# BRINGING TRANSPARENCY TO ROBO INVESTING

EDITION 23

# *The Robo Report®* First Quarter 2022

We are proud to publish the 23rd edition of the *Robo Report®* covering the first quarter of 2022. 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:*

- *Protections against rising inflation defined winning portfolios in Q1 2022; Wealthfront, Morgan Stanley Inflation Conscious, and Personal Capital were the best performers (pg. 5)*
- *For three-year performance, strong domestic bias propelled Zacks Advantage to the top spot (pg. 7)*
- *Wealthfront is the new long-term winner as its balanced portfolio showed resiliency among volatile market conditions (pg. 7)*
- *Shorter duration bond allocations boosted fixed-income returns for Zacks Advantage, Personal Capital, and Marcus Smart Beta (pg. 6)*

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## *Executive Summary*

This edition of the *Robo Report* tracks 58 accounts at 35 different providers. The *Robo Report* continues to evolve, and this quarter we bring you our usual data, which can be found online at theroboreport.com/data/, as well as performance commentary for the quarter. Next quarter, we will provide an in-depth review of the industry and where it stands, as well as an update to our semi-annual *Robo Ranking*.

We also want to address one other change this quarter. As a reader, you are familiar with Backend Benchmarking being the firm that publishes the *Robo Report*. Backend Benchmarking was founded by the president and founder of an independent investment advisor called Condor Capital Wealth Management. The teams at Condor and Backend Benchmarking have always been closely related and the genesis of the *Robo Report* was at Condor prior to the formation of Backend Benchmarking. Recently, the *Robo Report* and the team that puts it together was integrated back into Condor Capital and we will no longer be using the name Backend Benchmarking. The same team is still writing the *Robo Report* and will continue to publish new editions along with our data. We have always been, and will continue to be, dedicated to a fair, unbiased approach in our analysis of robo advisors. Most importantly, the email address that will be sending out the report going forward will be theroboreport@condorcapital.com. Please help us with e-mail delivery and add this email address to your whitelist. If you have any issues receiving the next quarter's report, please email us here so we can get it to you.

The first quarter of 2022 has been a tumultuous one and the volatility has only worsened since the end of the quarter. With inflation, the war in Ukraine, and the federal reserve ramping up efforts to dampen demand, markets have been difficult to navigate both in equities and fixed income. Firms like Wealthfront, Schwab, and Personal Capital have outperformed this quarter in a reversal from previous periods, bolstered by holdings in commodities and energy. In a reversal of previous trends, portfolios holding specific tilts towards value have outperformed year-to-date and are closing the gap from previous periods of underperformance. In fixed income, those portfolios holding TIPS and managers that have limited-duration exposure have minimized losses this quarter.

# Top Performers

## Year-to-Date Top Performers

| | Best | 2nd | 3rd |
|---|---|---|---|
| **Total Portfolio** | Wealthfront | Morgan Stanley Inflation Conscious | Personal Capital |
| **Equity** | Wealthfront | Interactive Advisors | Schwab Domestic Focus |
| **Fixed Income** | Zacks Advantage | Personal Capital | Marcus Invest Smart Beta |

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## 1-Year Trailing Top Performers

| | Best | 2nd | 3rd |
|---|---|---|---|
| **Total Portfolio** | Wealthfront | Zacks Advantage | Morgan Stanley Inflation Conscious |
| **Equity** | Wealthfront | Zacks Advantage | Marcus Invest Core IRA |
| **Fixed Income** | Schwab Domestic Focus | Schwab | Morgan Stanley Inflation Conscious |

*Produced by The Robo Report*

## 3-Year Trailing Top Performers

| | Best | 2nd | 3rd |
|---|---|---|---|
| **Total Portfolio** | Zacks Advantage | Wealthfront | SoFi |
| **Equity** | Zacks Advantage | SoFi | Morgan Stanley SRI |
| **Fixed Income** | Schwab | Axos Invest | SigFig |

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## 5-Year Trailing Top Performers

| | Best | 2nd | 3rd |
|---|---|---|---|
| **Total Portfolio** | Wealthfront | Fidelity Go | Axos Invest |
| **Equity** | Fidelity Go | Wealthfront | Vanguard P.A.S. |
| **Fixed Income** | Schwab | Axos Invest | SigFig |

*Produced by The Robo Report*

*Total Portfolio winners are based on the portfolio's return vs. the Normalized Benchmark. Returns are net of fees and are as of 03/31/2022.*

# *Performance Commentary*

- *Protections against rising inflation defined winning portfolios in Q1 2022: Wealthfront, Morgan Stanley Inflation Conscious, and Personal Capital thrive*
- *For three-year performance, strong domestic bias propelled Zacks Advantage to the top spot*
- *Wealthfront is the new long-term winner as its balanced portfolio showed resiliency among volatile market conditions*
- *Shorter-duration bond allocations boosted fixed-income returns for Zacks Advantage, Personal Capital, and Marcus Smart Beta*

## *Background*

As the calendar year changed to 2022, so too has the climate for investors across the globe. During the first quarter, the U.S. experienced inflation data points of 7.5%, 7.9%, and 8.5% for January, February, and March, respectively, as measured by the 12-month percentage change in the Consumer Price Index (CPI). In accordance with the Fed's signaling interest rate hikes, the 10-Year Treasury rose from 1.63% on January 3rd to 2.32% by March 31, 2022. The combination of rising inflation and rising interest rates caused significant declines in intermediate and long-duration bonds, as well as so-called "long-duration stocks", or those with expected earnings far into the future. For reference, the Russell 3000 Growth Index returned -9.25%, while the Barclays Aggregate Bond Index returned -5.93% for the year-to-date period ending March 31, 2022. As investors across the globe review their statements to find painful performance, many are reconsidering their options.

Overseas, the tragic war between Russia and Ukraine pushed oil prices from about $77 dollars per barrel at the beginning of the year, to over $100 by the end of the quarter when looking at WTI crude. Furthermore, prices were pushed upwards as supply/demand imbalances continued throughout the world, exacerbated by China's zero-covid policy and resulting lockdowns. It has yet to be seen if this current wave of inflation will prevail long term, but investors are taking a second look at their portfolios to plan for inflationary shocks accordingly.

**Year-to-Date: Wealthfront, Morgan Stanley Inflation Conscious, and Personal Capital protect investors' nest eggs from the perils of rising inflation.**

In light of stocks and bonds declining, many investors are asking themselves how to best protect their assets in a rising inflationary and interest rate environment. Investors in Wealthfront will be familiar with the notable allocation to commodities-related asset classes found in their portfolios. For example, our moderate growth allocation had about 10% allocated to VDE, the Vanguard Energy ETF, which focuses primarily on the various stages of oil and gas production. This ETF returned over 38% for the year-to-date period ending March 31, 2022, propelling Wealthfront to an impressive -0.7% return for equity-only performance. On the other hand, the average robo advisor returned -6.1% for equity-only performance during the same period. The bold allocation to VDE is the primary driver of why Wealthfront reached the top spot.

| Robo Advisor | YTD Quartile | 3-Year Quartile | 5-Year Quartile | % Growth | % Value | % Dedicated to Commodities/ Energy Stocks |
|---|---|---|---|---|---|---|
| Wealthfront | 1st | 1st | 1st | 25% | 36% | 10% |
| Personal Capital | 1st | 3rd | 4th | 28% | 29% | 7% |
| Schwab | 1st | 3rd | 4th | 21% | 38% | 1% |

**Ranks are in quartiles of Total Portfolio Performance vs. the Normalized Benchmark*

Similar to Wealthfront, Morgan Stanley's In. ation Conscious-themed robo advisor and Personal Capital's standard portfolio invested in specific asset classes that generated positive returns during the year-to-date period. Morgan's portfolio held TPYP and PDBC, a pipeline-rated ETF and commodities-basket ETF, respectively. These investments supported performance, as TPYP and PDBC returned over 20% and 25%, respectively, for the three-month trailing period ending March 31, 2022. Moreover, this is at a time when the S&P 500 Index declined by over -4.60%. Personal Capital earned its top spot in part by holding PDBC as well as the iShares Gold Trust ETF, IAU. This fund held up well and returned over 5.8% during the period, which supported returns, albeit significantly less than energy and commodities. Lastly, Personal Capital's relative performance was a function of its bond allocation as much as its equities and alternatives.

*The bold allocation to VDE is the primary driver of why Wealthfront reached the top spot.*

In addition to specific allocations to commodities, Wealthfront, Personal Capital, and Schwab are all overweight value. Growth names were the hardest hit during the quarter as rising rates make future cash flows worth less today. The Russell 3000 Growth underperformed the Russell 3000 Value index by 8.4% in the quarter. Schwab and Wealthfront have long held a value tilt to their portfolios, and while value has significantly outperformed this year, growth has generally outperformed value for the past decade.

Zacks Advantage held the top spot for bonds for the year 2022. The top three performers, Zacks Advantage, Personal Capital, and Marcus Smart Beta, all held effective durations a measure of interest rate sensitivity, well below the average robo advisor. Zacks Advantage held a duration of about 3 years, while Personal Capital and Marcus Smart Beta held durations of about 5.0 and 3.7, respectively. The average robo in our data set held a duration of upwards of 5.8 years. This means all three of these robos were prepared for a rise in the general interest rate—a downstream consequence of rising inflation. Personal Capital was further supported by its significant TIPS allocation, which outperformed the Barclays Aggregate Bond Index by over 2% year-to-date. On the other hand, Wealthfront's municipal-heavy, longer-duration bond portfolio was down about -6.9% for the period. However, investors can rest assured that performance from Wealthfront's equities has more than made up for that decline. Wealthfront, Personal Capital, and

*Growth names were the hardest hit during the quarter as rising rates make future cash flows worth less today.*

*However, investors can rest assured that performance from Wealthfront's equities has more than made up for that decline.*

Schwab were all great choices for this rising inflationary environment when compared to the average robo advisor.

**3-Years: Zacks Advantage wins the best performer over three years**

Zacks Advantage won the top spot for 3-year performance thanks to a strong domestic bias in its equity portfolio. In fact, whereas the average robo was allocated to about 64% of U.S. equities, Zacks was allocated to over 88% of U.S. stocks, propelling performance as the S&P 500 Index outperformed the MSCI EAFE Index by over 10%, per year. The SoFi portfolio and Morgan Stanley's Socially Responsible Investing (SRI) portfolio were the next two best equity performers thanks to significant allocations to growth stocks, which has been well-documented in previous editions of the *Report*. While value stocks have outperformed YTD and have shrunk the performance gap with growth stocks, growth has still outperformed over longer periods.

| Robo Advisor | 3-Year Quartile | % of Stocks in U.S. |
|---|---|---|
| Zacks | 1st | 88% |
| Wealthfront | 1st | 72% |
| SoFi | 1st | 71% |
| **Average Robo** | **-** | **64%** |

From a fixed-income perspective, Schwab, Axos, and SigFig boasted between 2.9% and 2.7% in returns, whereas the average robo returned about 1.3% for the 3-year period ending March 31, 2022. The outperformance was due to Schwab and SoFi's allocation to TIPS, while Axos' portfolio was allocated to short-duration high yield, all of which proved especially valuable due to the rising rate environment in 2022.

**5-Years: Wealthfront is the new best-performing robo alongside Fidelity Go and Axos Invest for 5-year returns**

*In fact, whereas the average robo was allocated to about 64% of U.S. equities, Zacks was allocated to over 88% of U.S. stocks, propelling performance as the S&P 500 Index outperformed the MSCI EAFE Index by over 10%, per year.*

Wealthfront and Fidelity Go boasted over 72% and 71% domestic stocks, respectively, as a proportion of the total equity portfolio. This was at a time when the S&P 500 Index returned about 16% per annum, while the MSCI EAFE Index, a developed international markets index, returned 7.3% per annum, for the 5-year period ending March 31, 2022. Interestingly, however, the trends in growth versus value were less decisive. Wealthfront is allocated to roughly 25% growth equities, while Fidelity held closer to a market-neutral allocation with 37% in growth at a time when the Russell 3000 Growth Index returned 20.1% annually and the Russell 3000 value returned just 10.1% for the 5-year period ending March 31, 2022. Axos was modestly overweight U.S. stocks and neutral growth equities, which supported its returns, placing it in the top quartile. Wealthfront managed the top performance spot despite being overweight value. This has been supported by energy and dividend stocks, which have had significant outperformance in the first quarter of 2022.

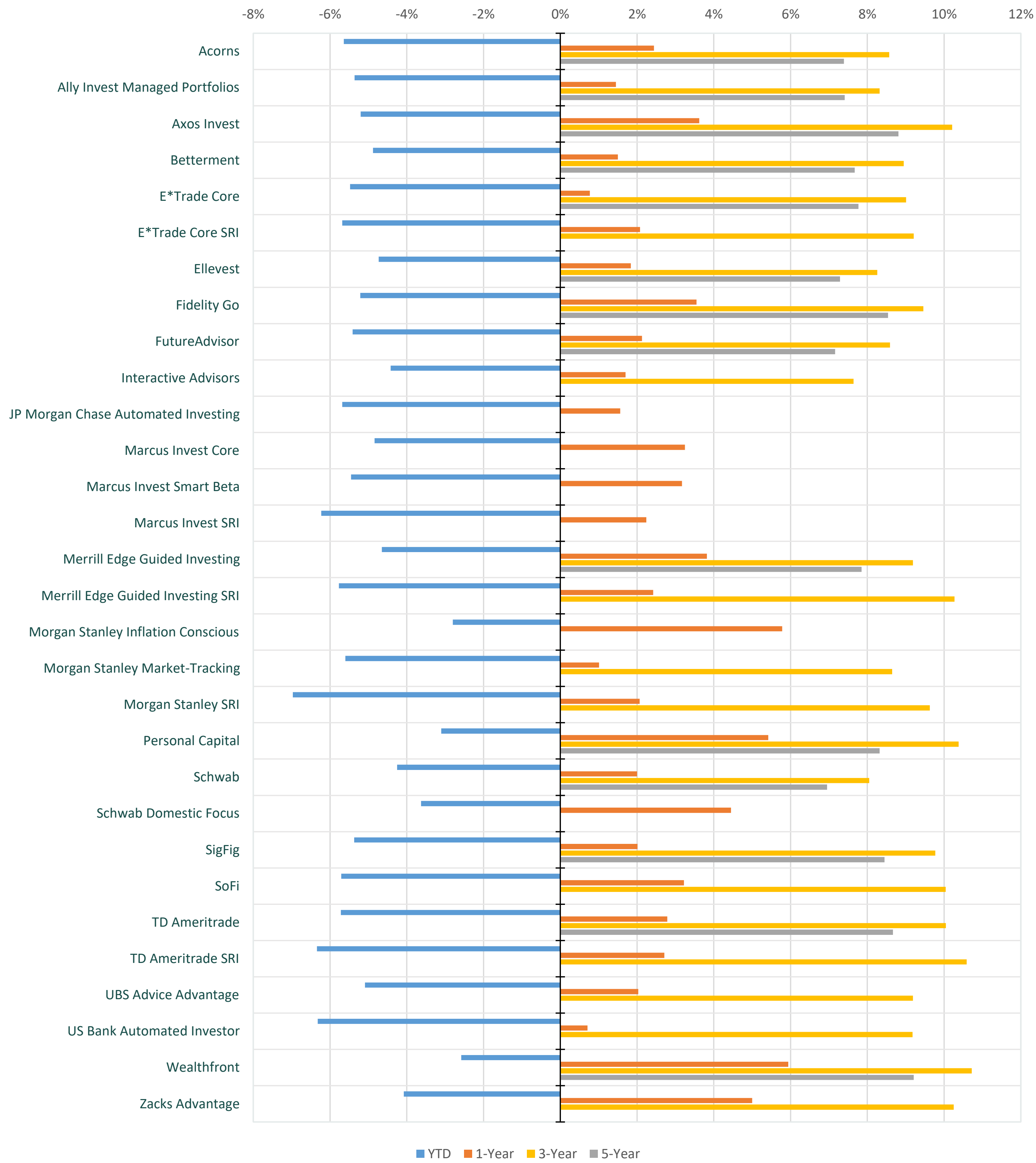
Schwab and Axos took the top two spots for fixed income performance, both of which demonstrated more sophistication than those robos that focused on standard intermediate investment-grade bond funds as their primary holdings. Schwab's portfolio was well designed for an inflationary environment, as just shy of 40% of its bonds were allocated to TIPS ETFs, which have principal amounts that are boosted by rising CPI numbers. Axos was less prepared for rising inflation and more prepared for rising interest rates, as upwards of 29% of its total fixed income portfolio was allocated to HYS and SJNK, short-duration high-yield bonds. Given that default rates have been down, supporting high-yield issues, and rates have risen, supporting short-duration instruments, these ETFs proved to be compelling choices over traditional bonds. Investors need to keep in mind, however, that Schwab continues to be a less-than-stellar choice due to the company's business model, which involves holding high allocations to cash in its robo's portfolios.

*Schwab's portfolio was well designed for an inflationary environment, as just shy of 40% of its bonds were allocated to TIPS ETFs, which have principal amounts that are boosted by rising CPI numbers.*

## *Final Remarks*

The year 2022 has been a rude awakening for investors who have become accustomed to low inflation, positive stock prices, and growth stocks performing well. High inflation, rising rates, and concerns around the Russia/Ukraine crisis have caused investors to demand earnings now as opposed to far into the future. In terms of major robo advisors, Wealthfront, Personal Capital, and Schwab have held up well in 2022 and will likely continue to outperform if inflation is above expectations. Furthermore, they make great compliments to the more growth-oriented robos like SoFi, SigFig, and Fidelity Go. We will continue to monitor these trends as markets evolve.

## *Total Portfolio Performance*



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[1] These 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.

[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.

[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 increasing 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 Digital Advice LLC'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. Digital Advice LLC is owned by Condor Capital Wealth Management, an SEC-registered investment adviser. A copy of Condor's Disclosure Brochure is available at www.condorcapital.com. Condor Capital holds a position in Schwab, JP Morgan Chase, and Goldman Sachs in one of the strategies used in many of their discretionary accounts. As of 03/31/2022, the total size of the position was 37,929 shares of Schwab common stock, 22,769 shares of JP Morgan Chase common stock, and 5,636 shares of Goldman Sachs common stock. As of 03/31/2022 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, JP Morgan Chase, Citizens Financial Group, Ally Financial, Charles Schwab, and Capital One.

For more information, please contact us at theroboreport@condorcapital.com

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