

THE RANKING EDITION

The Robo Report

Bringing Transparency to Robo Investing



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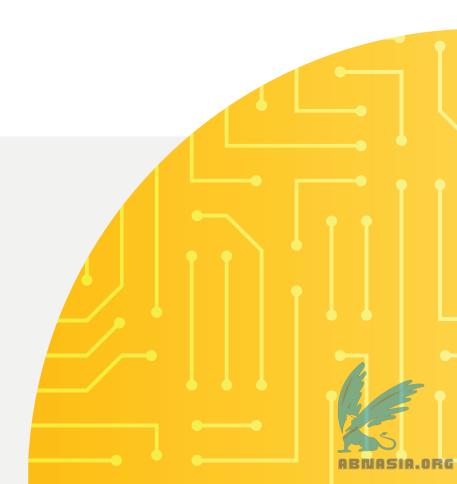
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Welcome to The Robo Report & Robo Ranking

Condor Capital Wealth Management is proud to publish the 32th edition of the Robo Report®, covering the second quarter of 2024, and the 13th edition of the Robo Ranking®. This Report is a continuation of an ongoing study that monitors well-known robo advisors. We strive to provide a reliable resource for both investors and professionals interested in the digital advice industry.



Highlights

- → Seven-year returns published for the first time.
- → Fidelity Go wins Best Overall Robo, offering stellar performance, competitive fees, no minimum investment, and robust features.
- → The winners of Best Robo for Digital Financial Planning, Empower and Wealthfront, serve as an example of simple yet effective online planning.
- → SoFi won Best Robo for First-Time Investors because of its low fees, and its ability to manage many areas of one's financial life on a single platform including debt consolidation, career coaching, and live financial planning.

- → Domestic, large-cap, and growth-oriented portfolios demonstrate enduring strength across one-, three-, five-, and seven-year periods.
- → Fixed Income portfolios with allocations different from the Bloomberg Aggregate Bond Index show superior performance.
- → Fidelity Go exhibits durable performance through strategic focus on large-cap and domestic equities, outperforming over seven years.
- → SoFi's growth-tilted portfolio achieves notable outperformance driven by high allocations to growth stocks and tech investments.

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Executive Summary

This edition of the Robo Report, published by <u>Condor Capital Wealth Management</u>, tracks 37 accounts at 26 different providers. The Robo Report continues to evolve. This quarter, we not only provide our usual data, which is available online at <u>condorcapital</u>. <u>com/the-robo-report/data/</u>, but also include performance commentary for the quarter.

The Robo Report

During the second quarter of 2024, the S&P 500 Index rose by 4.28%, ending just below all-time highs. The "Magnificent Seven" stocks once again outperformed the broader market, despite increased variability in their individual performances. The artificial intelligence theme continued to drive large-cap growth stocks, while small and mid-cap indices declined due to the impact of the Federal Reserve's extended period of higher interest rates. Economic activity remained robust, with U.S. GDP growth and consumer spending surpassing initial forecasts. Inflation data was mixed but showed signs of decline by June, prompting the Federal Reserve to reconsider the timing and number of anticipated rate cuts, now expected to be only one or two by year-end.

International equities had a mixed performance in the second quarter. The MSCI EAFE Index declined by 0.20%, while the MSCI Emerging Markets Index rose by 5.03%. China's economic challenges showed some improvement, but the rally in Japanese equities stalled, with the Topix gaining only 1.60%. The U.S. Dollar's moderate rise continued to pressure some foreign currencies. In the fixed income sector, postponed rate cuts led to higher yields, resulting in a slightly negative return for the Bloomberg U.S. Aggregate Bond Index. The 10-year yield increased by nearly 20 basis points to 4.39%, and high-yield credit performed similarly to investment-grade bonds after periods of outperformance.

There have been some notable changes in the robo-advice industry. Goldman Sachs has reached a deal to sell the investment accounts of Marcus to Betterment, with completion expected in June. Initially launched in February 2021 to attract retail investors, Marcus Invest aimed at a demographic significantly broader than Goldman Sachs' traditional clientele. The downstream move ultimately did not meet expectations, leading to an anticipated exit from the robo-advisory space.

Betterment announced a revamped premium plan. The upgraded plan includes new benefits, such as access to preferred rates on Betterment's Cash Reserve and a 20% discount on estate planning services. Premium customers will also be subject to an annual management fee of 0.65%, a notable increase from the previous fee of 0.40%. Both the increased fee at Betterment and the shuttering of the Goldman Sachs and JP Morgan Chase robo offerings represent the difficulty of offering advisory services at rock-bottom prices while earning meaningful profits for the provider.

Thank you for being a subscriber. We hope you enjoy this edition of The Robo Report.



The Robo Ranking

Introduction

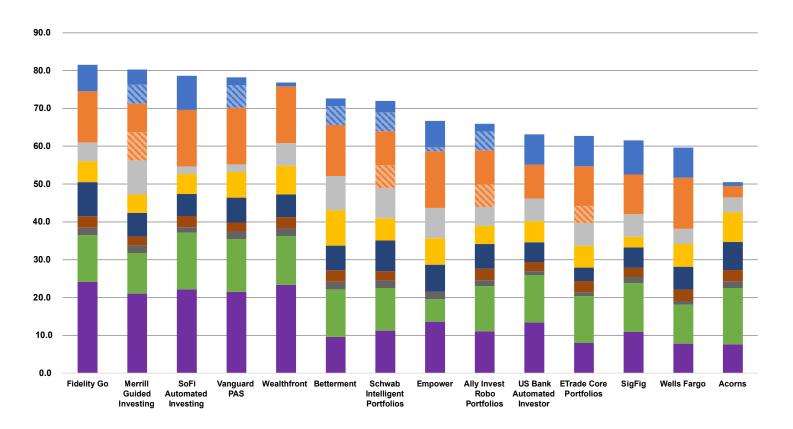
Condor Capital Wealth Management is excited to publish the 13th edition of the Robo Ranking®. The Robo Ranking is the only comprehensive ranking of robo advisors. It examines not only the features and services but also portfolio performance that is sourced from real accounts tracked by the Robo Report. Robo advisors have taken the advice industry by storm, with the larger independent providers continuing to show strong growth and innovative features, and robo-advice technology being adopted across banks, brokerages, and other traditional advice firms. Robo-advice providers are proving attractive to individual investors in large part due to their significantly lower minimums and costs. Here at the Robo Report, our goal is to bring transparency to the digital advice industry to empower investors to seek the best products and services.

The Robo Ranking grades robo advisors across more than 45 specific metrics and is the only examination that includes real and reliable performance data. We scored each robo on various high-level categories, such as features, financial planning, customer experience, access to live advisors, transparency and conflicts of interest, size and tenure, account minimums, costs, and performance. Each metric that we grade is specific and unambiguous. The details of how we created the scores and Ranking can also be found on our website. The Robo Ranking is a powerful tool to help those investors who are considering using a digital advisor. Although we rank and give each robo an overall score, we also acknowledge

the differences in individual investors and their situations. To help investors find a product that is right for them, we created sub-rankings to highlight where different products excel. Once investors have identified their needs, the category rankings can help them select a provider that stands out in the areas that are most important to them. The performance score is partly based on the Robo Report's innovative method to compare globally diversified portfolios called Normalized Benchmarking. A methodology of Normalized Benchmarking can be found on our website.



Robo Ranking Scores



- Access to Advisors Base Tier Points
- Additional Points at Higher Service Tier (Acess to Advisors)
- Financial Planning Base Tier points
- Additional Points at Higher Service Tier (Financial Plannning)
- Transparency and Conflicts
- Features
- **Customer Experience**
- Minimum
- Size and Tenure
- Costs
- Performance



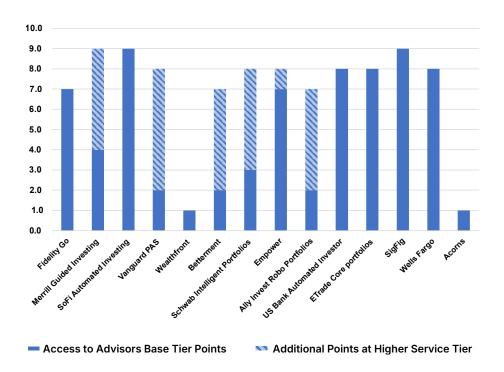
Robo Ranking Scores

| Robo Name | Access to Advisors | Financial Planning | Transparency and Conflicts | Features | Customer Experience | Minimum | Size and Tenure | Costs | Performance | Total |
|-------------------------------------|-----------------------|-----------------------|----------------------------|----------|------------------------|---------|--------------------|-------|-------------|--------|
| Fidelity Go | 7.00 | 13.50 | 5.00 | 5.54 | 8.99 | 3.00 | 2.00 | 12.39 | 24.11 | 81.53 |
| Merrill Guided Investing | 9.00 | 15.00 | 9.00 | 4.86 | 6.22 | 2.40 | 2.00 | 10.72 | 21.06 | 80.26 |
| SoFi Automated Investing | 9.00 | 15.00 | 2.00 | 5.25 | 5.80 | 3.00 | 1.40 | 15.00 | 22.18 | 78.63 |
| Vanguard PAS | 8.00 | 15.00 | 2.00 | 6.78 | 6.57 | 2.40 | 2.00 | 13.96 | 21.49 | 78.19 |
| Wealthfront | 1.00 | 15.00 | 6.00 | 7.60 | 6.00 | 3.00 | 2.00 | 12.91 | 23.34 | 76.85 |
| Betterment | 7.00 | 13.50 | 9.00 | 9.42 | 6.51 | 3.00 | 2.00 | 12.60 | 9.59 | 72.62 |
| Schwab Intelligent Portfolios | 8.00 | 15.00 | 8.00 | 5.86 | 8.15 | 2.40 | 2.00 | 11.27 | 11.28 | 71.95 |
| Empower | 8.00 | 15.00 | 8.00 | 7.00 | 7.11 | 0.00 | 2.00 | 5.92 | 13.65 | 66.68 |
| Ally Invest Robo Portfolios | 7.00 | 15.00 | 5.00 | 4.80 | 6.52 | 3.00 | 1.60 | 11.95 | 11.06 | 65.94 |
| US Bank Automated Investor | 8.00 | 9.00 | 6.00 | 5.52 | 5.26 | 2.40 | 1.00 | 12.60 | 13.39 | 63.17 |
| ETrade Core Portfolios | 8.00 | 15.00 | 6.00 | 5.80 | 3.52 | 3.00 | 1.00 | 12.39 | 7.98 | 62.70 |
| SigFig | 9.00 | 10.50 | 6.00 | 2.80 | 5.40 | 2.40 | 1.60 | 12.91 | 10.92 | 61.54 |
| Wells Fargo | 8.00 | 13.50 | 4.00 | 6.00 | 6.06 | 3.00 | 1.00 | 10.26 | 7.84 | 59.67 |
| Acorns | 1.00 | 3.00 | 4.00 | 7.80 | 7.39 | 3.00 | 1.80 | 14.87 | 7.62 | 50.49 |
| MAX | 10.00 | 15.00 | 10.00 | 10.00 | 10.00 | 3.00 | 2.00 | 15.00 | 25.00 | 100.00 |

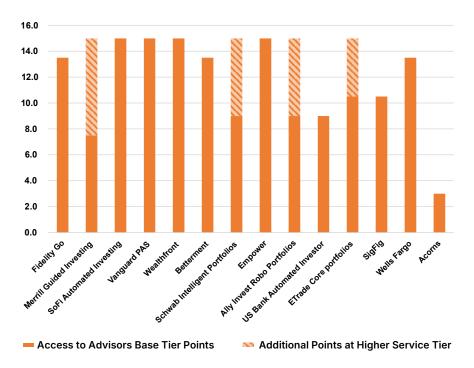


Access to Advisors and Planning

Access to Advisors



Financial Planning





Best Robo Advisors

- → Fidelity Go wins Best Overall Robo, offering stellar performance, competitive fees, no minimum investment, and robust features.
- → The winners of Best Robo for Digital Financial Planning, Empower and Wealthfront, serve as an example of simple yet effective online planning.
- → SoFi won Best Robo for First-Time Investors because of its low fees, and its ability to manage many areas of one's financial life on a single platform including debt consolidation, career coaching, and live financial planning.

Best Overall Robo Advisor

→ Winner: Fidelity Go

→ Runner-up: Merrill Guided Investing

Fidelity Go is our winner for Best Overall Robo in this year's Robo Ranking Summer Edition. Fidelity Go stands out for its competitive fees and robust features. The platform charges a management fee of just 0.35%, with no minimum investment requirement at the base level and \$25,000 for accessing live advisors. This cost efficiency makes it an attractive option for investors seeking a low-cost robo advisor. Fidelity Go also offers access to live operational support and licensed advisors (series 66 or 65), providing significant advantages to users. While Certified Financial Planners (CFPs) and dedicated advisors are not available at the base tier, the platform excels in financial planning, offering tools to build single and multi-goal financial plans, model various "what-if" scenarios, and determine retirement spending needs. The inclusion of Social Security estimates and the ability to incorporate pension income further enhance its comprehensive approach to retirement planning. Additionally, Fidelity Go delivers a superior customer experience with educational materials, a fully integrated digital advice portal, a mobile app, chat support, and account aggregation for a holistic financial picture.

Fidelity Go achieved exceptional performance scores, making it one of the top performers in our tracked universe. The platform's significant allocation to municipal bonds and its positioning with a bias towards large caps have contributed to its strong returns relative to benchmarks and good risk-adjusted

performance. The lack of a cash allocation ensures that the portfolio is fully invested, maximizing potential returns. Over the trailing 3-year period, Fidelity Go's portfolio managed to outperform its normalized benchmark by 0.75%, showcasing its effective investment strategy. Despite the challenges faced by equities and fixed income in 2022, Fidelity Go's strategic asset allocation mitigated the effects of the broader market sell-off, resulting in solid performance. Overall, Fidelity Go is an excellent choice for investors, offering a blend of low fees, robust financial planning tools, strong performance, and a user-friendly experience.

Merrill Guided Investing is our Runner-up for Best Overall Robo in this year's Robo Ranking Summer Edition. Merrill offers two tiers of service, a digital only tier, Merrill Edge Guided investing, available to those with \$1,000 or more to invest, and a hybrid tier, Merrill Edge Guided Investing with an Advisor, available to those with \$20,000 or more to invest. It is fairly standard in its offerings at the base tier, with access to live operational support, an ESG themed investment portfolio option, and a single goal per account planning tool that can help you project your future account value and likelihood of achieving your goal. At the hybrid level, investors will get access to live advisors to help with more complex planning.

Performance was another driver of their ranking, with Merrill scoring in the top half of our tracked universe thanks in part to its relatively large allocation to municipal bonds on the fixed income side of the portfolio, as well as its bias towards large caps on the equity side. The importance of a large cap bias is shown over the trailing 3- and 5-year periods, where the

Russell 1000 Index has returned 8.73% and 14.57% annually on average versus returns of -2.62% and 6.90% for the Russell 2000 Index. Merrill is one of the more active portfolio managers and is a good choice for those seeking a more active approach to portfolio construction.

ever, growth stocks have significantly outpaced value stocks. For the trailing three-year period ending June 30, 2024, the Russell 3000 Growth Index outperformed the Russell 3000 Value Index by over 5% per year on average.

Best Robo for Performance at a Low Cost

→ Winner: Fidelity Go → Runner-up: Wealthfront

The Best Robo for Performance at a Low Cost category is designed for investors seeking the best performing portfolio. We measure performance based on total portfolio performance compared to its Normalized Benchmark and Sharpe Ratio. For the three-year period ending June 30, 2024, Fidelity Go and Wealthfront emerged as top performers. This period encompassed some of the post-Covid recovery, as well as elevated inflation, rising geopolitical tensions, and rapidly increasing interest rates.

Fidelity Go's equity positioning is typically market-neutral concerning its growth and value split. However, they allocate more to large caps on average, at 76% of the equity portfolio, compared to about 69% on average across all tracked robos over the trailing three-year period. This allocation greatly benefited performance as large caps were the best-performing size among equities over this period.

On the fixed income side, Fidelity Go allocates all fixed income holdings to municipal bonds, one of the better-performing fixed income classes over the past three years. Wealthfront also maintains holdings in municipal bonds and TIPS, which have performed well relative to other fixed income classes over the past three years.

Wealthfront benefited significantly from its dedicated energy holding, which was advantageous during the prolonged inflation period and amid the disruption of energy markets following the Russian invasion of Ukraine. From the start of 2021 through the end of 2022, the energy sector, represented by the Vanguard Energy ETF, posted an average annual return of nearly 60%, compared to just 2.6% annualized for the S&P 500 during the same period. The outperformance of the value-tilted energy sector tracked the overall trend of value outperforming growth during that time. More recently, how-

Best Robo for First-Time Investors

→ Winner: SoFi

→ Runner-up: Fidelity Go

SoFi remains our top pick for first-time investors. For many, the true start of one's investing journey begins with paying down student loans, or some other form of debt. SoFi provides users a platform to explore options such as consolidating debt as a first step to their goals of saving for the long-term. They also have many tools available to first time investors outside of debt consolidation, such as access to career coaches and live financial planners. They also offer a strong budgeting tool in the form of SoFi Relay, which allows outside financial accounts to be tracked within SoFi's platform, helping to give a holistic view of one's budgeting. These abilities combined with SoFi's low fees make SoFi a top option for first time investors.

Fidelity Go earns the distinction of runner-up in this category due to a combination of low costs, an accessible digital platform, and impressive long-term returns. Fidelity Go users will benefit from low fees through a combination of no-cost Fidelity Flex funds, as well as no management fee on the first \$25,000 invested, making it especially attractive for investors with smaller amounts of money to start with. This combined with strong long-term performance due, in part, to their bias towards large cap equities makes them a great option for first-time investors.



Best Robo for Digital Financial Planning

→ Winner: Empower

→ Runner-up: Wealthfront

The most significant effect that robo advisors have exerted on the financial advice industry is the democratization of expertly managed portfolios. Robo advisors have not just facilitated widespread access to advised accounts, but they have also enabled high-caliber financial planning to become available to anyone equipped with an internet connection and the readiness to invest the time into building a plan.

The winners of this category offer the best digital planners among the robos we track. The two winners of this category, Empower (formerly known as Personal Capital) and Wealthfront, offer their digital plans to anyone without the need to open an account. These platforms offer the ability to build a holistic financial plan by combining multiple goals into a single plan, while also aggregating outside accounts so investors can get a view of their full financial picture. They make planning for the future easy by enabling users to model future life events, such as Social Security and other retirement income, as well as life events such as windfalls and other custom inputs, all while presenting it in an easy-to-use manner and offering it in the standard, free versions of their services.

Empower remains at the top of our list when it comes to financial planning tools. The robo enables users to plan for retirement, home purchase, education, and general saving among other goals with a plethora of in-depth tools. The retirement fee analyzer looks at your portfolio's holdings and estimates what portion of your portfolio will be lost to expense ratios, while the planner allows you to set up multiple spending goals along with projected future income and calculates a probability of success in the stated goals. The planner also allows you to map out a plan to pay down debt alongside your current savings, as well as an emergency fund. It will aggregate outside accounts and present you with a consolidated display of your monthly cash flows, overall net worth, and other views of your finances in a single dashboard. The robo offers a feature called Investment Checkup that explains how and why you should be rebalancing your portfolio, while taking into account your age, risk tolerance, and portfolio composition. Through its ability to aggregate outside accounts, it is also able to analyze positions held elsewhere. Overall, Empower

continues to be our top pick for robos related to financial planning due to its in-depth planning tools offerings, including a multi-goal financial plan and the ability to customize inputs specific to the investor.

Wealthfront's digital planning tools are representative of their digital-first philosophy, eliminating the need for human advisors and the higher fees attached to them. The planning tool allows for goals specific to retirement, education, home buying, and travel, with the home buying module utilizing Redfin data. While it is a little more complex than Empower's, the planning tool comes with a high degree of customization like projecting retirement income such as Social Security, windfalls, real estate, and other details, allowing for users to build out complex plans. It also utilizes a feature called Self-Driving Money, which is a set of automated or semi-automated features that enable users to invest excess cash held in their bank accounts. This allows for users to integrate their spending and saving habits with their long-term goals. Wealthfront's planner continues to be a premier example of innovation among robo advisors.

Best Robo for Complex Financial Planning

→ Winner: Vanguard → Runner-up: Empower

While some digital planning tools do a good job modeling complex situations, those with complex planning needs may still benefit from access to live advisors alongside robo planning, or a hybrid model. Vanguard wins the title for Best Robo for Complex Financial Planning. Their hybrid advice model allows access to a live financial advisor at a minimum investment of \$50,000 for just 0.30% in management fees. For a \$500,000 investment, investors get access to a dedicated adviser, available for the same low fee. This allows investors to model multiple financial goals and get a comprehensive view of their assets at a price point far below the 1% management fee typically charged by a traditional financial advisor.

Empower, the runner-up for Complex Financial Planning combines access to a live planner with one of the best digital planning platforms on the market. Empower has a high minimum investment at \$100,000 and a high management fee at 0.89% but offers some stand out features. Aside from its planning tools, Empower offers investment options such as

an SRI portfolio, and direct indexing, and for those with more than \$5,000,000 on the platform, alternative investments like private equity are also available. Empower also offers a feature called Smart Withdrawal which simplifies the process of determining where to withdraw retirement spending funds, and how to do so in a tax efficient manner. This feature can assist with more complex decisions, like whether tax gain harvesting should be considered, or if a Roth conversion may be beneficial. These features combine to make Empower one of the best robo options for complex financial planning, even with its higher fees.



Robo Ranking Facts

| Robo Name | 3-Year Annualized Return | 3-Year Return Above/Below Normalized Benchmark | 3-Year Sharpe Ratio | Account Minimum | Advisory Fee | Weighted Average Expense Ratio |
|---|--------------------------------|---|---------------------------|--|--|---|
| Acorns ¹ | 1.08% | -1.28% | -0.18 | No minimum | \$3/month for Personal; \$5/month for Personal Plus; \$9/month for Premium | 0.04% |
| Ally Invest Robo Portfolios ⁹ | 1.59% | -0.63% | -0.13 | \$100 | 0.30% annually; Also offers 'cash- enhanced' portfolio with 30% invested in cash and no management fee | 0.06% |
| Betterment ²⁷ | 1.50% | -1.10% | -0.13 | Digital: No minimum; Premium: \$100,000 | \$4/ month or 0.25% annually with \$20,000 in platform assets or \$250 monthly deposits; 0.65% annual fee for Premium | 0.08% |
| E*Trade Core ²¹ | 1.29% | -1.35% | -0.16 | \$500 | 0.30% annually | 0.05% |
| Fidelity Go ³³ | 3.77% | 1.53% | 0.07 | | No Advisory fee on account balances under \$25,000; 0.35% on accounts with balances over \$25,000 | 0.00% |
| Merrill Guided Investing ³¹ | 2.95% | 0.75% | -0.01 | "Guided Investing: \$1,000; Guided Investing with an Advisor: \$20,000" | Guided Investing: 0.45% annually (digital only); Guided Investing with an Advisor: 0.85% annually | 0.06% |
| Empower (Personal Capital) ⁴ | 2.37% | -0.93% | -0.05 | \$100,000 | 0.89% annually; discounted tiered pricing at higher asset levels | 0.08% |



| Robo Name | 3-Year Annualized Return | 3-Year Return Above/Below Normalized Benchmark | 3-Year Sharpe Ratio | Account Minimum | Advisory Fee | Weighted Average Expense Ratio |
|--|--------------------------------|---|---------------------------|--|--|---|
| Schwab Intelligent Portfolios ⁵ | 1.68% | -0.47% | -0.14 | Intelligent Portfolios: \$5,000; Intelligent Portfolios Premium: \$25,000 | Intelligent Portfolios: No fee (digital only); Intelligent Portfolios Premium: \$300 initial planning fee, \$30/month subscription | 0.17% |
| SigFig ⁶ | 1.62% | -0.67% | -0.13 | \$2,000 | No fee for the first \$10k; 0.25% annually for balance over \$10k | 0.05% |
| SoFi ¹⁷ | 3.21% | 0.85% | 0.02 | \$1 | No management fee | 0.06% |
| US Bank Automated Investor ²⁸ | 1.76% | -0.12% | -0.12 | \$1,000 | 0.24% annually | 0.09% |
| Vanguard Digital and Personal Advisor ⁴³ | 3.08% | 0.79% | 0 | Vanguard Personal Advisor: \$50,000; Vanguard Digital Advisor: \$3,000 | Vanguard Personal Advisor 0.30% annually. Vanguard Digital Advisor combined underlying fund fees and management fees capped at 0.20% | 0.07% |
| Wealthfront (Risk 4.0; 2016) ⁴⁴ | 3.50% | 1.24% | 0.04 | \$500, some additional portfolio features require a higher minimum | 0.25% annually | 0.05% |
| Wells Fargo Intuitive Investor ¹⁴ | 1.08% | -1.42% | -0.16 | \$500 | 0.35% annually; discounted relationship pricing may be available | 0.14% |



Robo Report Top Performers

YTD Top Performers

| | Best | 2nd | 3rd |
|-----------------|-----------------------|-------------------------------|------------------------------|
| Total Portfolio | SoFi | Betterment Climate Impact SRI | Fidelity Go |
| Equity | SoFi | Betterment Climate Impact SRI | Betterment Social Impact SRI |
| Fixed Income | Stash Smart Portfolio | Fidelity Go | Betterment |

1-Year Top Performers

| | Best | 2nd | 3rd |
|-----------------|--------------------------------|-------------------|------------------------------|
| Total Portfolio | SoFi | Fidelity Go | Vanguard Personal Advisor |
| Equity | SoFi | TD Ameritrade SRI | Acorns |
| Fixed Income | Wells Fargo Intuitive Investor | Fidelity Go | Betterment Social Impact SRI |

3-Year Top Performers

| | Best | 2nd | 3rd |
|-----------------|------------------------------|------------------------------|---------------------------|
| Total Portfolio | Fidelity Go | Wealthfront (Risk 4.0; 2016) | Zacks Advantage |
| Equity | Wealthfront (Risk 4.0; 2016) | Acorns | Zacks Advantage |
| Fixed Income | Zacks Advantage | Fidelity Go | Vanguard Personal Advisor |

5-Year Top Performers

| | Best | 2nd | 3rd |
|-----------------|-----------------|------------------------------|------------------------------|
| Total Portfolio | SoFi | Wealthfront (Risk 4.0; 2016) | Fidelity Go |
| Equity | Zacks Advantage | SoFi | Wealthfront (Risk 4.0; 2016) |
| Fixed Income | Fidelity Go | Vanguard Personal Advisor | Schwab Domestic Focus |

Total Portfolio winners are based on the portfolio's return vs. the Normalized Benchmark. Returns are net of fees and are as of 6/30/2024.

7-Year Top Performers

| | Best | 2nd | 3rd |
|-----------------|-------------|------------------------------|-------------------------------|
| Total Portfolio | Fidelity Go | Wealthfront (Risk 4.0; 2016) | SoFi |
| Equity | Acorns | Fidelity Go | SoFi |
| Fixed Income | Fidelity Go | Vanguard Personal Advisor | Schwab Intelligent Portfolios |

Performance Commentary

- → Seven-year returns published for the first time.
- → Domestic, large-cap, and growth-oriented portfolios demonstrate enduring strength across one-, three-, five-, and seven-year periods.
- → Fixed Income portfolios with allocations different from the Bloomberg Aggregate Bond Index show superior performance.
- → Fidelity Go exhibits durable performance through strategic focus on large-cap and domestic equities, outperforming over seven years.
- → SoFi's growth-tilted portfolio achieves notable outperformance driven by high allocations to growth stocks.

Backdrop

The S&P 500 Index rose by 4.28% in the second quarter of 2024, finishing the period shy of all-time highs. The so-called Magnificent Seven stocks once again outperformed the broader market, though the performance of those seven individual stocks did have more dispersion than in prior quarters. The artificial intelligence theme continued to fuel large-cap growth stocks through the second quarter. Small and mid-cap indices declined in the quarter as more rate-sensitive sectors of the economy began to feel the effects of the Federal Reserve's prolonged campaign of higher interest rates.

Economic activity remained robust, and U.S. GDP growth and consumer spending predictions exceeded initial forecasts. U.S. inflation data was mixed through the three months, eventually showing signs of falling to close out June 2024. Although the Federal Reserve is still forecasting more accommodative monetary policy by the end of 2024, persistent inflation has led to questions over the pace and timing of rate cuts. The Fed is monitoring stronger-than-expected economic growth and job market resilience as well. As a result, market expectations have shifted throughout 2024 from up to six rate cuts this year to just one or two.

International equities were mixed in the second quarter. The MSCI EAFE Index declined 0.20% in the quarter, while the MSCI Emerging Markets Index returned 5.03%. China's economic woes showed signs of improvement, while the rally in

Japanese equities stalled in the second quarter. The Topix lagged U.S. equities, gaining 1.60%. The dollar rose moderately in the quarter, and its elevated levels continued to weigh on some foreign currencies.

In fixed income markets, the second quarter remained a somewhat difficult period as rate cuts continue to be delayed. While lower rates would boost bond prices due to the inverse relationship between price and yield if the Fed were to cut rates, investors are coming to grips with the idea that the central bank will continue to hold rates higher. As a result, the Bloomberg U.S. Aggregate Bond Index posted a slightly negative return in the period, and yields rose once again. The longer end of the yield curve moved up for the second quarter in a row, with the 10-year rising almost 20 basis points to 4.39%. High-yield credit did not fare any better than investment grade after recent periods of outperformance.

Zooming back to longer-term returns, we are now publishing returns for these portfolios of the seven-year time period. Over those seven years, a few consistent themes have emerged. First, domestic equities have outperformed international ones by a wide margin. Over the seven-year period ending June 30th, 2024, the S&P 500 returned 14.26% annually, trouncing the 6.35% returns of the MSCI EAFE and 3.88% returns of the MSCI Emerging Markets index. This outperformance is of particular note as exposure to international equities vs. domestic equities is one of the most significant allocation differences we see in the robo portfolios. These portfolios

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range from a 50% allocation to international equities to 18% allocation to international equities. Domestic markets have outperformed over the trailing 1-, 3-, 5-, and 7-year periods.

The outperformance of growth indices shows a similar consistency. Over the past seven years, the Russell 3000 Growth has outperformed its value counterpart, returning an annual 17.92% compared to only 8.40% for the Russell 3000 Value Index. Despite value outperforming during the rising rate environment of 2022, growth has outperformed value over the same 1-, 3-, 5-, and 7-year periods.

The third major theme in markets and driver of outperforming robo portfolios has been large cap's dominance over small or mid cap companies. The Russell 1000 has outperformed the Russell 2000, with the former returning an annual 13.92% compared to an annual 6.82% for the latter over the trailing seven years. This outperformance is also witnessed in the 1-, 3-, and 5-year periods.

Innovation by major US growth firms like NVIDIA, Apple, Microsoft, and others have propelled U.S. large cap indices higher. The resilience of the U.S. economy through the pandemic and recovery period, the dominance of the U.S. dollar, record oil and gas production, government infrastructure spending, and a host of other factors have all contributed to a period of economic growth and stability throughout the U.S. economy led by the largest and most dominant domestic companies. Robos that are more tilted to domestic, large-cap equities have performed well across various time periods.

Large Cap Equities Help Fidelity Go, Wealthfront, and SoFi Over the Prior **Seven Years**

This analysis marks the first time we are evaluating the performance of robo-advisors over a seven-year period, making it a particularly exciting milestone. The standout performers over the past seven years were Fidelity Go, Wealthfront (2016), and SoFi. These portfolios consistently favored investments in large-cap equities. This approach has been particularly advantageous, aligning well with the strong performance of large caps, as shown with the Russell 1000 Index, an index focused on large cap equities, returning an annualized 13.92% over the prior seven years, compared to only 6.82% for the Russell 2000 Index. The winners also tended to have higher-than-average allocations to domestic equities. The importance of this decision is shown in the S&P 500's impressive seven-year annualized return of 14.26%, far surpassing the MSCI EAFE Index's return of 6.35%. The outperformance of domestic equities highlights the benefit of a U.S.-centric investment strategy during this time period. Fidelity Go ended the seven-year period with 76% allocated to large caps, with SoFi slightly below with 75%, and Wealthfront with 71%, all higher than the average of 68% for the robos represented in this time period.

The balance between growth and value allocations played a critical role in shaping equity performance. Despite a brief resurgence in value stocks in 2022, growth stocks maintained a considerable advantage. Over the last seven years, the Russell 3000 Growth Index achieved an annualized return of 17.92%, significantly outstripping the 8.40% annualized return of the Russell 3000 Value Index. SoFi greatly benefited from this trend, with 49% of its portfolio allocated to growth equities, the largest growth allocation by a wide margin and much higher than the average of 36% for robos we track. SoFi is also one of the only robos with growth-specific holdings, specifically their proprietary SoFi Next 500 and SoFi Select 500 ETFs. These ETFs weigh companies based on specific growth metrics in the mid- and large-cap areas of the market, respectively.

Conversely, portfolios with higher allocations to value stocks tended to struggle over this period. For example, Schwab Intelligent Portfolios had the highest allocation to value stocks and ranked near the bottom of the performance ranking for the seven-year period. Other robos with higher allocations to value that also lagged in performance included Empower, Ally, and Betterment. While a higher allocation to value buffered many of these accounts from the worst of the 2022 market decline, which witnessed a drawdown in growth stocks, this impact has started to wane. The resurgence of growth stocks has caused those with low allocations to growth to lag.

Additionally, Wealthfront benefited from its strategic investment in the energy sector through the Vanguard Energy ETF (VDE). While VDE yielded an annualized return of 9.37% over the seven-year period, Wealthfront has successfully added to or reduced this position over the years in a way that produced outperformance within the portfolio. This performance underscores the strong market returns from energy investments and illustrates Wealthfront's adept timing, having invested in

April 2020 and subsequently selling a portion in July 2022. This decision exemplifies successful market timing that significantly contributed to the portfolio's success.

In the fixed-income arena, the winning portfolios were Fidelity Go, Vanguard Personal Advisor, and Schwab Intelligent Portfolios, which all maintained high allocations to municipal bonds, which generally outperformed corporate bonds during the prior seven-year period, highlighting the broader market's preference for safer, income-generating assets amidst fluctuating interest rates and economic conditions. This performance differential is reflected in the Bloomberg Municipal Bond Index, which delivered a robust annualized return of 1.99%. In comparison, the Bloomberg US Corporate Index, representing corporate bonds, lagged slightly behind with a return of 1.79%.

Fixed income portfolios of robos that deviate from exposure similar to the Bloomberg US Aggregate Bond Index have tended to outperform. For example, Schwab Intelligent Portfolios, one of the top-performing fixed income portfolios during the trailing seven-year period, deviates significantly from the Aggregate Bond Index. Its fixed income portfolio has 11% government bonds, 86% municipals, 2% corporates. This is a large difference from the Aggregate Bond Index which has 46% government, 0.5% municipals, 25% corporates, and 28% securitized. This allocation helped Schwab outperform due to its exposure to municipals, which, as previously mentioned, have performed well. The portfolio also has high-yield bond funds, which has helped its performance. This includes the iShares Broad U.S. High Yield Corp ETF (USHY) and the Xtracker USD High Yield Corp ETF (HYLB). Since USHY's inception on November 26th, 2017, it has earned an annual return of 3.78%, compared to only 0.84% against the Bloomberg US Aggregate during this time. Schwab's holding of dedicated TIPS ETFs proved to be advantageous over the trailing seven-year period, as its two TIPS holdings, the Schwab US TIPS ETF and the SPDR Portfolio TIPS ETF, returned 2.41% and 2.32%, respectively, compared to the Bloomberg US Aggregate's return of 0.86%.

Large Cap Growth Drives Year-to-Date Performance for SoFi, Betterment Climate Impact, and Fidelity Go

SoFi, Betterment Climate Impact, and Fidelity Go have stood out as the leading performers year-to-date, compared to our Normalized Benchmark. This framework compares each robo advisor's returns against a benchmark tailored to their specific asset allocation, highlighting the substantial role of growth stocks in driving returns. Year to date, the Russell 3000 Growth Index gained 19.89%, outpacing the Russell 3000 Value Index, which advanced by 6.18%. All three platforms leaned towards growth allocations, with large cap equities playing a critical role. Notably, the Russell 1000 Index, primarily comprising large cap stocks, yielded a return of 14.23%, outperforming both the Russell Midcap Index at 4.96% and the Russell 2000 Index at 1.73%. This allocation emphasized the broader market trend where large caps have significantly outperformed mid and small caps.

The standout results of Betterment Climate Impact can be primarily attributed to their strategic focus on the technology sector and limited exposure to energy or other value sectors. The technology sector, including prominent companies like Microsoft and Nvidia, has experienced significant growth, which has been a major factor in the performance uptick. This focus is mirrored in the composition of various ESG-focused ETFs in their portfolios, such as TCW Transform 500 (VOTE), SPDR S&P 500 Fossil Fuel Reserve Free (SPYX), iShares MSCI ACWI Low Carbon Target (CRBN), Impact Shares NAACP Minority Empowerment (NACP), and iShares ESG Aware MSCI USA (ESGU). These ETFs have large weightings to the technology sector, which has benefited from the recent surge in interest surrounding A.I. ESG-focused portfolios and their underlying funds tend to be weighted towards technology and other growth sectors. It is not directly in their mandate to be tilted towards growth but is a by-product of portfolio construction around various ESG factors.

In the realm of fixed income, year to date, those bond portfolios staying on the shorter end of the yield curve or limiting duration have benefited as rate cut expectations have fallen since the end of 2023. Stash, our top-performing bond portfolio YTD, has a dedicated holding to the iShares Treasury Floating Rate Bond ETF, which has a total return of 2.74% compared to the Bloomberg US Aggregate Index loss of 0.71%. Betterment's holdings in international bond funds iShares J.P. Morgan USD Emerging Markets Bond ETF and Vanguard Total International Bond ETF helped its outperformance. The Bloomberg EM Aggregate Index returned 2.22%, also outperformed the Bloomberg US Aggregate. The performance of emerging markets bonds was buoyed by the anticipation of interest rate cuts by major central banks, which created a favorable investment climate for these assets. Betterment relies heavily on municipal bonds for its fixed income exposure while Fidelity relies entirely on municipal bonds which have continued their outperformance into the year-to-date period.

Large Cap Growth Propels One-Year Performance for SoFi, Fidelity Go, and **Vanguard Personal Advisor**

Over the past year, SoFi, Fidelity Go, and Vanguard Personal Advisor have emerged as top performers in terms of overall portfolio returns, with growth stocks playing a pivotal role. The Russell 3000 Growth Index significantly outperformed, posting a return of 32.21%, compared to the 12.91% return of the Russell 3000 Value Index. SoFi maintained higher-than-average allocations to growth stocks. SoFi's proprietary holdings, specifically the SoFi Next 500 and SoFi Select 500 ETFs, focus on growth-oriented indices, further aligning with this trend. The Fidelity Go portfolio holds four proprietary Fidelity Flex index funds. This broad market index approach has been beneficial by allowing the portfolio to expand its allocation to growth as growth companies have become a larger percentage of the market driven by their expanding market caps. Similarly, Vanguard's performance is notable due to its market-weighted nature, which has proven beneficial recently.

The emphasis on large cap stocks also contributed to their success, as evidenced by the Russell 1000 Index's return of 23.86%, surpassing the 12.88% and 10.03% returns of the Russell Midcap and Russell 2000 Indices, respectively. Fidelity Go, SoFi, and Vanguard all maintain higher weights towards large-cap equities than the average robo.

On the fixed income front, high-yield bonds outperformed investment-grade bonds, with the Bloomberg US Corporate High Yield Bond Index delivering a robust return of 10.44%, greatly exceeding the 2.63% return of the Bloomberg US Agg Total Return Index. Top performer in the fixed income category, Wells Fargo Intuitive Investor, had significant exposure to high-yield assets. Exposure to emerging market bonds also enhanced performance for Wells Fargo and Betterment Social Impact, reflecting broader trends seen in the Bloomberg EM USD Agg Index, which returned 7.95% and

vastly outperformed the Bloomberg Global Aggregate ex-USD Index, which saw a decline of 0.66%.

Domestic Equities and Municipals Bonds Fuel Performance for Fidelity Go, Wealthfront, and Zacks Advantage Over the Past Three Years

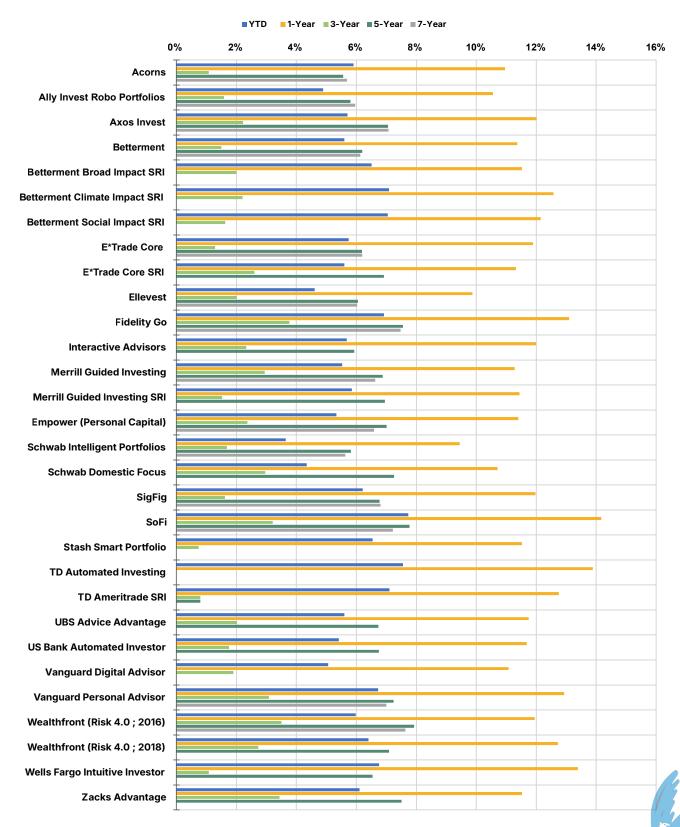
Over the last three years, Fidelity Go, Wealthfront (2016 vintage), and Zacks Advantage have led the pack in performance, bolstered by their strong allocations to U.S. equities. The S&P 500 delivered an annualized return of 10.00% during this period, markedly outperforming the MSCI EAFE Index and the MSCI Emerging Markets Index, which returned 3.53% and -4.75%, respectively. Notably, Zacks Advantage allocated the highest allocation to domestic equities at 82%.

While allocations towards value stocks have boosted the returns of robo advisors in this group in 2022, the recent surge in growth stocks has started to diminish the impact of these value allocations. Last quarter, we reported that the performance of Russell 3000 growth has overtaken that of its value counterpart in the trailing 3-year time frame ending March 31st, 2024. This shift has continued, as shown with the Russell 3000 Growth Index returning an annualized return of 10.33%, compared to the 5.11% return of the Russell 3000 Value Index for the trailing 3-year period ending June 30th, 2024. Notably, this change partly explains why Schwab Domestic Focus has dropped out of the top spot for the threeyear performance category, as the portfolio has one of the highest allocations to value.

In fixed income, municipal bonds played a crucial role in enhancing portfolio performance, with all leading portfolios showing high allocations to this asset class. This focus proved advantageous, as evidenced by the relatively modest annualized loss of 0.88% in the Bloomberg National Municipal Index over the past three years, in contrast to the more pronounced loss of 3.02% in the Bloomberg US Aggregate Index.

Zacks, in particular, has shown to be more actively managed than most, having switched from the iShares TIPS Bond ETF to the iShares 0-5 Year TIPS ETF on December 31st, 2021. In July 2022, they removed their TIPS exposure entirely. During this time period, the iShares 0-5 Year TIPS ETF lost only 0.74% compared to steeper losses of 9.81% in the Bloomberg US Aggregate index during the same period.

Total Portfolio Performance



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Robo-Advice Industry Update

- → At \$1 trillion in assets, robo advisors have reached a mature phase.
- → Goldman Sachs and JP Morgan Chase shutter robos.
- → Schwab closing down institutional, white label robo service.
- → Robo 3.0, providing portfolio options and customization.
- → Robinhood acquires Pluto, Al financial planner.

Robos Reaching Maturity

As robo advisor have crested \$1 trillion in assets under management the industry has reached a mature phase. When robo advisors first came to prominence many believed it would revolutionize the financial advice industry. Many thought it would create significant pressure on and take market share from traditional advisors. Others saw what they believed was an industry ripe for disruption and the disrupters having finally arrived. While predictions for the downfall of traditional advice have fallen short, robo advisors are making a permanent mark on the industry, just not in the way that many anticipated.

Robo advisors have not taken a significant market share from traditional advisors. Instead, they tend to be most attractive to do-it-yourself investors. Those investors who are comfortable making their own financial decisions and are willing to be active participants in building their own financial plans. This is part of the reason why Schwab and Vanguard have been so successful with their robo-advice product offerings and quickly became market leaders while other firms have struggled to find a footing. Vanguard and Schwab were already successful with self-directed investors and had large existing client pools in which they could introduce their low-cost advice offerings. Many other firms, start-ups, and established players alike have struggled to find their footing in acquiring large swathes of customers.

While robo advisors may not have up-ended traditional advice, they have democratized advice, making professionally managed accounts available to the masses. Having any type of financial advisor for those with just a few thousand dollars to invest was out of reach for most prior to Wealthfront and Betterment launching their products. Now, there is a plethora of low-cost options available for investors at any wealth level. Many investors are now starting financial advice relationships much earlier in the client life-cycle and at much lower levels of wealth. So, while robo advisors may not have disrupted traditional advice at the scale they had hoped, they have provided millions of investors with a quality, low-cost solution for professionally managed accounts and financial plans.

Now that the industry has reached maturity what will be the next phase of innovation? What will Robo 3.0 look like? Artificial, intelligence being leveraged for more personalized advice is one possibility, but will face high regulatory hurdles. One area we continue to see innovation is the ability to customize accounts or a wider variety of portfolio options.

Firms Continue to Exit

Departing from the days of regular new entrants into the market, today, products that have not reached scale are being shut down. From 2015 through 2020, large financial institutions and ambitious entrepreneurs followed the lead of pioneers Betterment and Wealthfront and launched a plethora of robo-advice products and new features within those products. Today, the pace of new product introductions and innovation has slowed, and the industry's evolution has led to the exit of several firms. As the initial growth phase has ended,

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companies that couldn't keep up or for whom it didn't make strategic sense have exited the space.

Two notable examples are JPMorgan Chase and Goldman Sachs. Both financial giants tried to capture the burgeoning robo-advice market but faced significant challenges. Goldman Sachs, which never had a strong foothold in the retail brokerage segment, struggled to gain traction, selling its Marcus Invest accounts to Betterment earlier this year. Citing the product's inability to scale and reach profitability, JP Morgan decided to shut down its digital-only robo-advice product late last year. The firm still offers a hybrid advice model with a \$25,000 minimum. Goldman Sachs and JP Morgan Chase are the most recent to shutter products. They are following suit of quite a few others in the space. Blackrock closed the direct-to-consumer offering of FutureAdvisor in 2023 after acquiring the company in 2015. Blooom, John Hancock's Twine, Pacific Life's Swell, and Northwestern Mutual's Learnvest are all examples of products that have closed as the industry has matured and consolidated.

Additionally, we have learned that Schwab plans to shut down its institutional, white label, robo service. The direct-to-consumer Intelligent Portfolio and Intelligent Portfolios Premium services will remain unaffected. Schwab's white-label product, where RIAs could sign up and quickly bring to market a robo-advice service built on the Institutional Intelligent Portfolios platform will be shut down. Institutional Intelligent Portfolios may have had difficulty finding advisors who wanted to enter the robo-advice market. Smaller robo-advice products face the challenge of reaching scale, and RIAs looking to launch their own robo would need to find how a robo-advice product would fit along side their existing offering in terms of service level and price.

Shifting Focus from Growth to Profitability

Scale and profitability have been a struggle for many in the space. Betterment, under the leadership of Sarah Levy has been making moves to increase revenue at the firm. First, Betterment introduced a flat \$4 a month fee for clients with less than \$20,000 on the platform and did not meet minimum monthly deposit requirements. More recently, Betterment hiked the fee for its premium tier from 0.40% to 0.65% annually. Many speculate Betterment may be eying an IPO and raising revenues and profits may be part of the preparation for a possible public offering. Wealthfront, on the other hand, has both stuck to its guns as a digital platform, deciding not to introduce a live-advisor focused service tier and has not raised prices. Wealthfront also claims that it is achieving healthy profits.

Robo 3.0: More Portfolio Options and Customization

Robos are trying to find what is next to improve their products. One area where we continue to see product enhancements is customization and choices in thematic portfolios. SRI, ESG, or Impact portfolios are now an option at many robos. This year, both Betterment and Wealthfront launched new bond portfolio options. Betterment announced in July a new short-term 'Tax Smart Bond Portfolio' through their partnership with Goldman Sachs, promising better after-tax returns than traditional highyield savings accounts. Meanwhile, Wealthfront launched an 'Automated Bond Ladder' product, which will construct a ladder of treasury securities for a client with as little as \$500. Schwab, years ago, started giving clients the option to opt for a 'Domestic Focus' portfolio, which is a portfolio with less exposure to international securities than its standard portfolio.

Both Wealthfront and Betterment clients can customize their portfolios, allowing them to express individual views on asset classes or industries by introducing funds and adjusting target weights within their portfolios. SoFi, earlier this year, announced offering alternative investments to its clients. Although alternatives are only available through the self-directed offering, this move will help bring new asset classes and strategies to retail investors.

The future of robo-advisory is likely to see an increased emphasis on personalization and flexibility, driven by technological advancements and a deeper understanding of investor preferences. Robo 3.0 will offer more strategies, thematic portfolios, portfolio customization and will hand back some control over portfolio direction to the clients, if they want it. Robos will need to strike a balance between providing portfolio options, while not overwhelming clients with too many options.



Artificial Intelligence and Advice

As product managers look to what is next, inevitably, a prominent question is whether artificial intelligence and large language models can be leveraged to create a new client experience. Like digital investment advisors, artificial intelligence will prove to be a challenge for both product managers and regulators alike. The reliability of large language models presents a challenge to those who deliver financial advice, as delivering bad advice to just one client can have a significant impact on that client and can violate an advisor's fiduciary duty. This will make the implementation of Al as financial advisors a challenge.

Robinhood's recent acquisition of Pluto, an Al-driven financial planning company, brings these regulatory questions to the forefront. With Pluto's capabilities, Robinhood increases the level of financial tools that it offers. However, it seems likely that Robinhood will aim to remain on the side of providing tools rather than full-fledged advice to avoid increased regulation and fiduciary duties.

While Robinhood is not an investment advisor, its tools may give the impression of offering investment advice. For example, currently, Robinhood offers recommended portfolios that provide first-time users with an asset allocation snapshot but do not manage the portfolio over time. Walking through the recommended portfolio module is strikingly similar to the onboarding phase of opening a new account at a robo advisor.

This distinction could become even more blurred if the integration of Pluto's capabilities provides investment insights and suggestions. Both Robinhood and Pluto are positioned as tools for self-directed investors, providing generalized investment suggestions based on limited user inputs rather than detailed, personalized advice. Although, Robinhood representatives have discussed the possibility of registering as an investment advisor. Navigating these distinctions will be key for compliance with evolving regulatory frameworks, especially as AI capabilities expand and regulatory considerations become more complex.

The integration of AI into robo-advisory services presents both opportunities and challenges. While innovation in some areas may slow, Al has the potential to drive growth and enhance accessibility in financial advice. Companies must navigate a complex regulatory landscape, balancing the benefits of advanced AI tools with the need to comply with evolving guidelines and meet the standards required of fiduciaries.

Whether AI can and will be implemented in robo products or the next stage of innovation will center around optionality in portfolio offerings we are excited to see what is next in the industry. Robo advice has established itself as permanent fixture of the advice landscape. We hope to see industry leaders continue to expand access to financial advice and bring new innovative products and features to market.



Growth of the Robo-Advice Industry

- → The robo-advice industry surpassed \$1 trillion in client assets by the end of 2023, marking a significant milestone.
- → The industry experienced a significant rebound in 2023, recovering from the market corrections of 2022.
- → Exits of lower-performing firms, such as JPMorgan Chase and Goldman Sachs, reflect the maturation and competitive nature of the market.

The robo-advice industry experienced a significant rebound in 2023, recovering from the dramatic pullback in 2022. Market corrections in the 2022 fiscal year put downward pressure on assets, but the broader cycle saw markets and AUM quickly recovering. By mid-2023, both Schwab and Vanguard had rebounded, posting growth over the 2022 and 2021 year-ends. By the end of 2023, Vanguard's AUM increased to \$311.9 billion from \$251.4 billion, and Financial Engines saw its AUM rise to \$270.8 billion from \$242.0 billion. Schwab also grew its AUM to \$80.9 billion from \$70.5 billion, demonstrating the resilience and recovery of these market leaders.

All told the industry has reached a mature milestone. We now estimate the robo-advice industry, including robo advisors within the employer plan advice space, like Financial Engines, has crested \$1 trillion in client assets. We estimate that at the end of 2023 robo advisors managed \$1.089 trillion in assets.

The industry's evolution over the past year has led to the exit of several less-performing firms that could not sustain their operations or align with their existing business models. This trend reflects a broader maturation in the robo-advice market, where early rapid growth has given way to a more stable, albeit competitive, environment. Notable exits include JPMorgan Chase and Goldman Sachs, both of which faced significant challenges despite their established reputations. Goldman Sachs is closing its automated investing business, Marcus Invest, transferring clients and their assets to Betterment. JPMorgan Chase also announced it is discontinuing its

purely digital robo-advisor, J.P. Morgan Automated Investing, transitioning clients to its self-directed online investing brokerage offering. These moves highlight the difficulties even large financial institutions face in achieving scale and profitability in the robo-advice space.

Smaller, independent robo advisors also saw growth in 2023, despite previous market challenges. Betterment's AUM increased to \$45.9 billion from \$36.6 billion, and Wealthfront's rose to \$29.9 billion from \$25.2 billion, according to ADV filings. Acorns grew to \$8.2 billion from \$6.3 billion, and other independents like Ellevest, SigFig, SoFi, and Stash also posted AUM growth. However, some players like Axos saw a decline, with AUM decreasing to \$143 million from \$155 million.

As the industry is reaching maturity, client growth is slowing. Tracking the number of clients can be a better gauge of platform growth as it is not impacted by the growth of existing accounts from investment gains and client deposits. Betterment and Wealthfront continue to add clients but at a slower rate than in years past.

Betterment's annual client growth rate has decreased from around 20% in the years 2018 - 2020 to 8% in 2023. Wealthfront clients grew by a remarkable 42% in 2018, and its annual growth rate was in the teens for 2019 and 2020. In 2023 we estimate Wealthfront grew clients by just 1.4%. Acorns has acquired clients rapidly over the years. In 2019, 2020, and 2022, the platform grew clients at a rate of more than 40% year over year. In 2023, they grew by just 13%. The industry is transitioning from its rapid growth stage to a mature phase, where the focus will likely be on maintaining growth and improving profits.

In summary, the robo-advice industry has shown remarkable resilience and adaptability in the face of market challenges. The future of robo-advisory services will depend on how well these firms can navigate regulatory landscapes and integrate new technologies to meet the evolving needs of their clients.



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Last updated: 03/31/2023

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- ¹These accounts were funded with more than the minimum amount required to establish an account. Had the accounts been funded with more assets, they would be charged a flat dollar fee up to \$1,000,000. Because the fee is a flat dollar amount, a higher account balance would have the result of increasing reflected performance, while a lower account balance would have the result of decreasing reflected performance. In December of 2018, a \$1 fee was not recorded. Performance has been updated to include this fee as of Q1 2019.
- ² This account has no minimum required to establish an account, but had the account been funded with more assets, it would, at certain asset levels, be eligible for a lower advisory fee. The lower advisory fee would have the result of increasing reflected performance.
- 3 These accounts were funded with more than the minimum amount required to establish an account. There is no fee schedule; all accounts are charged the same asset-based fee. Therefore, performance is not affected by the account's asset level.
- ⁴ This account was funded with the minimum or more than the minimum amount required to establish an account at the time of opening. Had the account been funded with more assets it would, at certain asset levels, be eligible for a lower advisory fee. The lower advisory fee would have the result of increasing reflected performance.
- ⁵ This account was funded with more than the minimum in order to take advantage of tax-loss harvesting. Tax-loss harvesting may result in better or worse performance compared to similarly positioned accounts that are not enrolled in tax-loss harvesting. This account is enrolled in their digital-only "Intelligent Portfolios", thus it is not charged an advisory fee. If one were to upgrade to "Intelligent Advisory" which introduces access to live advisors, a subscription fee would be levied, which would decrease reflected performance.
- ⁶ These accounts were funded with the minimum amount required to establish an account. At balances less than \$10,000, there is no advisory fee. Had the account been funded with \$10,000 or more, an asset-based advisory fee would be levied, which would decrease reflected performance.
- ⁷ These accounts were funded with the minimum amount required to establish an account at the time of opening. There is no fee schedule; all accounts are charged the same asset-based fee. Therefore, performance is not affected by the account's asset level.
- ⁸ These accounts have no minimum required to establish an account. Prior to the Axos and Wisebanyan acquisition and integration, this account was not charged a management fee. Had additional service packages, such as tax-loss harvesting, been added, the lesser of an asset-based fee or flat dollar fee would have been assessed. These fees would have decreased the reflected performance. Currently, this account is charged a 0.24% management fee. In August of 2021, there was a reporting issue with this provider. The issue has been resolved but the resolution effectively caused a rebalance of the account on 09/30/2021.
- 9 This account was funded with the minimum investment amount at the time. At the time of opening, the account had a 0.25% management fee. Due to changes in the service at the end of the 1st quarter of 2017, new accounts are charged a 0.30% management fee. The fee on our account was grandfathered in and remains at 0.25%. The higher advisory fee would have the result of decreasing reflected performance.
- 10 These accounts were funded with the minimum amount required to establish an account. This account is enrolled in their digital-only "Essential Portfolios" and is charged an asset-based advisory fee. If one were to upgrade to "Selective Portfolios" which introduces access to live advisors, a higher asset-based advisory fee schedule would apply, which would decrease reflected performance. "Essential Portfolios" does not appear to be available to new clients, likely due to the pending Schwab and TD Ameritrade integration. These accounts are grandfathered into the "Essential Portfolios" program and are charged a 0.30% annual asset-based management fee.
- 11 This account has no minimum required to establish an account, but had the account been funded with more assets, it would, at certain asset levels, be eligible for a lower advisory fee. The lower advisory fee would have the result of increasing reflected performance. A special request was made for an allocation of 60% equities and 40% fixed income or close to it, but this allocation was not one of the standard models at the time of account opening. At the time of account opening the closest standard models offered were in the range of 50/50 or 75/25 equity to fixed income split.
- 12 These accounts were funded with more than the minimum amount required to establish an account. Due to the asset-based advisory fee, performance is not affected by the accounts' asset levels. In previous reports, we reported the performance of two accounts that were combined to achieve a 60/40 allocation. Due to our introduction of Normalized Benchmarking we are no longer reporting the combined account, but just the account with the closest to a 60/40 allocation as we could achieve at this provider.
- 13 These accounts were funded with less than the minimum investment through an agreement between The Robo Report and the provider. There is no advisory fee levied regardless of the amount of assets invested.
- 14 This account was funded with the minimum amount required to establish an account. A flat, asset-based advisory fee is levied on the account. Had we subscribed to additional, specific, provider products the account would be eligible for a lower asset-based advisory fee. A lower advisory fee would have the result of increasing reflected performance.

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- 15 This account has no minimum required to establish an account and is enrolled in the Digital Only plan. If the account was enrolled in the premium service with access to live advisors, there would be a higher asset-based advisory fee. The higher advisory fee would have the result of decreasing reflected performance.
- 16 This account is enrolled in the Self Service plan. If the account was enrolled in the Full Service Plan, the fee would be higher or lower depending on the level of assets in the account. The higher/lower advisory fee would have the result of decreasing/increasing reflected performance. Recently, this provider changed its fee schedule, but our account was grandfathered in at the previous, lower fee for the size of the account. New accounts would be subject to the new fee schedule, which would decrease reflected performance at most account size levels.
- ¹⁷ This account was funded with more than the minimum amount required to establish an account. This account will not be charged an advisory fee through 2019. In previous reports, we reported the performance of two accounts that were combined to achieve a 60/40 allocation. Due to our introduction of Normalized Benchmarking we are no longer reporting the combined account, but only the account with the closest to a 60/40 allocation as we could achieve at this provider.
- 18 This account was funded with more than the minimum amount required to establish an account. This account will not be charged an advisory fee through 2019.
- ²⁰ This account was funded with the minimum required to establish an account. This account is enrolled in their digital-only "Intelligent Portfolios", thus it is not charged an advisory fee. If one were to upgrade to "Intelligent Advisory" which introduces access to live advisors, a subscription fee would be levied, which would decrease reflected performance.
- 21 These accounts were funded with more than the minimum amount required to establish an account. There is no fee schedule; all accounts are charged the same asset-based fee. Therefore, performance is not affected by the account's asset level. The fee was waived for the first year. Had a fee been levied, reflected performance would have been lower.
- ²² These accounts were funded with more than the minimum amount required to establish an account. There is currently no fee schedule; all accounts are charged the same asset-based fee. Therefore, performance is not affected by the account's asset level. Previously, the fee was only assessed on balances in excess of \$10,000.
- 23 These accounts were funded with the minimum amount required to establish an account. There is no fee schedule; all accounts are charged the same asset-based fee. Therefore, performance is not affected by the account's asset level. The fee was waived for an initial promotional period. Had a fee been levied, reflected performance would have been lower.
- ²⁴ Interactive Advisors is registered as an advisor under the name of Covestor Ltd. and is part of the Interactive Brokers Group. This account was funded with the minimum required to open an account and is invested in their Asset Allocation portfolio. It is charged an asset-based fee. There is no fee schedule on this account; therefore performance is not affected by the account's asset levels. Previously, the account was charged a lower asset-based fee; the increase took effect starting March 2019. Interactive Advisors offers multiple strategies with different sets of fees, including Smart Beta, index-tracking and model ETF portfolios, in addition to the Asset Allocation portfolios. Interactive Advisors also offers a marketplace for actively managed portfolios for which it charges higher fees (0.08-1.5%), part of which it remits to the portfolio managers supplying the data underlying those strategies.
- ²⁵ Originally, there was no advisory fee on these accounts. Had additional service packages, such as tax-loss harvesting, been added, the lesser of an asset-based fee or flat dollar fee would have been assessed. In June 2018, one package was activated, resulting in a fee on these accounts. This fee decreases the reflected performance.
- ²⁶ This account was enrolled in Prudential's Strategic Portfolios. It was funded with the minimum required to open an account. Had the account been funded with more assets it would, at certain asset levels, be eligible for a lower advisory fee. The lower advisory fee would have the result of increasing reflected performance. Prudential also offers Reserve Portfolios for short-term investing, which have a lower account minimum and fee. However, the Reserve Portfolios do not allow asset-allocation customization based on individual demographic and risk tolerance.
- ²⁷ This account has no minimum required to establish an account and is enrolled in the Digital Only plan. If more was invested, the account would be assessed a lower asset-based fee, which would increase reflected performance. If the account was enrolled in the premium service with access to live advisors, there would be a higher asset-based advisory fee. The higher advisory fee would have the result of decreasing reflected performance. All balances above \$2 million are charged a lower asset-based advisory fee. A lower advisory fee would have the result of increasing reflected performance. The 2018 end-of-year statement for Betterment did not include dividends received near the end of 2018, these dividends first appeared on the March 31st, 2019 statement. These dividends are reflected as of the Q1 2019 Robo Report but were not reflected in performance reported in the Q4 2018 Robo Report. In Q2 2020 a dividend was misattributed to the cash asset class instead of income causing the equity performance of the main Betterment account to be slightly underrepresented.
- 28 These accounts were funded with the minimum amount required to establish an account. There is no fee schedule; all accounts are charged the same asset-based fee. Therefore, performance is not affected by the account's asset level. The fee was waived for an initial promotional period. Had a fee been levied, reflected performance would have been lower. As of March 27, 2019, the management fee has been lowered. The lower advisory fee will increase reflected performance.

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- 29 This account was funded with the minimum or more than the minimum amount required to establish an account at the time of opening. Had the account been funded with more assets it would, at certain asset levels, be eligible for a lower advisory fee. The lower advisory fee would have the result of increasing reflected performance. After opening, this provider changed its fee schedule, raising the fee for the asset level of the account, but our account was grandfathered in at the previous, lower fee. New accounts would be subject to the new fee schedule, which may change reflected performance.
- 30 These accounts were funded with more than the minimum amount required to establish an account. The account is charged a flat dollar fee subscription at its service level. Had the accounts been enrolled in different service packages, they could be assessed a higher subscription fee. Because the fee is a flat dollar amount, a higher account balance would have the result of increasing reflected performance, while a lower account balance would have the result of decreasing reflected performance.
- 31 These accounts were funded with the minimum amount required to establish an account at the time of opening. This account is enrolled in their digital-only "Guided Investing" and is charged an asset-based advisory fee. If one were to upgrade to "Guided Investing with an Advisor" which introduces access to live advisors, a higher asset-based advisory fee schedule would apply, which would decrease reflected performance.
- 32 This account has no minimum required to establish an account and is enrolled in the Digital Only plan. If the account was enrolled in the premium service with access to live advisors, there would be a higher asset-based advisory fee. The higher advisory fee would have the result of decreasing reflected performance. All balances above \$2 million are charged a lower asset-based advisory fee. A lower advisory fee would have the result of increasing reflected performance.
- 33 This account has no minimum required to establish an account and is enrolled in the Digital Only plan. If the account was enrolled in the premium service with access to live advisors, there would be a higher asset-based advisory fee. The higher advisory fee would have the result of decreasing reflected performance. Prior to August 2020, this account was assessed a 0.35% annual management fee As of August 2020, the provider changed the fee structure such that accounts under \$10,000 are not charged a management fee. Our account is under this threshold and will therefore not be charged a management fee starting in August of 2020. This will have the result of increasing reflected performance.
- 34 This account was funded with more than the minimum required to establish an account, There is no management fee levied. Therefore, performance is not affected by the account's asset level. This platform has numerous different portfolio strategies. We chose the "moderately aggressive" strategy. Different portfolio strategies have different allocations which could increase or decrease reflected performance.
- 35 These accounts were funded with the minimum amount required to establish an account. This account is enrolled in their "Selective Portfolios" and is charged an asset-based advisory fee. These specific portfolios are only offered at the "Selective Portfolios" level, which charges a higher asset-based advisory fee due to access to live advisors than the "Essential Portfolios." Additionally, these portfolios may hold balanced funds. Due to the nature of these funds and limits in our portfolio management system, we cannot accurately track equity and fixed income performance individually at the portfolio level for portfolios with balanced fund holdings. Total portfolio performance is unaffected by holding balanced funds.
- 36 These accounts were funded with more than the minimum amount required to establish an account. There is no fee schedule; all accounts are charged the same asset-based fee. Therefore, performance is not affected by the account's asset level. This platform has numerous different portfolio strategies. We chose the "60/40 classic" option. Different portfolio strategies have different allocations which could increase or decrease reflected performance.
- 37 These accounts were funded with the minimum amount required to establish an account. This account is enrolled in their "Selective Portfolios" and is charged an asset-based advisory fee. These specific portfolios are only offered at the "Selective Portfolios" level, which charges a higher asset-based advisory fee due to access to live advisors than the "Essential Portfolios."
- 38 These accounts were opened when the provider charged 0.25% annual management fee. Recently, the fee structure changed to be a flat monthly fee. However, our account was grandfathered into the old fee structure. This change may have the result of increasing/decreasing reflected performance based on account size.
- 39 This account charges a 0.15% annual management fee and caps the underlying fund fees at 0.05% so that the all-in fee never exceeds 0.20% annually. The same fee is charged at all asset levels.
- ⁴⁰ This account charges 0.55% annually. However, those with a Citi Gold or Priority account (required balances of \$50,000 and \$200,000 respectively) will not be charged a management fee, which would increase reflected performance.
- ⁴¹ This account is enrolled in the "Standard" pricing plan for \$120 a year which is paid by an outside bank account. This account was opened with a \$5,000 initial deposit. We assess the fee on the account as though it was opened with a \$50,000 initial deposit. We assess a \$1 monthly, \$12 a year, management fee on this account. A flat dollar fee pricing structure means the level of assets in the account will affect net-of-fee performance.
- 42 These accounts were funded with more than the minimum amount required to establish an account. The account is charged a flat dollar fee subscription. Because the fee is a flat dollar amount, a higher account balance would have the result of increasing reflected performance, while a lower account balance would have the result of decreasing reflected performance.
- 43 This account was funded with the minimum or more than the minimum amount required to establish an account at the time of opening. Had the account been funded with more assets it would, at certain asset levels, be eligible for a lower advisory fee. The lower advisory fee would have the result of in-

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creasing reflected performance. On June 19th, 2017, Vanguard removed the Robo Report's primary Vanguard account from the Vanguard Personal Advisor Services program. As of June 20th, 2017, the primary account was replaced by a secondary account with the same risk profile as the primary account. The returns for the secondary account have been linked to the original primary account. Asset type and allocation between the two accounts at the time of the switch were very close but not identical.

44 These accounts were funded with more than the minimum amount required to establish an account. There is currently no fee schedule; all accounts are charged the same asset-based fee. Therefore, performance is not affected by the account's asset level. Previously, the fee was only assessed on balances in excess of \$10,000. In the 1st Quarter of 2018 Wealthfront liquidated the positions in the account used for the 4th Quarter 2017 and previous editions of this report. A different account was used for this report and is labeled "Wealthfront (Risk 4.0)". The performance numbers from the previous account are available in the addendum labeled as "Wealthfront (Risk 3.0)". The risk scores and thus allocations of the two accounts are different and labeled as such. Asset type and allocation between the two accounts at the time of the switch were close but not identical. The difference in equity allocation between the accounts on 12/31/2017 was approximately 5.4%.

45 These accounts were funded with the minimum amount required to establish an account. This account is enrolled in their digital-only "Essential Portfolios" and is charged an asset-based advisory fee. If one were to upgrade to "Selective Portfolios" which introduces access to live advisors, a higher asset-based advisory fee schedule would apply, which would decrease reflected performance. Due to the down market in December 2018, this account engaged in repeated tax-loss harvesting on one of its asset types. All alternative securities were exhausted for this asset type, so to prevent a wash sale, the entire position, representing approximately 31% of the portfolio, was liquidated and held as cash for a 1 month period, during which time the market experienced a large upswing. Because this portfolio missed the market upswing, its performance versus the normalized benchmark is lower.

In previous reports, the initial target asset allocation was calculated as the asset allocation at the end of the first month after the account was opened. In the Q3 2018 report, we adjusted our method to calculate the initial target asset allocation as of the end of the trading day after all initial trades were placed in the accounts. This adjustment has caused some portfolio's initial target allocation to be updated from previous reports. These updates did not change any initial target allocations of equity, fixed income, cash, or other by more than 1%.

Prior to Q3 2018, due to technological limitations of our portfolio management system, some accounts which contained fractional shares had misstated the quantity of shares when transactions quantities were smaller than 1/1000th of a share in a position as a result of purchases, sales, or dividend reinvestments. This had a marginal effect on the historical performance of the accounts. The rounding of position quantities caused by this limitation has been resolved, and quantities have been adjusted to reflect the full position to the 1/1,000,000th of a share as of the end of Q3 2018. Therefore, this rounding of fractional shares will not be necessary in the future.

At certain custodians, a combination of the custodian providing us a limited number of digits on fractional share and fractional cent transactions rounding errors are introduced into our tracking. At quarter-end starting 3/31/2020, we implemented a process to enter small transactions to eliminate any rounding errors that have built up to more than a full cent. These transactions are small and do not have an appreciable effect on performance. Sharpe ratios and Standard Deviation calculations are calculated with the assumption of 252 trading days in a year.

This report represents Condor Capital Wealth Management's research, analysis and opinion only; the period tested was short in duration and may not provide a meaningful analysis; and, there can be no assurance that the performance trend demonstrated by Robos vs indices during the short period will continue. A copy of Condor's Disclosure Brochure is available at www.condorcapital.com. Condor Capital holds a position in Schwab in one of the strategies used in many of their discretionary accounts. As of 6/30/2024, the total size of the position was 60,107 shares of Schwab common stock. As of 6/30/2024, accounts discretionarily managed by Condor Capital Management held bonds issued by the following companies: Morgan Stanley, Bank of America, Goldman Sachs, Wells Fargo, E*Trade, Citi Group, Citizens Financial Group, Ally Financial, Charles Schwab, Fidelity, and TD Bank.

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