



Six Pillars for an Effective Model Portfolio

T. Rowe Price process has key design and management strengths.

December 2021

KEY INSIGHTS

- Investors and financial professionals seeking model portfolios face a crowded market of providers and solutions, requiring them to make critical choices.
- Our analysis has identified six key factors that we believe investors and financial professionals should prioritize when evaluating model portfolios.
- T. Rowe Price offers a range of services designed to support financial professionals no matter where they are in their models-based practice.

Model portfolios that provide diversified exposure to stocks, bonds, and/or other asset classes have rapidly emerged as a solution of choice for many investors and financial professionals.¹ However, while model portfolios can greatly simplify the asset allocation process, they still require investors and financial professionals to evaluate a host of critical factors when selecting a model appropriate for their investment objectives and risk preferences.

Not least of these decisions is the choice of providers—both of the model itself and of the underlying components used to assemble the desired portfolio allocations. Asset allocation and portfolio design are complex processes based on extensive research and proprietary methodologies.

Ongoing portfolio management requires investors and financial professionals to consider a range of additional questions:

- What kind of support can the model provider offer to help keep financial professionals and their clients informed about their portfolios and overall market conditions?
- Does the manager seek to add value through tactical allocation—shorter-term portfolio shifts that seek to take advantage of, or guard against, temporary market conditions?
- Who will monitor potential risk exposures within the underlying components or ensure that they continue to provide the asset class and/or style exposures called for in the model?



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Portfolio Manager,
Global Multi-Asset Team

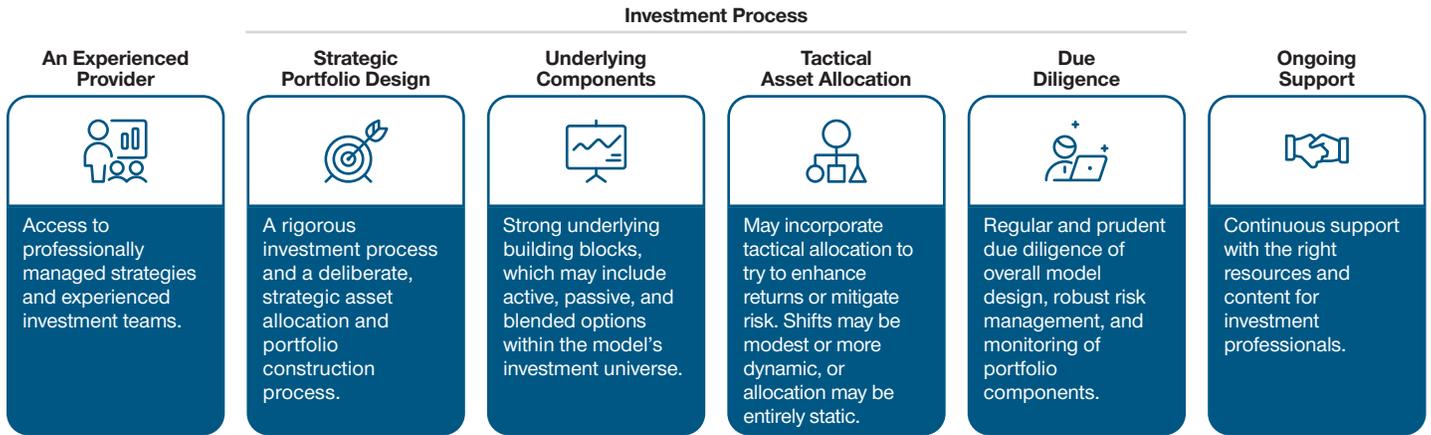


Wenting Shen
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¹ Model portfolios are professionally managed investment solutions provided by asset managers to financial professionals, reflecting a design for a group of underlying investments that together target a certain investment objective or a range of risk or return levels. Model portfolios are typically not directly investable, and financial professionals' actual implementation of provided design may vary from the asset manager's suggested design.

Pillars of Strength

(Fig. 1) T. Rowe Price model portfolios are backed by decades of asset allocation experience



Source: T. Rowe Price.

In an increasingly crowded marketplace, investors and financial professionals will find many proposed answers to these questions and will be offered thousands of potential solutions by asset managers and other model portfolio providers.

In terms of the evaluation and selection process, we have defined six key factors that we believe are most important for investors and financial professionals to consider when choosing model portfolios (Figure 1). In this paper, we explain how T. Rowe Price addresses these key factors and describe the resources and investment expertise we seek to apply to them.

To a large extent, these six pillars represent the core institutional strengths—as multi-asset allocators and as investment managers—that we believe we bring to the model portfolio process.



An Experienced Provider

In our view, investment skills, resources, and experience are the foundational criteria needed in selecting a model portfolio provider. In that regard, we believe T. Rowe Price brings a compelling track record to the entire process—from strategic portfolio design to ongoing management.

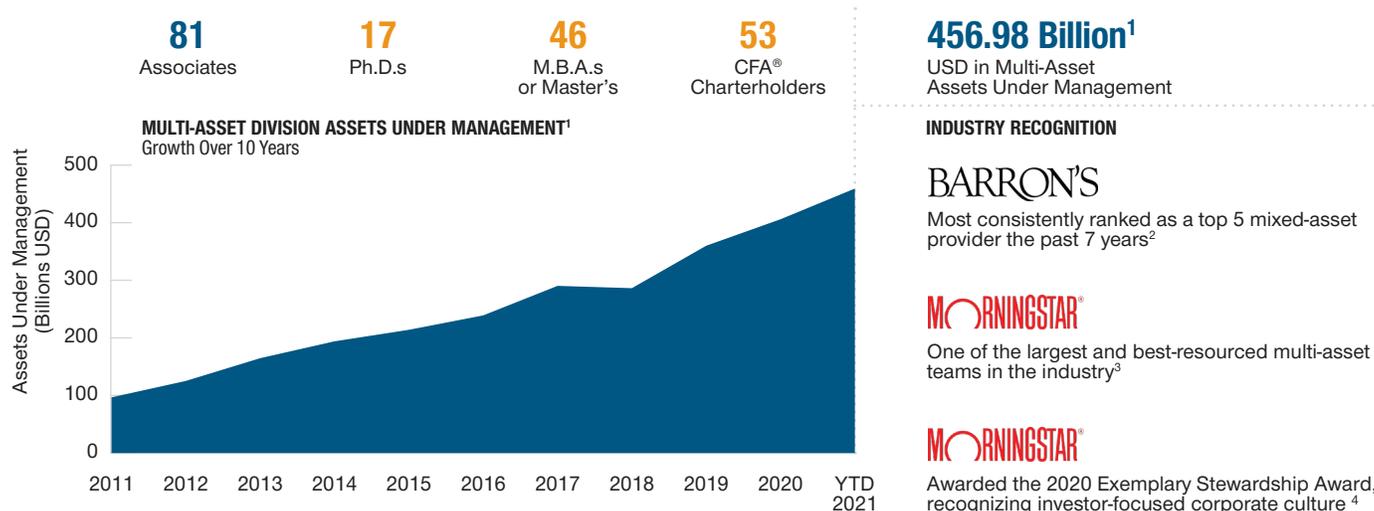
The firm has more than 30 years of experience in constructing and managing multi-asset portfolios across a range of strategies for individual and institutional investors. We apply those same advanced investment techniques to designing, managing, and supporting model portfolios.

T. Rowe Price model portfolios are managed by a dedicated team that Morningstar has cited as one of the largest and best-resourced multi-asset organizations in the investment industry (Figure 2). Our team understands the complexities of managing multi-asset portfolios.

Responding to a dynamic market environment means that generating strong investment results requires thoughtful initial portfolio design and ongoing due diligence, monitoring, and revaluation of the portfolio through time. We are thorough in each step of the process—from strategic portfolio design, through the selection of the underlying components, to tactical asset allocation positioning—and we are aware of the risks and interactions across each step of the investment process.

T. Rowe Price Has Over 30 Years of Experience Managing Multi-Asset Portfolios

(Fig. 2) Experience and resources of our Multi-Asset Division



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As of September 30, 2021.

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¹ The combined multi-asset portfolios managed by T. Rowe Price Associates, Inc., and its investment advisory affiliates. This figure includes assets that are held outside of T. Rowe Price, but where T. Rowe Price influences trade decisions.

² Barron's ranked T. Rowe Price in the top five mixed-asset providers 4 out of 7 years from 2014 to 2020. Last reviewed February 2021.

³ Source: Morningstar Direct, Analyst Report, March 5, 2021 (see Additional Disclosures).

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Strategic Portfolio Design

Strategic portfolio design is the most critical part of the investment process and the principal driver of an investor's risk and return outcomes. The portfolio design process establishes the long-term neutral portfolio allocations across asset classes.

T. Rowe Price model portfolios are built upon the same design principles and disciplined, repeatable investment process used in the T. Rowe Price target allocation and target date strategies (Figure 3). Each model is designed to align with an investor's specific investment goal, risk tolerance, and expected time horizon. Strategic asset class and sub-asset class neutral weights are informed by a range of analysis and inputs based on the model portfolio's unique risk/return objectives and desired outcomes.

T. Rowe Price target allocation model portfolios are broadly diversified across global equity and fixed income sectors

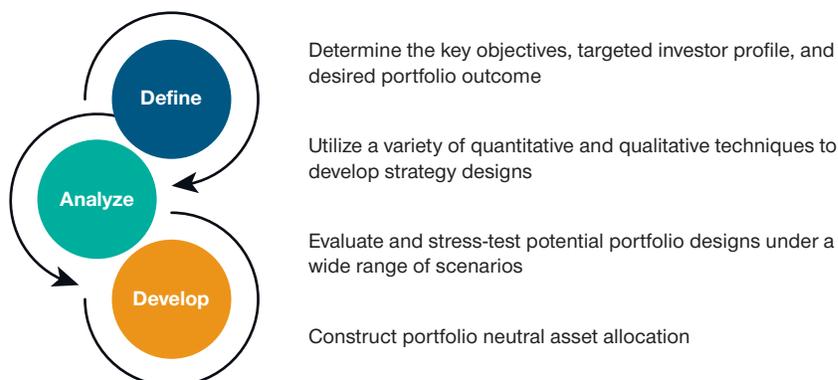
and regions. Our goal is to build durable portfolios that can consistently perform across a range of market environments by incorporating diversified sources of potential added value and by not being overly reliant on any single environment to succeed. We routinely review these allocations to help assure their efficacy.

In our diversified portfolio designs, the equity allocation is generally intended to serve as the primary contributor to growth and capital appreciation. Within equity, our approach is generally both size and style neutral versus the market, and we advocate for global diversification while recognizing that some investors may wish to preserve a bias toward their home country. (Figure 4).

Our strategic fixed income allocations generally seek to take advantage of the global opportunity set and include a combination of core and diversifying strategies (Figure 5).

We Believe Strategic Portfolio Designs Are Critical to Helping Clients Achieve Their Goals

(Fig. 3) T. Rowe Price's strategic portfolio design process



We combine analytical frameworks with our investment expertise and insights across our portfolio design phases and ultimately to how we implement and manage each portfolio.

Source: T. Rowe Price.

- Core high-quality fixed income asset classes (e.g., short-term, intermediate, and long-term U.S. investment-grade bonds, and U.S. dollar-hedged global ex-U.S. bonds) can act as a ballast or counterweight to the models' equity exposure in order to diversify sources of portfolio risk and help contribute to lower portfolio return volatility.
- Diversifying sectors (also known as plus sectors), such as high yield bonds, floating rate loans, and emerging markets debt, can provide exposure to higher-yielding opportunities and help reduce interest rate sensitivity.

While the plus sectors complement the core bonds, we size plus sector allocations accordingly, recognizing their higher correlation with equities, particularly in periods of market stress.

Selection of the Underlying Components

In addition to considering the strategic portfolio design, financial

professionals also need to evaluate a model's underlying components and their characteristics.

We believe in the potential for skilled active management to add long-term value across multiple asset classes, and we would argue that T. Rowe Price has demonstrated that ability through the longer-term historical performance of our target date funds relative to both industry benchmarks and their major passive competitors.³

In our view, financial professionals evaluating actively managed underlying components in a model portfolio should look for experienced management teams with a demonstrated ability to deliver strong relative performance over full market cycles. We believe T. Rowe Price is well positioned to meet this need.

The underlying components in T. Rowe Price model portfolios are typically drawn from a wide range of

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How We Construct Equity Model Portfolios

(Fig. 4) Illustrative equity allocation design



Equity Exposure

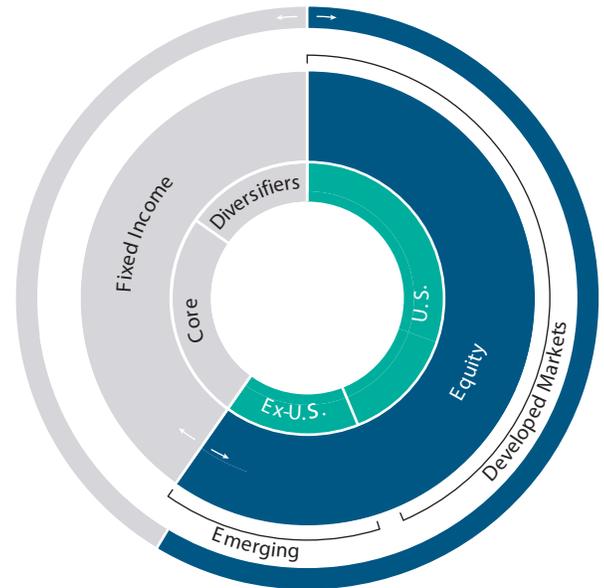
We believe the role of equity in a multi-asset portfolio is to drive long-term growth of capital.

- This role is consistent throughout target risk levels.
- The level, not the type, of equity is the primary driver of portfolio volatility.



Geography

Not necessarily neutral versus the benchmark, as, in some cases, a home country bias might make sense depending on client preference.



Source: T. Rowe Price.

actively managed strategies covering major asset, sector, and geographic region. This expansive opportunity set allows us to select from a wide range of sector-specific components and more broadly diversified components with greater sector representation.

Selection of the underlying components in our models is conducted in close collaboration between the model's portfolio managers and our multi-asset research team. We carefully consider how the underlying components could contribute to a model portfolio's potential active risk. We may combine components with lower and higher active risk budgets to target a specified level of overall tracking error in the portfolio. We also may combine core and style-specific components to diversify active risk and implement tactical asset allocation decisions.

Similar to T. Rowe Price's other multi-asset strategies, our model portfolios seek to provide diversification and multiple sources of excess return. We seek to balance diversification

across the underlying components by incorporating sector-specific strategies and more diversified, flexible components. We believe that including a mix of sector-specific and broad components allows us to ensure adequate diversification while avoiding unnecessary portfolio complexity as we determine the breadth of the underlying attributes and number of holdings.

In our view, the benefits of using T. Rowe Price proprietary strategies in our model portfolios include:

- direct access to the expertise and capabilities of the underlying portfolio management teams;
- a focus on style consistency, making it more likely that strategies will remain consistent to their mandate;
- accurate, timely information on underlying holdings, which can facilitate risk management and tactical positioning;
- a consistent process for risk management oversight;

How We Construct Fixed Income Model Portfolios

(Fig. 5) Illustrative fixed income allocation design



Fixed income components have markedly different relative dynamics compared with equities.



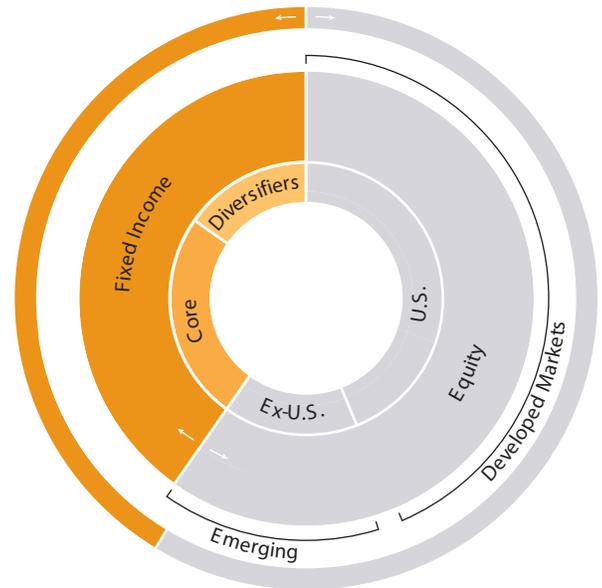
Bonds can be used as portfolio ballast to help potentially reduce portfolio volatility and seek higher risk-adjusted returns.



We believe a fixed income portfolio should maintain a sufficiently diversified exposure to the broad fixed income universe.



When used in a multi-asset portfolio, the fixed income allocation should be designed with the total portfolio in mind.



Source: T. Rowe Price.

- shared corporate values among investment professionals, all of whom must meet T. Rowe Price's rigorous standards for integrity, ethical behavior, and putting client interests first.



Tactical Asset Allocation

T. Rowe Price believes that a risk-aware approach to tactical asset allocation can provide opportunities to add value by leaning in to areas where

market conditions have resulted in asset mispricing or created potential opportunities to reduce exposure to perceived risks. Accordingly, T. Rowe Price's model portfolios incorporate tactical asset allocation decisions as an additional source of potential value added.

Our tactical asset allocation approach is driven by fundamentals and

Active Management Backed by Global Resources

Active management and in-depth research are core capabilities for T. Rowe Price. Our global research platform is staffed by more than 380 research professionals worldwide, while our portfolio managers average 22 years of investment experience and 17 years of tenure with the firm.⁴

Our research teams include specialists across the capitalization and style spectrums who use fundamental, bottom-up analysis to evaluate companies and inform security selection.

Extensive interaction among analysts across asset classes, sectors, and industries promotes a broad perspective and timely decision-making, in our view.

⁴ As of September 30, 2021.

supported by a range of quantitative tools and inputs. Tactical decisions are made by the T. Rowe Price Asset Allocation Committee (AAC), which is composed of senior investors across the firm's multi-asset, equity, and fixed income divisions.

The AAC meets monthly to decide which asset classes and sub-asset classes, if any, to overweight or underweight over a specific time horizon, typically six to 18 months. The committee seeks to harness the collective insights of the multi-asset team and the proprietary views of our global research platform to identify market themes and potential opportunities and to identify possible catalysts for profit realization.

Within the T. Rowe Price model portfolios, we take a measured approach to tactical decisions. Our typical practice is to build in and out of positions rather than taking outsized investment bets over short time periods. Our process also considers the potential transaction costs of incremental trades across portfolios and applicable tax considerations.

We typically implement tactical decisions on a quarterly basis and are cognizant of risk considerations, such as tracking error relative to strategic profile, particularly in cases where the model portfolios are positioned on a risk continuum to sit within a risk/volatility band.

Due Diligence

Once a model portfolio has been adopted, financial professionals need to be sure that the underlying components continue to be managed in a way that is consistent with their intended objectives and roles in the portfolio. At T. Rowe Price, providing this level of oversight is a central element in our approach. This requires ongoing monitoring of quantitative and qualitative factors, including risk/return, style, performance attribution, risk attribution and exposures, tracking error, positioning, and portfolio characteristics.

Members of the Multi-Asset Due Diligence Committee meet regularly with the managers of the underlying strategies to ensure their continued adherence to their stated objectives and investment process; to review key drivers

Case Study: Tactical Asset Allocation During the COVID-19 Sell-Off

A recent example of value added⁵ through T. Rowe Price's tactical asset allocation process occurred during the COVID-19 market sell-off in March 2020. The model portfolio management team responded to the downturn by overweighting stocks versus bonds, reflecting a view that equity valuations looked broadly attractive after the sell-off. Afterward, as equity markets recovered and the risk/reward profile for stocks began to look less compelling, the team moved back to a neutral stock/bond mix at the beginning of July 2020.

These moves added value for our Target Allocation Active Series Model Portfolios. Over the full calendar year 2020, for example, tactical adjustments to the stock/bond allocation added approximately 60 to 90 basis points, net of fees, to returns on the Target Allocation Active Series Model Portfolios, relative to each portfolio's combined benchmark.

Past performance is not a reliable indicator of future performance.

⁵ Six of the eight Target Allocation Active Series model portfolios experienced a positive impact from tactical adjustments during the period cited. Two portfolios—the 100% equity and 100% fixed income target allocations—were unaffected by tactical allocation changes. However, not all of the portfolios that had positive contributions to their returns from tactical allocation outperformed their benchmarks during the period.

of recent performance; and to understand the potential implications of any changes in process, philosophy, and/or people. The models and their underlying components are also routinely evaluated by T. Rowe Price's independent investment risk team. We believe that multiple layers of oversight may help provide a more durable investment experience for financial professionals.

Ongoing Support

Effective model portfolios require more than just strategic portfolio design and investment management expertise. T. Rowe Price recognizes how important it is for financial intermediaries to have access to marketing and distribution services to help serve their clients.

As one of the world's largest asset management firms and a leading provider of recordkeeping and investment services to defined contribution plan sponsors, T. Rowe Price has decades of experience in investor outreach and education. We seek to provide financial professionals with timely content that will help them effectively communicate with their clients and address questions and concerns about current market events, portfolio performance, and the reasoning behind our tactical allocation decisions.

More About Our Model Portfolio Services

No matter where financial professionals are in the evolution to a model-based practice, T. Rowe Price can help.

We provide a range of services including fully outsourced model portfolios designed and managed by a dedicated team of professionals. These models seek to add value at each level of the portfolio management process:

- strategic portfolio design based on T. Rowe Price's proprietary asset allocation methodology, which combines in-depth capital markets research with advanced analysis of the qualitative and quantitative factors that can shape investor risk and return preferences;
- tactical asset allocation that incrementally seeks to add value through prudent, fundamentals-based evaluation of the current market environment;
- selection of underlying portfolio components from T. Rowe Price's extensive lineup of actively managed strategies;
- due diligence at the portfolio and component level, including ongoing risk assessment, performance attribution analysis, and monitoring of process or personnel changes in the underlying components.

Custom Models

Model portfolio design is not always a one-size-fits-all approach, and T. Rowe Price recognizes that specific client-directed objectives and constraints may apply to the implementation of investment solutions.

We have the capabilities to collaborate with financial professionals to design models that reflect our mutual best thinking and client goals, including seeking to limit tracking error or reduce investment costs by incorporating enhanced or passive strategies, tailoring the specific line items, or incorporating a multi-manager approach based on client's preferences.

The principles expressed in this paper reflect our baseline philosophy, but we appreciate the value of customizing model designs to reflect specific views or objectives where appropriate.

Conclusions

Taken together, we believe our model portfolios and related services can serve as “force multipliers” that make it easier for financial professionals to offer well-resourced, institutional-quality investment solutions while leaving them more time to spend with their clients and to grow their practices.

T. Rowe Price also has the marketing and communications resources to help

financial professionals keep their clients informed and aware of portfolio-positioning decisions, significant market developments, and their progress toward their long-term financial objectives.

Our financial intermediary specialists would be happy to provide additional information on T. Rowe Price model portfolio services upon request.

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