T. Rowe Price Retirement Target-Date Fund Series Report

Morningstar Analyst Rating Silver

Key Features

Asset-Weighted Expense Ratio	0.69%
Active/Passive Exposure	88% Active
Open/Closed Architecture	100% Closed
Total Net Assets ($M)	140,553

Executive Summary — Rating:

Process — Positive

Management's research suggests investors spend more money in retirement than they anticipate and risk outliving their savings. As a result, the funds' glide path has a higher equity allocation than many of its rivals', both before and during retirement. The majority of the underlying funds come recommended via their Morningstar Analyst Ratings.

Price — Neutral

This series' funds aren't as cheap as peers that invest in passively managed options, but they are reasonably priced, especially compared with series that invest predominantly in active strategies.

Performance — Positive

The series' three-, five-, and 10-year returns through December 2017 handily outpaced the majority of its peers'. But the funds' relatively heavy equity stake can lead to greater short-term volatility than many rivals. For example, the funds lost more than their average competitor during 2008's market slide and rebounded more sharply than most during 2009's rally.

People — Positive

T. Rowe Price's asset-allocation committee makes the strategic decisions for the funds, while firm veteran Jerome Clark leads a group of associate managers who run the funds' day-to-day operations. Longtime team member Wyatt Lee joined the manager roster in August 2015. The underlying funds largely feature solid, proven managers.

Parent — Positive

T. Rowe Price's corporate culture and regulatory history are impressive. The firm stresses long-term investing, high-quality securities, and sensible risk management. T. Rowe also does a good job describing its target-date funds and communicating with investors. Manager transitions are typically planned well in advance.

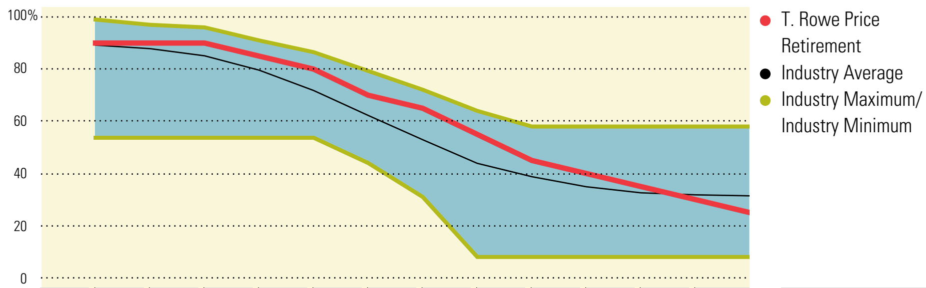
Morningstar Analyst Rating

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Rating Spectrum

Gold Silver Bronze Neutral Negative

Strategic Glide Path Total Equity Exposure



Retirement Date	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005	2000	1995
T. Rowe Price Retirement	90	90	90	85	80	70	65	55	45	40	35	30	25
Industry Average	89	88	85	80	72	62	53	44	39	35	33	32	31
3-Yr Total Return	6.78	6.80	6.81	6.77	6.61	6.43	6.10	5.72	5.24	4.85	4.54	-	-
3-Yr Performance Quartile												-	-

Available Funds

2005 Fund	2020 Fund	2035 Fund	2050 Fund
2010 Fund	2025 Fund	2040 Fund	2055 Fund
2015 Fund	2030 Fund	2045 Fund	2060 Fund

Morningstar Opinion

Leo Acheson
02-02-2018

Strong underlying funds and a robust asset-allocation approach give the T. Rowe Price Retirement series a discernible edge, earning a Morningstar Analyst Rating of Silver.

Jerome Clark has served as the series' lead manager since its 2002 inception, and Wyatt Lee joined the roster in 2015. The firm has invested heavily in its target-date team, which now stands at 30 members. That's an impressive size, and the firm plans to continue growing the multi-asset group.

With the risk of outliving one's assets in mind, the group designed a glide path that looks more aggressive than the typical competitor's. Except for the early savings years and about 20 years after retirement, the series keeps a higher equity weighting than the industry norm throughout the glide path.

In late 2017, the series began making changes within the bond sleeve. It's reducing exposure to an intermediate-term fixed-income fund to 45% of the bond sleeve to make way for an unconstrained bond fund and a hedged international-bond fund, which will take 10% and 15% of bond assets, respectively. As lower-volatility strategies, those funds represent core bond allocations. The remaining 30% of the bond sleeve will strategically shift exposures to more-volatile sectors, including high-yield bonds, emerging-markets debt, bank loans, and long Treasuries as the investor ages. (Previously, this allocation held 10% weightings in unhedged foreign bonds, emerging-markets debt, and high-yield bonds.) Once these changes are complete, about 35% to 60% of each target-date fund's bond sleeve will be altered, depending on the fund year. T. Rowe Price conducted in-depth analysis to support these changes and believes they will lower total portfolio risk without impacting returns.

Following the bond sleeve changes, the series will hold 21 unique underlying funds. Overall, it's a compelling lineup. We rate 15 of those, and 14 are Morningstar Medalists, meaning we expect them to outperform peers going forward.

The bond sleeve changes didn't stem from performance concerns. During the last 10 years, all of the series' funds outpaced at least 95% of peers. An equity-heavy glide path has helped. Attribution from T. Rowe Price indicates that it has also added significant value from security selection, and tactical allocation had a modestly positive effect.

Strong returns have attracted investors, and the team now manages more than $225 billion in target-date assets. Four of the series' five small- and mid-cap funds are closed to new investors, so continued growth could create capacity constraints. The series has the option to invest in small- and mid-cap index funds, but access to top-tier active funds has been a key strength, so we will keep an eye on changes in this area.

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The date shown next to the Morningstar Analyst Rating is the date on which the Morningstar Manager Research Analyst assigned or reaffirmed the current rating for the target-date fund series based on the analyst's latest review and research report for the target-date fund series.

The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of funds: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a fund as well as the interaction between the pillars, which we believe is crucial to understanding a fund's overall merit.

People

The overall quality of a target-date fund series' investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a target-date fund series' investment team requires that analysts assess several relevant items including how key decisions are made.

Parent

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

Process

We look for target-date fund series with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

Performance
We do not believe past performance is necessarily predictive of future results, and this factor accordingly receives a relatively small weighting in our evaluation process. In particular, we strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a target-date fund series is delivering to our expectations.

Price
To reflect actual investor experience, price is evaluated within the context of the relevant market or cross-border region—for example, the United States, Australia, Canada, or Europe. In recognition of differences in scale and distribution costs in various markets, the level at which a target-date fund series is penalized for high fees or rewarded for low fees can vary with region. In Europe, for example, target-date fund series are penalized if they land in the most expensive quintile of their Morningstar category and are rewarded if they land in the cheapest quintile. The assessment is made using prospectus expense ratios, but in the case of target-date fund series with performance fees, expenses are evaluated excluding any performance fees and then the structure of the performance fee is evaluated separately.

Morningstar Analyst Ratings
Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a target-date fund series; the difference between them corresponds to differences in the level of analyst conviction in a target-date fund series' ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

Gold
Represents target-date fund series that our analyst has the highest-conviction in for that given investment mandate. By giving a target-date fund series a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a target-date fund series must distinguish itself across the five pillars that are the basis for our analysis.

Silver
Represents target-date fund series our analyst has high-conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these target-date fund series will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

Bronze
Represents target-date fund series that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these target-date fund series to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

Neutral
Represents target-date fund series in which our analysts don't have a strong positive or negative conviction. In our judgment, these target-date fund series are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

Negative
Represents target-date fund series that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these target-date fund series are inferior to most competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

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Under Review
This designation means that a change that occurred with the target-date fund series or at the target-date fund series company requires further review to determine the impact on the rating.

Not Ratabale
This designation is used only where we are providing a Report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

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Equity-Related Data Points
The Report lists the top ten holdings in the target-date fund series as of the dated noted. For each underlying holding, a series of data points is provided including, where applicable, that security's Economic Moat rating as of the date noted.

Economic Moat
The concept of an economic moat plays a vital role in our equity analyst's qualitative assessment of a firm's long-term investment potential, but also in the actual calculation of its fair value estimate. An economic moat is a structural feature that allows a firm to sustain excess profits over a long period of time. We define economic profits as returns on invested capital (or ROIC) over and above our estimate of a firm's cost of capital, or weighted average cost of capital (or WACC). Without a moat, profits are more susceptible to competition. We have identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

Companies with a *narrow moat* are those we believe are more likely than not to achieve normalized excess returns for at least the next 10 years. *Wide-moat* companies are those in which we have very high confidence that excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. The longer a firm generates economic profits, the higher its intrinsic value. We believe low-quality, *no-moat* companies will see their normalized returns gravitate toward the firm's cost of capital more quickly than companies with moats.

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