2021 Model Portfolio Landscape

Morningstar Manager Research
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Executive Summary

The model portfolio landscape continues to expand at a rapid pace. Approximately $315 billion in assets were following model portfolios as of June 30, 2021. This conservative estimate only counts what model providers can track; many providers don't know the assets following their paper models or assets invested through model marketplaces. The number of model portfolios reported to Morningstar has more than doubled since 2020, with now more than 2,100 models reported by asset managers and third-party strategists.

To help investors sort through the myriad options, Morningstar is launching the Morningstar Rating™ for models, also known as the "star rating" in the fourth quarter of 2021. The star rating ranks strategies in an objective and transparent manner, which can be a useful starting point for research. Because there are few agreed upon reporting standards for model portfolios, models must meet additional criteria to be eligible for a star rating, which this report will cover in depth.

This report will also look at the key trends driving the models' growth, most popular model providers ranked by assets under advisement, highest-rated model portfolios, and developments in model portfolio construction, fees, and performance.

Key Takeaways

- Approximately $315 billion of assets follow model portfolios as of June 30, 2021. This conservative estimate uses data submitted to Morningstar by model providers and only counts what providers can accurately track; many model providers cannot accurately track assets following their paper models or those invested through model marketplaces.
- BlackRock is the most popular provider, with almost $70 billion of assets. The 10 largest providers have around 75% of the overall market share.
- The number of models available continues to surge. Morningstar collected data on more than 1,000 new models in less than a year with only a modest increase in outreach, which confirms the hypothesis that they are growing fast.
- Allocation models continue to make up the bulk of options. As of August 2021, nearly 75% of individual models reported to Morningstar fall into one of seven allocation categories.
- To help investors sort through their options, Morningstar will launch the Morningstar Rating for Models (also known as "the star rating") at the end of October 2021.

- Morningstar Analyst Ratings for models also now include models with hypothetical performance. As of August 2021, Morningstar analysts cover 43 model series and expect that to more than double by the end of 2021.
- Model portfolios continue to offer a large fee advantage compared with similar mutual funds, driven by the greater use of low-cost exchange-traded funds as underlying components.
- Model portfolios offer significant flexibility to those looking to manage tax liabilities. That has supported the launch of more than 250 tax-aware allocation strategies (largely nonexistent in mutual funds) and opened the door to model-delivered active equity strategies.

Introduction

What Are Model Portfolios?

"Model portfolio" can have many different meanings. This paper defines models as portfolio blueprints offered by asset managers or investment strategists for financial advisors, who implement them in a variety of ways, such as following paper versions of the model or using third-party platforms, like Envestnet, to handle the execution. This report doesn't include models that large wealth management firms, such as Merrill Lynch, offer exclusively through their advisors and turnkey asset-management programs because they typically are not public. It also excludes robo-advisors that mostly target retail investors, not financial advisors.

Third-party models offer advisors an opportunity to outsource some, or all, of their investment management responsibilities. Similar to mutual funds or separate accounts, model portfolios can focus on a single asset class, such as equities or fixed income. However, most models combine multiple asset classes to meet a range of goals, including targeting a specific risk level, providing income, and/or maximizing aftertax returns.

Tax Management and Customization Options Defining Model Features

Models differ from mutual funds in two key ways: tax efficiency and customization.

Advisor clients following models directly own the underlying securities. Mutual fund investors share ownership with the fund's other investors. So advisors can craft individualized tax-loss harvesting strategies for clients in models that are not possible in mutual funds.

Advisors can sometimes customize models based on client preferences or their own underlying fund-selection preference. This is most common with the paper models that provide portfolio construction recipes of recommended underlying funds, trades, and rebalancing frequencies but let advisors execute them.

For example, an advisor who prefers passive funds for equities and active ones for fixed income could take an all-index model portfolio, such as Vanguard's Core portfolio series, and swap in the actively managed Baird Aggregate Bond BAGIX, which has a Morningstar Analyst Rating of Gold, for the Gold-rated Vanguard Total Bond Market ETF BND index fund. Such deviations could introduce unintended sector or style bets to portfolios that counteract the benefits of using a model, though. Advisors should consider how such changes affect the portfolio's risk profile before making them.

Outsourcing Investing Helps Advisors Focus on Business, Fuels Growth of Models

Minimizing tax bills and tailoring portfolios are important features, but those aren't the main reasons advisors are turning to models. The growth of models is hitched to how they allow advisors to focus on building stronger ties to clients and growing their businesses.

Models allow advisors to outsource investment management, freeing up time for activities, including attracting new clients and managing their practices.

For various reasons, more financial advisors are broadening their services beyond investing. This helps insulate advisors from fluctuations in their business driven by unpredictable financial markets. Advisors who only offer investment advice risk losing clients during inevitable periods of underperformance. So, more advisors are focusing on services, like estate and tax planning. For example, advisors expect 53% of clients to receive comprehensive financial planning by 2022, up from 46% in 2020, according to market research firm Cerulli Associates. This more-holistic, total-financial-health approach should lead to stickier client relationships. By using model portfolios, advisors can free up the necessary time and resources to evolve their practices.

Selecting target-date mutual funds or defaulting to old stalwarts, such as the Vanguard LifeStrategy target-risk funds, could serve the same purpose but would give up the tax-management individualization potential.

Conversations with industry professionals indicate advisors are most likely to start using models for smaller clients and eventually offer them to larger clients as they grow more comfortable with them, assuming performance lives up to expectations.

Model Landscape Overview

The Top 10 Providers of Model Portfolios

Tracking the size of the model portfolio landscape is difficult because asset managers and strategists often don't know the extent to which advisors are following paper models. As of June 30, at least $315 billion was invested in third-party model portfolios, based on a survey of 28 of the leading model providers and data reported to Morningstar Direct. Exhibit 1 shows the breakdown of the top 10 providers by reported assets.

Exhibit 1 Top 10 Model Providers by Assets

Firm Name	Assets ($Mil)
BlackRock	$69,500
Wilshire	$46,733
Vanguard	$31,132
Capital Group	$28,900
Russell Investments	$17,919
*WestEnd Advisors, LLC	$13,663
Brinker Capital	$10,869
Natixis	$8,500
Richard Bernstein Advisors	$8,470
RiverFront	$8,219

Source: Surveyed Data. Data as of June 30, 2021. *Assets pulled from Morningstar Direct.

BlackRock's $69.5 billion in assets gives it a big lead due to a couple of factors. In 2014, it established a dedicated model team led by Michael Gates and was able to leverage its existing relationships with advisors who use its iShares ETFs to get a head start. Its advanced risk management and portfolio diagnostic tools make comparing its models to advisors' in-house portfolios easier. The firm also tries to communicate in a consistent and timely manner with advisors about model performance and trades. None of this would matter if the models didn't perform, but Gates and team have proved to be forward-thinking and thoughtful asset allocators.

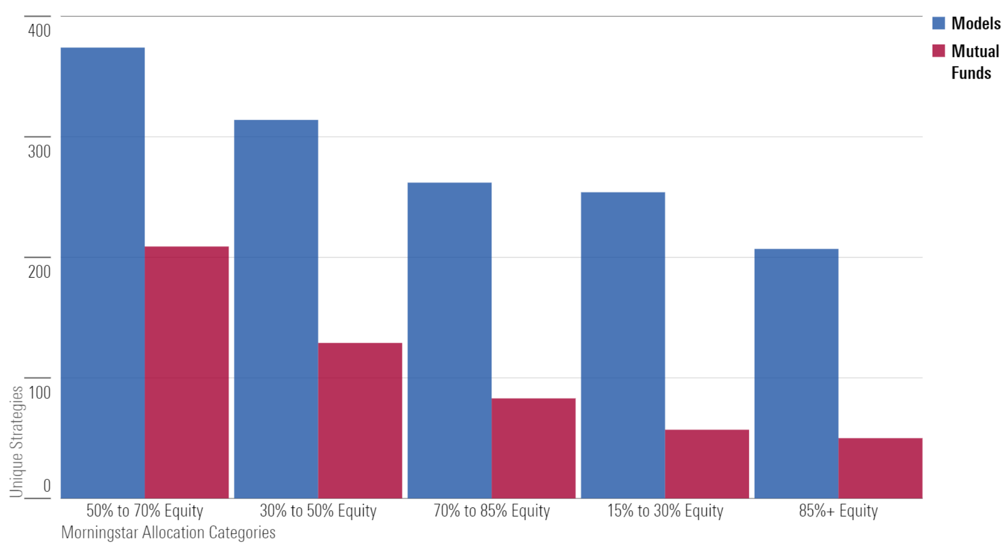
The bulk of the $46.7 billion in model assets of Wilshire Associates, the second-largest provider, is on a platform only available to Ameriprise advisors. It has about $1.5 billion on other platforms.

Four of the top 10 providers aren't from major asset-management firms with big sales teams or cutting-edge technology. WestEnd Advisors, Brinker Capital, Richard Bernstein Advisors, and RiverFront are strategists that mostly use third-party funds and ETFs for their models. They were early winners during the ETF Managed Portfolios trend in the mid-2010s and have maintained that momentum, unlike many peers from that era who overpromised and underdelivered.

Allocation Models Dominate the Landscape

Asset-allocation models using mutual funds and ETFs are the most common models reported to Morningstar. (These are distinct from, say, equity models built around individual stock holdings.) As of June 30, nearly 75% of the 2,100 models fall into one of Morningstar's seven allocation categories. Allocation models tend to come in series of three, five, or even 10, which helps explain the rapid growth in the number of individual model portfolios. In fact, allocation models have multiplied so fast they now outnumber allocation mutual funds. Exhibit 2 shows the number of models and allocation mutual funds in Morningstar's five primary allocation categories as of July 31, 2021.

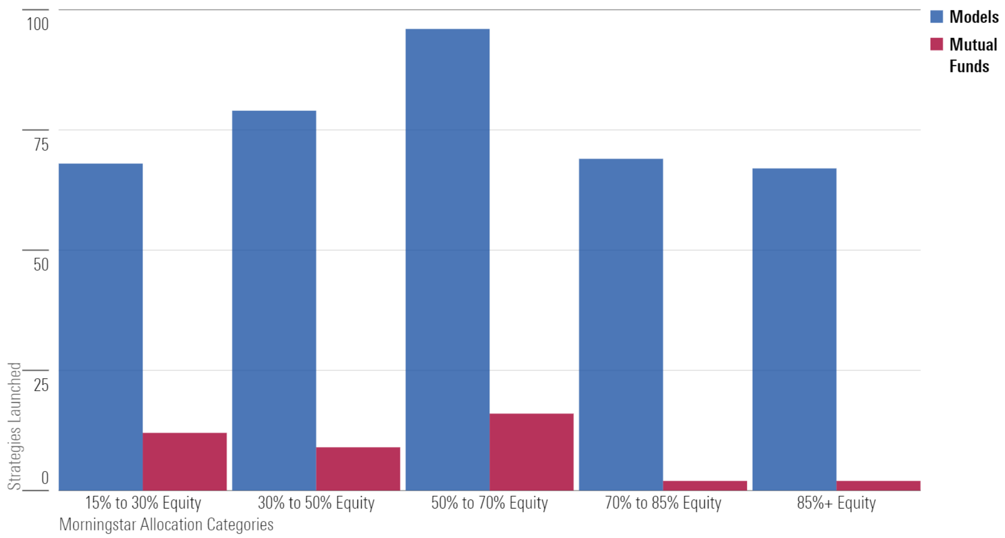
Exhibit 2 Models and Mutual Funds in Allocation Categories



Source: Morningstar Direct. Data as of July 31, 2021.

Models have fewer barriers to entry and cost less to launch than mutual funds and other vehicles. They, for instance, don't have to register with the U.S. Securities and Exchange Commission or pay a bank a fee to hold custody of assets because the providers don't hold the assets. This has further supported the flood of new model launches. Exhibit 3 shows new model launches by allocation category compared with mutual funds since 2019, when Morningstar created a unique database for models.

Exhibit 3 Model Launches Outpacing Fund Launches

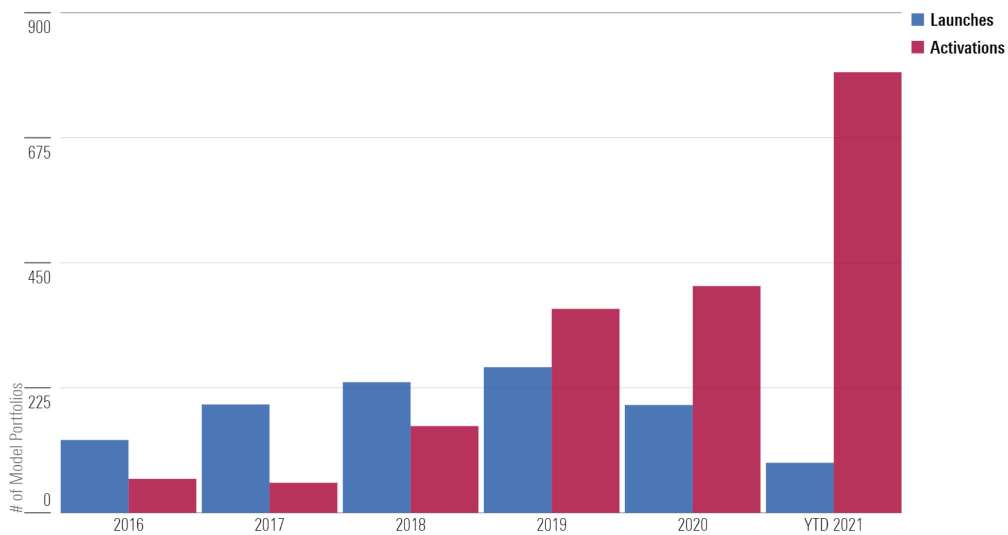


Source: Morningstar Direct. Data as of July 31, 2021.

It is clear that asset managers have turned their multi-asset product development resources toward models to meet growing demand from advisors.

The fact that Morningstar was able to collect data on more than 1,000 new models in less than a year for this report with only a modest increase in outreach efforts (regulators don't yet require models to disclose data, so Morningstar requests it) testifies to the vehicle type's rapid growth. The total number of models reported to Morningstar topped 2,100 as of June 30, 2021. Morningstar also has increased its model portfolio and data collection efforts. The combination of more assiduous collection and model growth has resulted in a sharp increase in the number of models reported to Morningstar. From 2019, when Morningstar created a unique database for models, through June 30, 2021, the number of models reported and "activated" in Morningstar's database after their inception date has outpaced the number of new model launches by roughly threefold. (Exhibit 4 shows this as the number of model "Activations" in Morningstar's database compared with the model providers' "Launches.")

Exhibit 4 Model Portfolio Launches and Activations by Year



Source: Morningstar Direct, Author's Calculations. Data as of July 31, 2021.

New and Expanded Tools to Help Advisors

To help advisors and individuals sort through the many options in this rapidly growing space, Morningstar has plans to launch a range of new tools and analytics.

Introducing Star Ratings for Models

In the fall of 2021, Morningstar will launch the Morningstar Rating for models, better known as the "star rating,". The star ratings' emphasis on longer time frames and risk-adjusted returns makes it useful for sorting through a large universe of options, like models.

The star rating for models will follow the same approach used to assign star ratings to mutual funds and separate accounts, with some additional criteria required to be eligible.

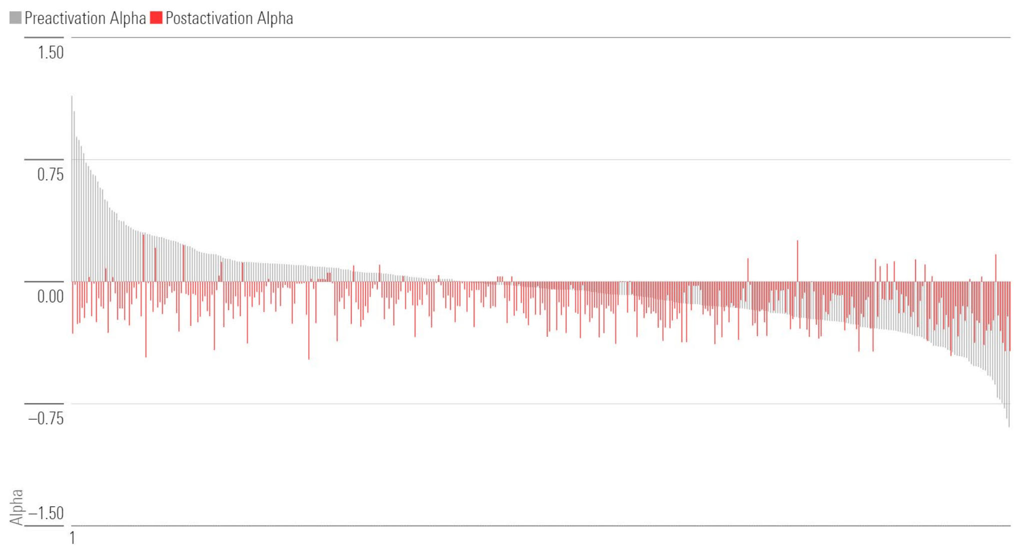
Like funds and separate accounts, the rating will use trailing three-, five-, and 10-year risk-adjusted returns and distribute ratings on a bell curve. The best-performing 10% of funds in each category will get 5 stars, the next 22.5% 4 stars, the middle 35% 3 stars, the next 22.5% 2 stars, and the bottom 10% 1 star.

There are numerous challenges to tackle when constructing a star rating methodology for models. For example, models often submit historical performance records that predate their appearance in databases like Morningstar's when they start reporting. Further, they often do not submit historical portfolio data with their performance records, making it hard to analyze what has driven performance or how their managers have tinkered with their asset allocations or underlying fund lineups.

There also are cases where preactivation returns reflect hypothetical, back-tested returns. Even when reported returns reflect actual results, model providers have few incentives to voluntarily report poor performance. So, the possibility of managers only reporting flattering results rather than their entire record, warts and all, can inflate relative returns, a phenomenon known as *back-fill bias*.

A look at back-filled model returns versus returns reported after a model enters Morningstar's database shows evidence of back-fill bias. There are approximately 400 models that report to Morningstar and have at least three years of pre- and postactivation returns. A multifactor regression with data from Fama-French to calculate each model's alpha before and after reporting to Morningstar found that the alpha of about 70% of those models declined in the three years after they reported to Morningstar. Furthermore, the regression showed about half with positive alpha based on preactivation returns, but only 10% with positive alpha in the three years following activation. Exhibit 5 shows the trend in three-year pre and postactivation alphas.

Exhibit 5 Model Alpha Fades Postactivation



Source: Morningstar Direct, Author's Calculations. Data as of July 31, 2021.

Star ratings aren't based on a multifactor regression, but when accounting for exposure to common investment factors like value, size, and credit exposure, it is clear that returns postactivation tend to be less impressive than those that are backfilled. There are lots of potential reasons for this, and most are not nefarious, but it argues for giving less weight to backfilled returns.

Raising the Standards for Model Transparency

To address these concerns and ensure the integrity of the star rating for models, models now must meet supplemental criteria to be eligible for a star rating:

- The provider must be compliant with the Global Investment Performance Standards or have a minimum of $10 billion in regulated vehicles, like mutual funds or ETFs. This ensures the providers meet minimum professional performance reporting standards or manage material sums of assets while complying with regulations.
- Models must report at least quarterly holdings data for the ratings periods. This should allow advisors to conduct holdings-based analysis to help validate and understand models' reported performance and ensure the accuracy of Morningstar Category assignments.
- Models must have a minimum of 18 months of postactivation returns. The use of preactivation performance in star rating calculations will be limited to 18 months. A model, therefore, won't be eligible for a three-year star rating until 18 months after it is reported to Morningstar, regardless of the length of its preactivation track record. This should discourage cherry-picking or data mining what models to report.

- Models linked to a representative separate account are exempt because those represent live track records. Those models can use the inception date of the separate account as their starting points.

These supplemental requirements should reduce the risk of data-mined returns being used to achieve high star ratings and make it easier for advisors to check if the reported returns are consistent with the reported holdings.

The rating will be assigned based on a models' trailing performance overlaid on top of the relevant separate account Morningstar Category. This helps address issues distinct to models that can lead to back-fill, survivorship, and other biases. The overlay approach will not affect the rankings of the SMAs with which models are being compared.

Morningstar will evaluate the criteria and update the methodology as necessary as models evolve.

Morningstar's Top-Rated Model Portfolio Series

Advisors also can use Morningstar Analyst Ratings to assess models. Separate accounts that are representative of models started getting Analyst Ratings in March 2019. The eligible coverage universe now includes hypothetical models to better reflect advisors' opportunity sets. As of the end of August 2021, more than 40 series covering more than 250 individual models have Analyst Ratings, and the number of series should double by year-end.

The Analyst Rating is a forward-looking, qualitative assessment of a strategy's merits. Strategies expected to outperform their Morningstar Category Index over a market cycle earn Gold, Silver, or Bronze ratings, while those expected to lag get Neutral or Negative.

The ratings are based on analysts' fundamental evaluation of the People, Process, and Parent of each model portfolio. Fees, including the asset-weighted expenses of the underlying funds and any additional fees, such as those charged by strategists, also play a crucial role.

Exhibit 6 shows Morningstar's highest-rated model series as of August 2021. For a more detailed breakdown of each series' fees and underlying holdings, see the Appendix.

Exhibit 6 Morningstar Medalist-Rated Model Portfolio Series

		Pillar Rating		
Model Portfolio Series	Morningstar Analyst Rating	People	Process	Parent
BlackRock Target Allocation ETF	Gold	Above Average	High	Above Average
Vanguard Core	Gold	Above Average	Above Average	High
American Funds Income	Silver	Above Average	Above Average	High
American Funds Growth & Income	Silver	Above Average	Above Average	High
American Funds Growth	Silver	Above Average	Above Average	High
American Funds Tax Aware Growth and Income	Silver	Above Average	Above Average	High
American Funds Tax Aware Income	Silver	Above Average	Above Average	High
Vanguard CRSP	Silver	Above Average	Above Average	High
Vanguard Russell	Silver	Above Average	Above Average	High
Vanguard S&P	Silver	Above Average	Above Average	High
BlackRock Target Allocation Tax-Aware ETF	Silver	Above Average	Above Average	Above Average
Fidelity Target Allocation Index-Focused	Silver	Above Average	Average	Above Average
Dimensional Core Wealth	Silver / Bronze *	Above Average	Above Average / Average	High
Dimensional Tax-Sensitive	Bronze	Above Average	Average	High
T. Rowe Price Active	Bronze	Above Average	Average	High
BlackRock Target Allocation with Alternatives	Bronze	Above Average	Average	Above Average
John Hancock Active/Passive	Bronze	Above Average	Average	Above Average
Pimco Taxable Fixed-Income	Bronze	Above Average	Average	Above Average
Schwab A	Bronze	Above Average	Average	Above Average
State Street Strategic Asset Allocation	Bronze	Above Average	Average	Above Average
Goldman Sachs Multi-Manager ETF	Bronze	Above Average	Average	Average
Fidelity Target Allocation	Bronze / Neutral *	Above Average / Average	Average	Above Average
Goldman Sachs ETF	Bronze / Neutral *	Above Average / Average	Average	Average

Source: Morningstar Direct. Data as of Aug. 31, 2021. *Model portfolio series holds a split rating across the portfolios.

The BlackRock Target Allocation ETF and Vanguard Core model series earn Gold ratings. BlackRock's series benefits from a dedicated model portfolio team, strong exchange-traded fund building blocks, a thoughtful and relatively active asset-allocation approach, and rock-bottom fees.

As of August 2021, BlackRock Target Allocation ETF is the only series to earn a topnotch Process rating. Its dedicated models team constructs the series of 11 models with precision and consistently questions the status quo for portfolio construction. BlackRock’s model team distinguishes itself by meticulously building each portfolio individually rather than building a single portfolio and then scaling the level of risk up or down to meet different investor preferences. This leads to equity-heavy portfolios favoring high-quality fixed income that can more reliably provide protection during stress periods for equities than credit. In more-conservative portfolios, BlackRock is more willing to take on more credit risk since the overall portfolio risk is not as high given the lower equity allocation. It is a more nuanced focus on diversification across the series than most firms take. BlackRock also isn't afraid to challenge the status quo for portfolio construction. For example, it is one of the only allocation teams to include a strategic allocation to intentionally sustainable equity ETFs as part of its broader equity portfolio in models that are not marketed as environmental-, social-, and governance-focused; the equity portfolio also includes non-ESG ETFs. This reflects its view that investors’ growing preference for ESG strategies has created a tailwind for companies that have low ESG risks. Most peers take an all-or-nothing approach to sustainable investing that limits their investable options.

Vanguard also offers an extremely appealing price tag along with topnotch, highly diversified underlying index-based funds. Unlike BlackRock, Vanguard rarely makes portfolio changes and avoids tactical tilts. Its combination of simplicity and low costs have proved hard to beat over the long term. Its CRSP, Russell, and S&P models follow a similar approach, with double the underlying holdings, which may make them more attractive for taxable accounts because they have more opportunities for tax-loss harvesting.

American Funds' Growth & Income and Tax Aware Growth & Income series are among the next highest-rated series. Both benefit from highly skilled underlying active managers.

Trends Driving Model Development

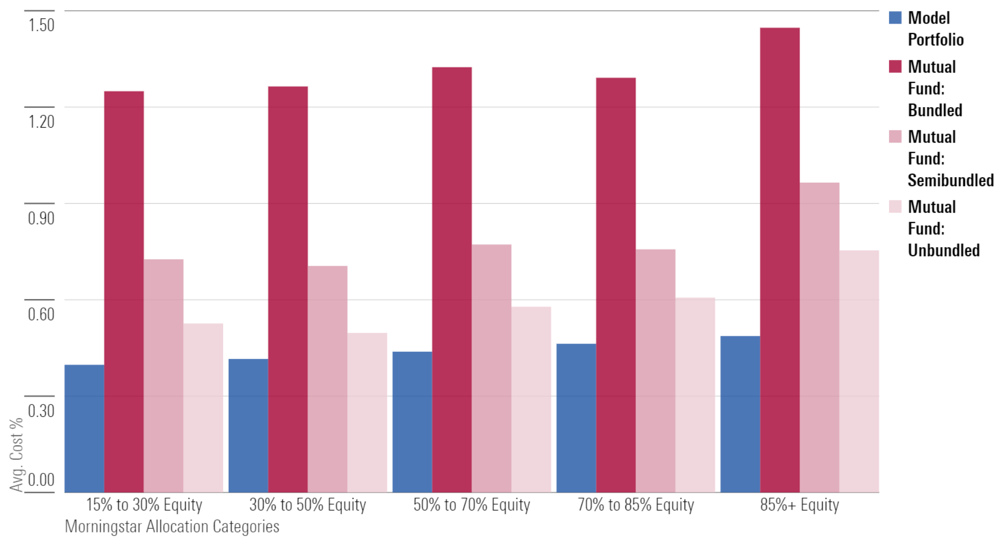
Models Continue to Benefit From Low Fees

Low costs are a strong selling point for model portfolios. To measure models' fee advantage compared with similarly allocated mutual fund peers, we first calculated the asset-weighted fee for each allocation model that reported a portfolio in 2021 (most models sit in these allocation categories). We did not account for the strategist fee, which can vary by platform, or any fees an advisor might charge on top of the model or mutual funds. To compare them with mutual funds, we used a methodology similar to that used in the 2021 U.S. Fund Fee Study by looking through the lens of Morningstar's "Clean Share-Service Fee Arrangement" data point. This data point sorts funds into the following groups:

- Bundled: Indicates the mutual fund share class includes load sharing or payments to third parties for distribution fees.
- Semibundled: Indicates the mutual fund share class does not pay third-party distribution fees or engage in load sharing. However, the "semibundled" share class may pay these third parties for subtransfer agent services or engage in revenue sharing.
- Unbundled: Indicates that the mutual fund share class does not pay third parties, either through share class expenses or revenue-sharing arrangements.

As depicted in Exhibit 7, model portfolios have a significant fee advantage against their mutual fund peers regardless of fee arrangement. This is true even compared with "unbundled" mutual funds, which have the lowest built-in expenses. On average, models were 15 basis points cheaper compared with the cleanest, unbundled share class of comparable mutual funds.

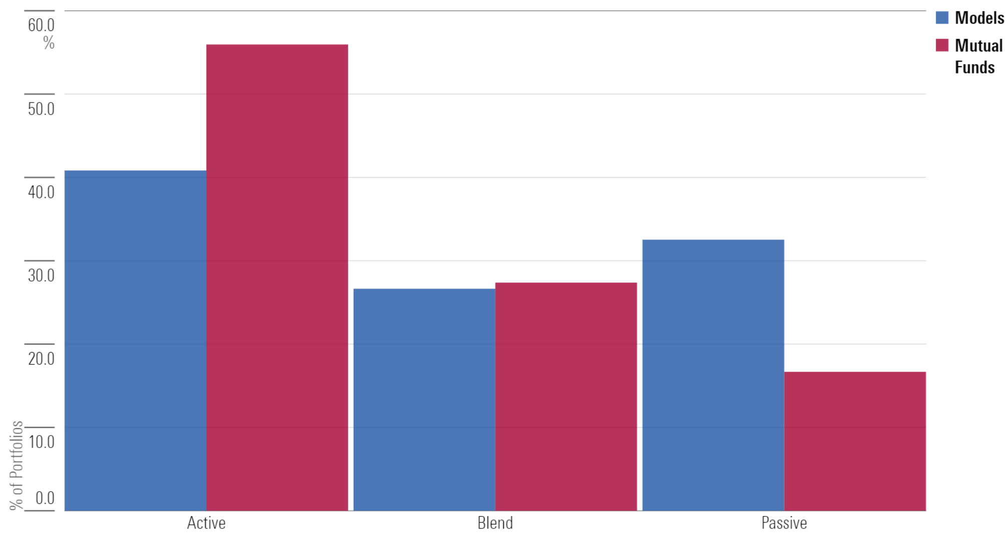
Exhibit 7 Model Portfolios Hold a Fee Advantage Across Allocation Categories



Source: Morningstar Direct, Author's Calculations. Data as of July 31, 2021.

Models' fee advantage mainly rests on their tendency toward using low-cost, index-based underlying funds relative to comparable mutual funds that use a fund-of-funds construction. Exhibit 8 depicts the percentage of mutual funds and model portfolios in the allocation—50% to 70% equity Morningstar Category that fall within the three buckets of active, blend, and passive, according to their use of underlying strategies. "Active" represents those strategies that allocate less than 25% of their exposure to underlying index funds, "passive" accounts for strategies with greater than 75% exposure to index funds, and "blend" are the remaining strategies that have an allocation between those thresholds.

Exhibit 8 Model Portfolios Prefer Passives

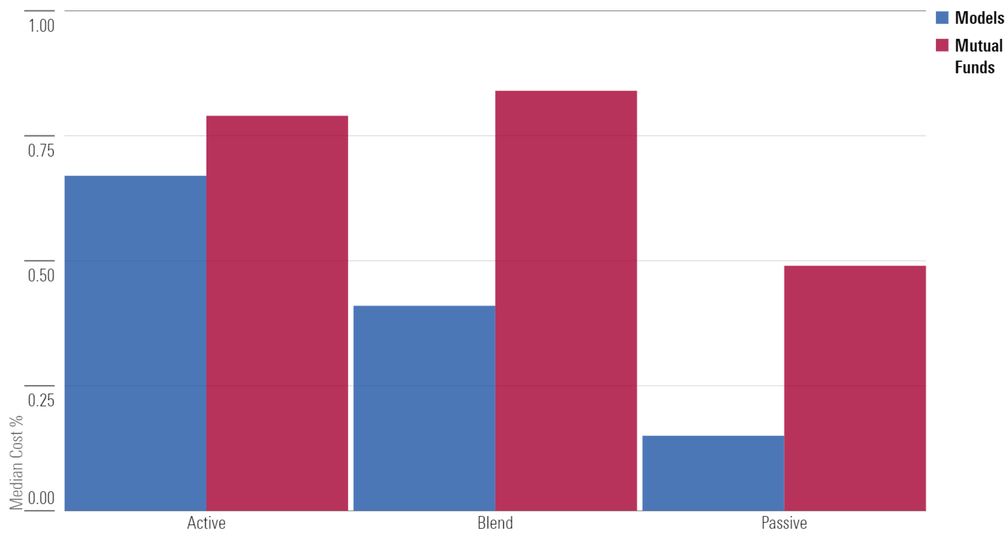


Source: Morningstar Direct, Author's Calculations. Data as of July 31, 2021.

Within the active and passive buckets, there is a noticeable difference between the preference of mutual funds and model portfolios. Roughly a third of model portfolios in the allocation—50 to 70% equity category fall in the passive bucket, while under a fifth of their mutual fund peers take the same approach. Instead, more than half of mutual funds prefer active funds to fill their underlying fund lineups, which tends to be more expensive.

Even when models and mutual funds have similar underlying fund preferences, models still tend to come out ahead. Exhibit 9 looks at the median cost for those mutual funds (using the adjusted operating expense ratio for their cheapest share class) and model portfolios in the same category across active, passive, and blend portfolios.

Exhibit 9 Models Hold a Big Cost Advantage

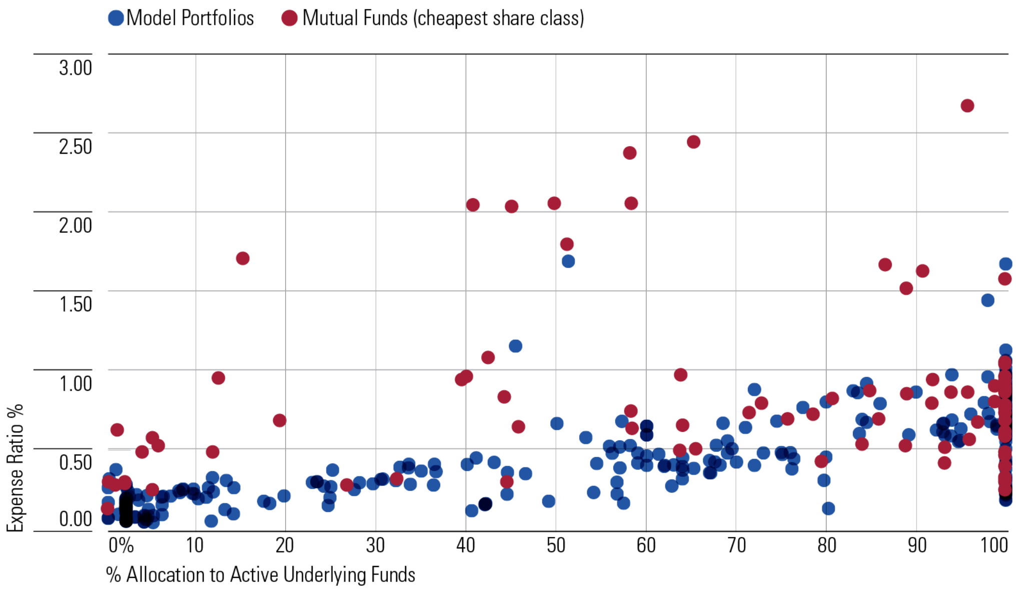


Source: Morningstar Direct, Author's Calculations. Data as of July 31, 2021.

The median model portfolio utilizing primarily actively managed funds was 17 basis points cheaper than its respective mutual fund peer, while the median blend and passive models are a half and a third of the cost, respectively. That is because advisors following the models do not have to pay the additional ongoing costs that come with mutual funds, such as accounting and administrative fees.

Using the median cost versus average cost helps mitigate the impact of outliers in the subset of fund-of-funds mutual funds in the allocation—50 to 70% equity category. If the average cost were used, the advantage would be even more substantial for model portfolios. Exhibit 10 shows why this is the case; it charts the cost for each model portfolio and mutual fund's cheapest share class relative to their exposure to active underlying funds. Whereas expenses for model portfolios fall within a relatively narrow band, mutual funds have a handful of high-priced outliers; seven charge more than 200 basis points.

Exhibit 10 Total Expense Ratio Versus Exposure to Active Underlying Funds

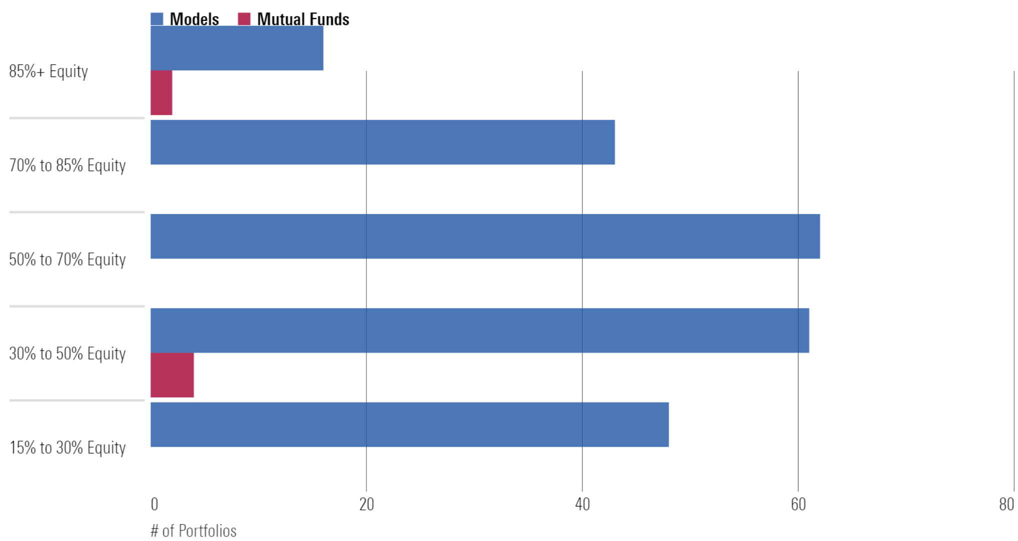


Source: Morningstar Direct, Author's Calculations. Data as of July 31, 2021.

Model Portfolios Offer an Expansive Lineup of Tax-Oriented Strategies

Model portfolios offer a plethora of options for tax-conscious investors, making up for the lack of tax-oriented allocation strategies in the mutual fund space. Mutual funds must hold at least 50% of their assets in municipal bonds to pass the income from that sleeve to investors tax-free. Model portfolios do not face such limitations, as each fund in the portfolio is owned directly and passes any associated tax benefits to its investors. So, the construct of model portfolios is more conducive to tax-oriented strategies. Exhibit 11 shows the number of tax-oriented model portfolios and mutual funds across allocation categories.

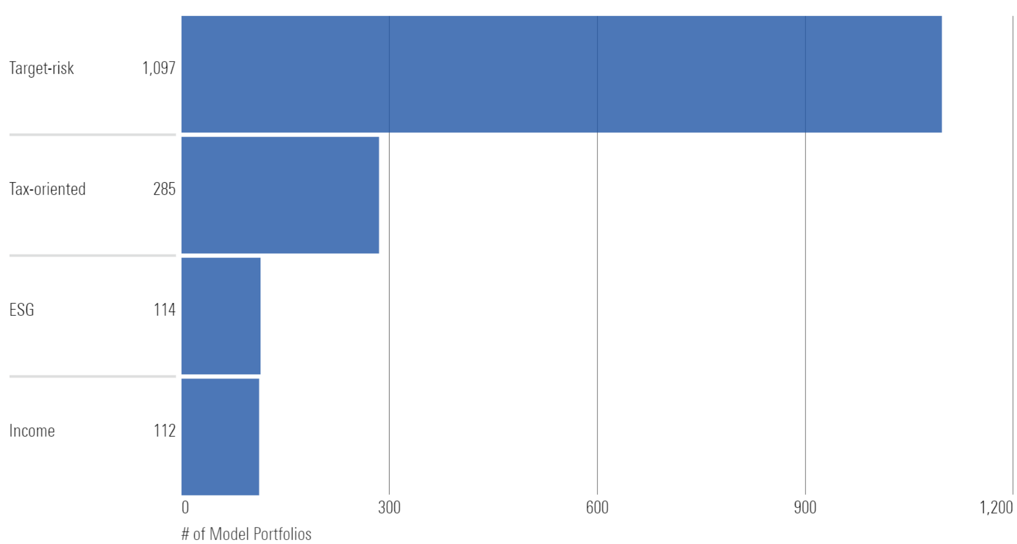
Exhibit 11 Tax-Oriented Models Versus Mutual Funds by Morningstar Allocation Category



Source: Morningstar Direct, Author's Calculations. Data as of July 31, 2021.

Among model portfolios, tax-orientation ranks among the most common objectives. Exhibit 12 buckets model portfolios in Morningstar's database into four types: target-risk, tax-oriented, ESG, and income. Tax-oriented models number 285—nearly 20% of the models within these four groupings. (This table excludes nearly 500 models that do not fit nicely into common groupings, such as stand-alone equity, fixed-income, allocation, or alternative models.)

Exhibit 12 Model Portfolios by Type



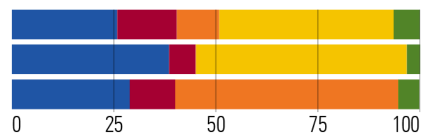
Source: Morningstar Direct, Author's Calculations. Data as of July 31, 2021.

What Tax-Oriented Asset-Allocation Portfolios Look Like

Exhibit 13 shows the average asset allocation of tax-oriented model portfolios and mutual funds in the allocation—30% to 50% equity category (where these strategies are most prevalent) alongside the asset allocation of the Morningstar US Moderate Conservative Target Allocation Index, which reflects the average exposure of all funds in the category. Unsurprisingly, the primary differentiator of tax-oriented strategies is the heavy presence of municipal bonds. Meanwhile, the index and typical category peer have essentially no municipal-bond exposure.

Exhibit 13 Tax-Oriented Funds: Average Asset-Class Exposures (Allocation—30% to 50% Equity Category)

	U.S. Equity %	Non-U.S. Equity %	Taxable Bonds %	Municipal Bond %	Cash + Other %
Models	25.8	14.6	10.4	42.8	6.4
Mutual Funds	38.5	6.5	0.1	51.7	3.3
Benchmark	28.9	11.1	54.7	0.0	5.2



Source: Morningstar Direct, Author's Calculations. Data as of July 31, 2021.

Other distinguishing factors of tax-oriented strategies include low turnover—the four tax-oriented mutual funds in the allocation—30 to 50% equity category had an average turnover of 20% in 2020, versus 66% for the category norm. Model providers also tend to rebalance and recommend fewer trades in their tax-aware models. For example, in the BlackRock Target Allocation Tax-Aware series, management excludes any tactical trades that have a time horizon of less than one year (which would trigger short-term capital gains if they are correct). While BlackRock's model series that aren't focused on aftertax returns rebalance quarterly, this one limits its rebalancing to semiannually.

Similar to most model portfolios, tax-oriented strategies tend to favor index-based underlying strategies, which on average represent about one third of assets in tax-oriented models in the allocation—30% to 50% equity category.

Advisors Can Add Even More Tax Alpha to Tax-Oriented Models

The use of tax-friendly underlying strategies can add meaningful value for investors. In the allocation—30% to 50% equity category, the four tax-oriented funds had Morningstar tax-cost ratios[1] of only 0.76% over the last year, versus 1.43% on average for all other funds in the category.

Advisors can add more value for the clients in tax-oriented models via shrewd tax-management strategies. Tax-loss harvesting—which involves selling some investments at a loss to offset realized gains—is an effective way to reduce clients' tax bills. To reduce the risk of missing out on a rebound if the security that was sold makes a comeback, advisors can replace the liquidated holding with a strategy that is similar and therefore likely to perform somewhat in line with the position that was sold.

[1] The Morningstar tax-cost ratio measures how much a fund's annualized return is reduced by the taxes investors pay on distributions, such as stock dividends, bond income, and capital gains.

(Note: To avoid triggering a "wash sale," the replacement strategy cannot be “substantially identical”—as defined by the IRS—to the strategy that was sold.)

For instance, consider an investor whose advisor recently put them in a model portfolio with a 30% weighting in DFA Tax-Managed U.S. Marketwide Value DTMMX. Say that fund suffered a steep drop and the investor is showing a 20% loss on that holding. The advisor could harvest that loss by selling DFA Tax-Managed U.S. Marketwide Value and replacing it with iShares Core S&P US Value ETF IUSV. Those funds are similar—their five- and 10-year trailing returns through July 2021 are within about 5 and 25 basis points annualized of one another, and iShares Core S&P US Value ETF has an R-squared of about 0.98 relative to DFA Tax-Managed U.S. Marketwide Value over both periods, However, they are different enough to likely not be considered a "wash sale." (For instance, DFA Tax-Managed U.S. Marketwide Value has a smaller average market cap and has turned in a higher beta than iShares Core S&P US Value ETF). Moreover, iShares Core S&P US Value ETF has had a more favorable Morningstar tax-cost ratio than DFA Tax-Managed U.S. Marketwide Value over all trailing periods. The potential result: An investor harvested a loss without giving up exposure to an asset class, which should help reduce the tax liability for the year or allow the investor to realize gains elsewhere in the portfolio with no tax liability.

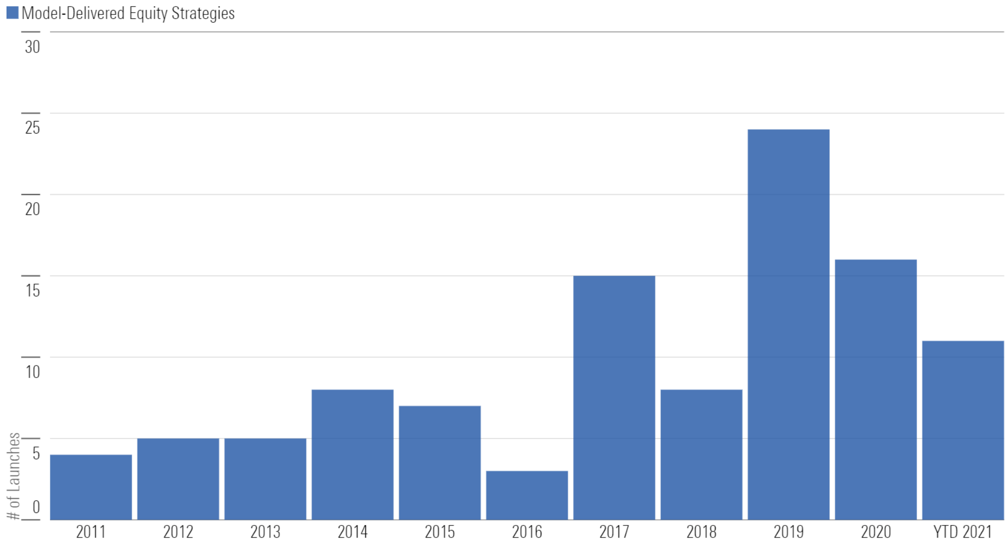
Finally, advisors may also potentially boost aftertax results within the bond sleeve of tax-oriented model portfolios. For instance, advisors may consider replacing a portion of a model portfolio’s national municipal-bond strategy with one or several state-specific municipal funds to gain additional tax benefits at the state level.

Of course, whether tax-loss harvesting or swapping out muni funds, it is imperative for advisors to do their homework and select the appropriate options. Still, if executed carefully, there is potential to add meaningful value to client portfolios via such techniques.

Model-Delivered Equity Portfolios: The Next Frontier?

Allocation models make up the bulk of the landscape thus far, but actively managed equity models are starting to get more attention. Exhibit 14 shows the number of active equity models launched by year through July 31, 2021.

Exhibit 14 Model-Delivered Equity Strategies Are on the Rise



Source: Morningstar Direct, Author's Calculations. Data as of July 31, 2021.

Instead of using ETFs and mutual funds as the underlying holdings, active equity models recommend individual stocks selected by the managers.

The benefits of model-delivered equity strategies resemble those offered by direct indexing. Broker/dealers and turnkey asset-management platforms have invested in technology that allow advisors to offer greater degrees of flexibility and customization to their clients. Better tax management is the biggest benefit of greater personalization. Model-delivery vehicles allow advisors to overlay client-specific tax management with much greater precision and granularity. For example, advisors can apply stock-specific preferences, allowing advisors to, among other things, screen out certain positions for clients with large single-stock exposure to avoid inadvertently adding to company-specific risks.

Personalization Means Trade-Offs

Advisors, however, need to clearly communicate the trade-offs of model-delivered strategies. Greater customization naturally produces higher dispersion between composite portfolio and client-specific returns. Even without any customization, performance may still be out of step because of differing trading and implementation operations, uneven cost structures, and, in some cases, distinct positioning (see ARK case study below). As such, advisors should set proper expectations around tracking error with clients.

Trading costs should be considered, too. Unbundling trading and implementation operations, while reducing asset-management fees, may just move those fees to the platform doing the trading. As such, this disintermediation may not always lead to lower all-in expenses. Yet there is reason to believe that model delivery reduces total costs. Large broker/dealers can use economies of scale to aggregate trading activity, which keeps costs down. While this benefits the largest advisory firms, independent advisors can also access these benefits through large turnkey asset-management platforms, which offer a similar service.

The logistics behind portfolio trading are also important. There are notable compliance guardrails in place to ensure that asset managers do not give preferential treatment to certain vehicles. This is done in one of two ways. Some asset managers use trade rotation, whereby they rotate the order in which the recommended portfolio trades are released. For instance, pooled vehicles, such as mutual funds, could get preference in one round, then model-delivered strategies in another. Asset managers can also release the trades all at once. Under this method, the portfolio managers release trades to all interested parties concurrently, meaning the in-house and external traders access the recommended positioning at the same time and act accordingly, for the most part. The logistics behind this trading activity also explains why asset managers have launched model-delivered-clones of highly liquid strategies, while more-niche offerings remain off the table. As liquidity dries up, asset managers do not want to compete with clients when moving in and out of positions.

Will Equity Strategies Delivered Via Models Become Mainstream?

Model delivery, like SMAs, is currently geared toward advisors serving more-affluent clients. That is mostly due to the vehicle's higher account minimums. Yet innovations on the horizon could force this trend down-market. Trading in fractional shares should push account minimums lower as it further eases the implementation burden. Lower commissions across the trading environment should help, too. Finally, increased usage should facilitate further investment in the infrastructure behind model delivery, easing the administrative burden on advisors and providing a more seamless experience.

Exhibit 15 shows notable active equity models and their open-end fund counterparts.

Exhibit 15 Notable Model-Delivered Equity Strategies

Name	Morningstar Analyst Rating	Investment Type	Ticker	Morningstar Category	3-Yr Gross Return %
ARK Disruptive Innovation Model	Neutral	Model	—	Large Growth	48.3
ARK Innovation ETF	Neutral	Exchange-Traded Fund	ARKK	Mid-Cap Growth	42.8
Mondrian Int Equity Model	—	Model	—	Foreign Large Value	5.7
Mondrian International Value Equity	Silver	Open-End Fund	MPIEX	Foreign Large Value	4.5
Alger Small Cap Focus Model	—	Model	—	Small Growth	22.5
Alger Small Cap Focus	Silver	Open-End Fund	AOFIX	Small Growth	22.3
Hotchkis & Wiley Value Opps Model	—	Model	—	Allocation--85%+ Equity	13.9
Hotchkis & Wiley Value Opps	Bronze	Open-End Fund	HWAIX	Allocation--85%+ Equity	12.0
Alger Capital Appreciation Model	—	Model	—	Large Growth	24.4
Alger Capital Appreciation	Bronze	Open-End Fund	ACAAX	Large Growth	25.5

Source: Morningstar Direct. Data as of July 31, 2021.

Case Study: ARK Disruptive Innovation Model

Cathie Wood helms the ARK Disruptive Innovation model portfolio, applying the firm's thematic investing style to the portfolio in a similar manner to her approach on the ARK Innovation ETF ARKK. There are, however, notable differences between the two vehicles.

ARK's thematic approach revolves around five technology platforms—artificial intelligence, blockchain, DNA sequencing, energy storage, and robotics—that it believes will revolutionize how economic sectors across the globe operate. It accesses many of these themes by investing in companies it views as leaders in those areas, like Tesla TSLA in artificial-intelligence-enabled automation and CRISPR Therapeutics CRSP in DNA sequencing.

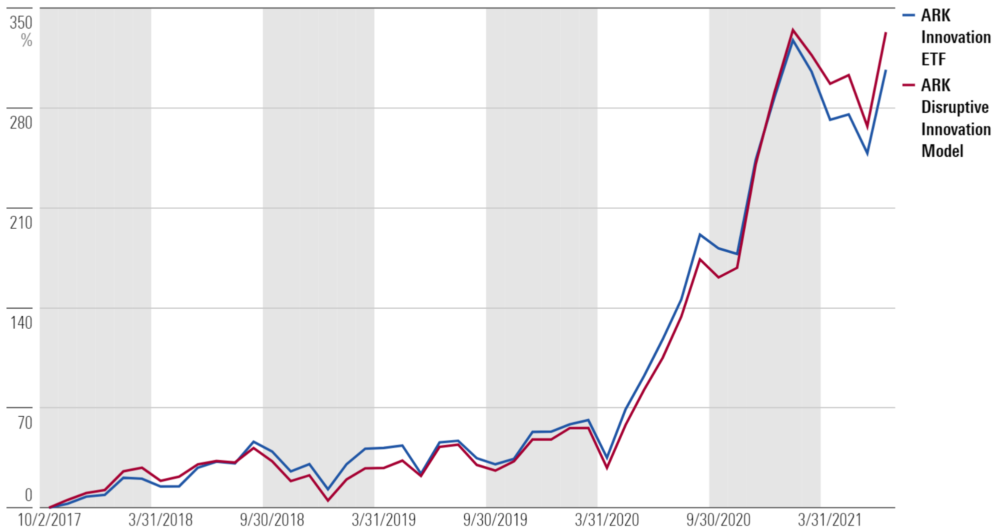
However, because of certain tax consequences, it is costly for the ETF to invest directly in blockchain. It does so indirectly through its stake in cryptocurrency exchange Coinbase COIN, but it has no exposure to bitcoin, Ethereum, or the many other cryptocurrencies.

The firm's model portfolios aren't subject to the same tax treatment as the ETF, though. So, the model has big stakes in both Greyscale Bitcoin Trust GBTC and Greyscale Ethereum Trust ETHE, which had respective weights of 5.9% and 4.4%, as of June 2021. These two funds, and the coins they invest in, are hypervolatile; over the trailing three months ended July 31, the Greyscale Bitcoin Trust had annualized volatility of 79% and the Greyscale Ethereum Trust was 104%, which makes Coinbase's 65% look tame. The model may offer a purer distillation of the team's blockchain views, but it comes with much more risk.

Besides the roughly 10% stake in cryptocurrency, the portfolios look similar, though not identical, on any given day. The ETF trades more frequently than the models, with Wood trimming or adding to names daily. The model trades at least once every two weeks, but it will also trade when Wood enters or exits a position or whenever a trade is greater than 1% of fund assets. This contributes to slight performance differences but should average out over the long run.

Since the model's October 2017 inception, its 47.0% annualized gain through July 2021 is better than the ETF's 45.5% gain. Crypto's strong run accounts for much of the model's outperformance, though the 150-basis-point edge hints that the model's cryptocurrency stake hasn't always been as big as it is now. Investors should expect more dispersion in the future, as the highly volatile 10% allocation impacts performance.

Exhibit 16 ARK Innovation ETF Versus ARK Disruptive Innovation Model



Source: Morningstar Direct. Data as of June 30, 2021.

Appendix

Model Scorecards

To help investors navigate the model portfolio landscape, we have assigned more-granular attributes to the models we have assigned Morningstar Analyst Ratings. We have also estimated the expense ratio for each model based on its most recent portfolio and included the series' average three-year category rank versus their representative separate account Morningstar Category.

Portfolio Goals

Target-Risk

These portfolios seek to deliver a consistent level of risk by sticking close to long-term strategic equity and bond allocations. They are usually offered in a series that spans conservative, moderate, and aggressive investor risk tolerances. The allocation to equities typically stays within 10 percentage points of its strategic allocation.

Tax-Managed

These portfolios are similar to target-risk portfolios, but their investment strategy prioritizes aftertax returns. They typically substitute tax-advantaged municipal bonds for taxable bonds in the fixed-income sleeve and favor companies with qualified dividends on the equity side.

Income-Oriented

These portfolios prioritize asset classes with higher levels of income than target-risk or tax-aware portfolios. This typically leads to larger allocations to dividend-paying equities, high-yield bonds, and more-niche markets like REITS, emerging-markets debt, master limited partnerships, and preferred securities.

ESG

These portfolios have more than 50% of assets invested in underlying funds that intentionally target companies with favorable environmental, social, and governance characteristics.

Portfolio

Passive—More than 75% of these portfolios' assets reside in passively managed, index-based underlying funds.

Active—More than 75% of these portfolios' assets reside in actively managed underlying funds.

Blend—These portfolios hold a more balanced mix of active and passive underlying funds.

Additional Tags

SMA Track Record—These portfolios have a representative separate account with a live track record that is held to higher compliance requirements than models that only report hypothetical returns.

% Medalist—This indicates the percentage of underlying strategies that receive a Morningstar Analyst Rating or Morningstar Quantitative Rating of Gold, Silver, or Bronze. These ratings indicate the conviction level in the fund's ability to outperform its category benchmark over the long term. For passive funds, they indicate the conviction level in the fund to outperform the average peer in the category.

Exhibit 17 Morningstar Model Portfolio Series Scorecard: Target-Risk

Model Portfolio Series	Morningstar Analyst Rating	Portfolio	SMA Track Record	# of Portfolios	Average # of Underlying Funds	Average % Medalist Exposure	Average Asset-Weighted Fee %	Average 3-Yr Category Percentile Rank**
BlackRock Target Allocation ETF	Gold	Passive	✓	11	16	95.6	0.17	29^
Vanguard Core	Gold	Passive	—	11	5	98.0	0.05	36
American Funds Growth & Income	Silver	Active	✓	3	8	96.6	0.41	30
American Funds Growth	Silver	Active	—	3	7	100.0	0.51	64
Fidelity Target Allocation Index-Focused	Silver	Passive	✓	9	7	98.0	0.05	-
Vanguard CRSP	Silver	Passive	—	11	10	98.0	0.05	36
Vanguard Russell	Silver	Passive	—	11	10	98.0	0.07	36
Vanguard S&P	Silver	Passive	—	11	9	98.0	0.05	36
Dimensional Core Wealth	Silver / Bronze *	Active	—	6	7	58.5	0.21	-
BlackRock Target Allocation with Alternatives	Bronze	Blend	—	5	22	88.2	0.40	12
Goldman Sachs Multi-Manager ETF	Bronze	Passive	—	7	13	96.1	0.12	27
John Hancock Active/Passive	Bronze	Blend	✓	5	18	73.0	0.55	-
Schwab A	Bronze	Passive	—	12	8	96.0	0.04	-
State Street Strategic Asset Allocation	Bronze	Passive	—	6	13	93.9	0.08	35
T. Rowe Price Active	Bronze	Active	✓	8	7	65.3	0.47	-
Fidelity Target Allocation	Bronze / Neutral *	Blend	✓	9	16	90.7	0.36	18
Goldman Sachs ETF	Bronze / Neutral *	Passive	—	6	11	63.8	0.16	27
Columbia Active Risk Allocation	Neutral	Blend	—	3	15	42.4	0.53	62
Franklin Templeton Target-Risk	Neutral	Active	✓	6	13	35.5	0.46	-
Janus Henderson Global Adaptive	Neutral	Passive	—	3	21	70.4	0.11	78
Janus Henderson Global Allocation	Neutral	Active	—	3	22	27.0	0.70	58
JPMorgan MultiAsset Tactical	Neutral	Active	—	6	18	78.8	0.66	23
PGIM Strategiest	Neutral	Blend	—	5	19	87.7	0.42	-
Putnam Target-Risk	Neutral	Blend	—	5	9	54.4	0.38	-
Russell Core	Neutral	Active	—	7	9	0.0	0.77	55
Wilshire Premier Allocation	Neutral	Active	—	6	11	20.3	0.85	30
WisdomTree Select (incl.Pimco)	Neutral	Blend	✓	3	15	61.3	0.37	-

Source: Morningstar Direct. Author's calculations use most recent reported portfolio as of July 31, 2021. Ratings as of Aug. 31, 2021.
*Model series holds a split rating across portfolios. **Returns as of June 30, 2021. ^Corresponding separate account track records used.

Exhibit 18 Morningstar Model Portfolio Series Scorecard: Tax-Managed

Model Portfolio Series	Morningstar Analyst Rating	Portfolio	SMA Track Record	# of Portfolios	Average # of Underlying Funds	Average % Medalist Exposure	Average Asset-Weighted Fee %	Average 3-Yr Category Percentile Rank**
American Funds Tax Aware Growth and Income	Silver	Active	✓	3	7	100.0	0.32	23
American Funds Tax Aware Income	Silver	Active	—	2	6	100.0	0.37	—
BlackRock Target Allocation Tax-Aware ETF	Silver	Passive	✓	10	13	100.0	0.13	34^
Dimensional Tax-Sensitive	Bronze	Active	—	6	4	0.0	0.24	—
Nuveen Tax-Exempt	Neutral	Active	✓	3	5	18.9	0.48	—
Russell Tax-Managed	Neutral	Active	—	7	6	0.0	0.77	40

Source: Morningstar Direct. Author's calculations use most recent reported portfolio as of July 31, 2021. Ratings as of Aug. 31, 2021.
**Returns as of June 30, 2021. ^Corresponding separate account track records used.

Exhibit 19 Morningstar Model Portfolio Series Scorecard: Income-Oriented

Model Portfolio Series	Morningstar Analyst Rating	Portfolio	SMA Track Record	# of Underlying Funds	Medalist Exposure %	Asset-Weighted Fee %	Average 3-Yr Category Percentile Rank**
American Funds Income	Silver	Active	—	7	60.3	0.40	49
PGIM Income Builder	Neutral	Blend	—	15	73.8	0.56	—
Putnam Income	Neutral	Blend	—	7	23.7	0.36	—
Franklin Templeton Income	Neutral	Active	✓	9	26.7	0.41	—

Source: Morningstar Direct. Author's calculations use most recent reported portfolio as of July 31, 2021. Ratings as of Aug. 31, 2021.
**Returns as of June 30, 2021.

Exhibit 20 Morningstar Model Portfolio Series Scorecard: ESG

Model Portfolio Series	Morningstar Analyst Rating	ESG Commitment Level	Portfolio	SMA Track Record	# of Portfolios	Average # of Underlying Funds	Average % Medalist Exposure	Average Asset-Weighted Fee %	Average 3-Yr Category Percentile Rank**
Calvert Responsible Target-Risk	Neutral	Advanced	Blend	—	5	15	44.6	0.53	13
Nuveen ESG Target-Risk	Neutral	Advanced	Passive	✓	4	8	21.4	0.33	22

Source: Morningstar Direct. Author's calculations use most recent reported portfolio as of July 31, 2021. Ratings as of Aug. 31, 2021.
**Returns as of June 30, 2021.

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