehicle shares the same parent firm as a covered vehicle.

Directly, by Algorithm

Pillar ratings assigned algorithmically to vehicles not assigned pillar ratings directly or indirectly by an analyst. Morningstar has developed a machine-learning model to expand its coverage beyond ratings assigned directly or indirectly by analysts. The model algorithmically derives pillar ratings for vehicles not assigned ratings directly or indirectly by analysts. It does so by using the decision-making processes of analysts, their past ratings decisions, and the data used to support those decisions.

Morningstar Medalist Rating - People Pillar

The overall quality of a strategy's investment team is a significant key to a strategy's ability to deliver superior performance relative to its benchmark and/or peers. Evaluating an investment team requires that analysts assess, among other things, the individuals who make the key decisions on the portfolio; if there is more than one person in charge, how conflicts are resolved; resources that directly support the managers' work on the strategy; other resources that are not part of the team; the expertise and relevance of available resources to the strategy; and how incentive pay influences decision-making and team stability.

The relevant personnel are judged along several axes:

- Experience & ability
- Fit & structure
- Workload
- Communication/information flow
- Temperament
- Alignment of interests
- Key-person risk
- Team stability

Morningstar assigns pillar ratings to vehicles in one of three ways:

Directly, by Analysts

Pillar ratings assigned by analysts to vehicles they cover, based on their qualitative assessment. When analysts cover a vehicle, they assign all three pillars—People, Process, and Parent.

Indirectly, by Analysts

Pillar ratings assigned to vehicles that are not covered directly by analysts. This is achieved by mapping the pillar ratings that analysts have assigned to vehicles they cover to uncovered vehicles that are related in some way to the vehicles they cover.

These relationships can take a few forms, such as when an uncovered vehicle follows the same strategy as a covered vehicle, when an uncovered vehicle is managed by the same team that runs a covered vehicle, or when an uncovered vehicle shares the same parent firm as a covered vehicle.



Directly, by Algorithm

Pillar ratings assigned algorithmically to vehicles not assigned pillar ratings directly or indirectly by an analyst. Morningstar has developed a machine-learning model to expand its coverage beyond ratings assigned directly or indirectly by analysts. The model algorithmically derives pillar ratings for vehicles not assigned ratings directly or indirectly by analysts. It does so by using the decision-making processes of analysts, their past ratings decisions, and the data used to support those decisions.

Morningstar Medalist Rating - Process Pillar

The Morningstar Medalist Rating is style-agnostic, meaning that, for equity strategies, we do not prefer value to growth or momentum, or vice versa. For fixed-income strategies, both highquality and credit-sensitive styles are viable. For multi-asset strategies, a wide range of approaches to asset allocation can succeed. We look for strategies with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. It must also be implemented effectively. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective. We seek to understand the context in which managers think about risk and how this is expressed when constructing the portfolio. Our analysts make extensive use of Morningstar's global database and holdings-based analytical capabilities to evaluate the portfolio. We look for strategies with a process distinctive enough to generate standout results in the future.

More specifically, we seek to understand:

- The investment philosophy that underpins the strategy.
- The key "edge" of the process as executed by the manager.
- Elements that are systematic and repeatable, if any.
- The fit of the process with the resources backing the strategy and with the size of the asset base tied to the strategy (including all vehicles across all domiciles).
- Whether the process has been consistently applied, as demonstrated by the composition of the portfolio over time.
- The risks entailed in the process, from a portfolio-bias point of view and from an ability-to-execute point of view
- The managers' approach to risk management.
- Our expectations for performance in different market environments assuming the process is adhered to.
- Whether or not we believe the process can add value across the cycle versus the relevant benchmark or category on a risk-adjusted basis.

- The suitability of the strategy for different types of investors given the risks we would expect to see in its portfolio.
- Any historical changes in approach or style, and the reasons for those changes.

Morningstar assigns pillar ratings to vehicles in one of three ways:

Directly, by Analysts

Pillar ratings assigned by analysts to vehicles they cover, based on their qualitative assessment. When analysts cover a vehicle, they assign all three pillars — People, Process, and Parent.

Indirectly, by Analysts

Pillar ratings assigned to vehicles that are not covered directly by analysts. This is achieved by mapping the pillar ratings that analysts have assigned to vehicles they cover to uncovered vehicles that are related in some way to the vehicles they cover.

These relationships can take a few forms, such as when an uncovered vehicle follows the same strategy as a covered vehicle, when an uncovered vehicle is managed by the same team that runs a covered vehicle, or when an uncovered vehicle shares the same parent firm as a covered vehicle.

Directly, by Algorithm

Pillar ratings assigned algorithmically to vehicles not assigned pillar ratings directly or indirectly by an analyst. Morningstar has developed a machine-learning model to expand its coverage beyond ratings assigned directly or indirectly by analysts. The model algorithmically derives pillar ratings for vehicles not assigned ratings directly or indirectly by analysts. It does so by using the decision-making processes of analysts, their past ratings decisions, and the data used to support those decisions.

Morningstar Medalist Rating - Data Coverage %

The Data Coverage % data point is a summary metric describing the level of data completeness used to generate the overall rating. If the pillar is assigned directly or indirectly by analysts, the pillar has complete data availability, as no model was used to estimate the pillar score. If the pillar is assigned directly by algorithm, Morningstar counts the number of data points feeding both the positive and negative models and counts whether the vehicle has strategy-specific data available. A simple percentage is calculated per pillar. Each pillar-completeness metric is scaled by the weights listed in the methodology document.

For example, consider an active fund where all three pillar ratings are indirectly assigned by an analyst. In that scenario, the Data Coverage % data point would be 100%. However, if the analyst



coverage changed and the People Pillar was no longer indirectly assigned by an analyst, then the People Pillar would be assigned directly by an algorithm. Across both the Positive and Negative People models, the algorithm uses 28 data points. Suppose the fund has all the input data for those data points except for the Manager Excess Return -5 Year data point, which appears in both the Positive and Negative models. Under that scenario, Morningstar would have coverage of 26 out of 28 required People Pillar data points, or 92.9%. Since the People Pillar is a 45% weight for active funds, that would mean the overall data coverage would be 96.9% (45% for the Process Pillar plus 10% for the Parent Pillar plus 41.9% for the People Pillar).

Morningstar Medalist Rating - Analyst Driven %

The Analyst-Driven % data point displays the weighted percentage of a vehicle's pillar ratings assigned directly or indirectly by analysts. For example, if the People and Parent ratings are assigned directly or indirectly by analysts but the Process rating is assigned algorithmically, the Analyst-Driven % for an actively managed vehicle would disclose that 55% of the pillar weight was assigned by analysts and the Analyst-Driven % for a passively managed vehicle would disclose that 20% of the pillar weight was assigned by analysts.

Range of Analyst-Driven % by Pillar Inheritance Level for Active Funds			
# of Inherited Pillars	Analyst-Driven %		
0	0		
1	10-45		
2	55-90		
3	100		

Range of Analyst-Driven % by Pillar Inheritance Level for Passive Funds			
# of Inherited Pillars	Analyst-Driven %		
0	0		
1	10-80		
2	20-90		
3	100		

