

To:Shelly SchuellerFrom:Emily LockwoodSubject:MTR BenchmarkingDate:May 21, 2019

Following the March WDC Board meeting, the question was asked, how does a provider benchmark their managed account offering? Enclosed is a white paper from the Empower Institute that discusses various measurement tools being used to gauge success of Retirement Managed Accounts (RMAs), such as My Total Retirement offered by the WDC.

Following is a summary of the white paper:

- Behavioral influence
 - Employees with RMAs call in far less during market drops than employees without RMAs.
- Increased savings rates
 - RMA savers save an average of 4% higher than other savers.
 - RMAs typically include enhanced communications and engagement strategies which likely drive the higher contribution rate. Users receive recurring reports on personal progress toward goals and access to local in-person and call center representatives.
- Diversification
 - RMA savers have assets in an average of nine asset classes and 11 funds (chosen for them by professionals based on personalized data)
 - o Do-it-yourself savers are invested in an average of four asset classes and four funds.
- Returns
 - o RMA savers have more consistent returns See page 7
- Lifetime income
 - Engaged RMA savers may have 16% more income than non-RMA savers
 - Unengaged RMA savers may have 5% more income than non-RMA savers

For more information, one of the authors of this white paper, Brian Cosmano, is available to attend the November Board meeting. Morningstar staff may also be available.



This Time, It's Personal:

Four distinct benefits of a retirement managed account



MARCH 2019

This Time, It's Personal Four distinct benefits of a retirement managed account

A WHITE PAPER

Defined contribution plans have become a mainstay in the workplace retirement savings landscape, with target date funds as the qualified default investment alternative (QDIA) of choice. This growth has occurred, in part, due to the Pension Protection Act of 2006, which laid out four QDIA options for defined contribution plans: target date funds, balanced risk funds, managed accounts and capital preservation funds. Target date funds are the chosen QDIA for 85% of plans,¹ and their approach to investing has many advantages, including low fees and a simplified investment

strategy. However, research suggests that the potential long-term benefits of more personalized strategies such as retirement managed accounts (RMAs) may outweigh the advantages of target date funds in some situations.

This paper presents new insights showing that the personalized portfolio approach of RMAs adds value to retirement accounts, and that the key is to look beyond performance.



RMAs have four distinct benefits

1 Callan Institute, "2018 Defined Contribution Trends," 2018.

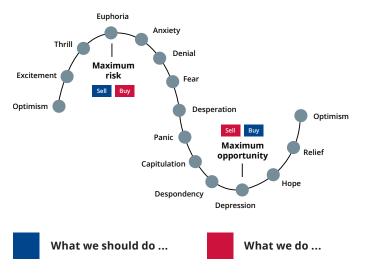


Let's take a closer look at each of these benefits

1. RMAs influence investor behavior.

Studies have shown that the pain of losing \$100 is approximately twice as great as the pleasure of winning the same amount.² This emotional imbalance often causes investors to stray from their plans, whether out of excitement about the prospect of temporary gains or fear of future losses. Many investors get stuck in a cycle of euphoria and depression that leads them to buy when they should sell and sell when they should buy.

Investors' behavioral journey



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As a result of such behavioral biases, many individual investors may miss out on the market's best days. For example, staying invested over the past nine years would have earned an investor \$10,508 more than if they had missed the market's 10 best days during that same time period.³

2 Kahneman, D. and Tversky, A., "Prospect Theory: An Analysis of Decision under Risk," Econometrica, 47 (4): 263–291, 1979.

3 Bloomberg. This chart illustrates the value of a \$10,000 investment in the S&P 500[®] made on December 31, 2009 through December 31, 2018, assuming the investment remained invested the whole time (first bar) and then assuming the investor missed the market's 10, 20 and 50 best days, respectively.

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Three types of savers

In this paper, we will refer to three categories of savers: target date fund savers, RMA savers and do-it-yourself savers. We define each group as follows:

Target date fund savers: For the purposes of this paper, target date fund savers are defined as individuals that hold 90% or more of their retirement plan account savings in a target date fund. They choose a single target date fund that most closely matches the year in which they plan to retire. For example, if a 35-year-old in 2019 wants to retire at age 67, she would choose a 2050 fund. Using a mix of funds, each target date fund will automatically adjust to a more conservative mix as its investors near retirement. The asset mix and glide path of a target date fund are designed to be part of the only investment an investor holds.

The 90% benchmark is critical: When a saver selects an additional investment outside their target date fund, their asset allocation based on their retirement age is thrown off. Performance also suffers. However, few savers act accordingly: Only about one in four people who hold target date funds meet the 90% benchmark.*

RMA savers: This category includes people who are enrolled in workplace retirement plan managed account programs. RMAs differ significantly from other default investment options like target date funds or balanced funds in that they select funds for each participant based on personalized retirement strategies. For an investment solution to be considered an RMA, it must meet all four of the following criteria:

- Participant-level 3(38) fiduciary protection
- Periodic, automatic updates of participant investments
- An interactive online user experience
- Dedicated investment adviser representative call center support

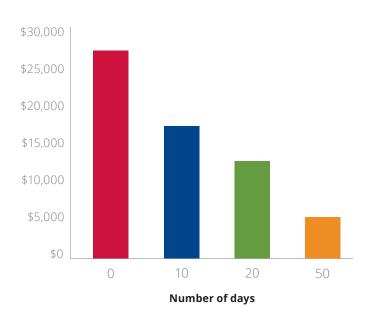
Do-it-yourself savers: For the purposes of this paper, do-it-yourself savers are defined as those that hold 10% to 100% of their workplace retirement plan assets outside a target date fund. In other words, these individuals have allocated their investments away from their target date fund qualified default investment alternative.

* Financial Engines, "Not so simple: Why target-date funds are widely misused by retirement investors," March 2016.



Missing the market's best days

(Initial investment of \$10,000)

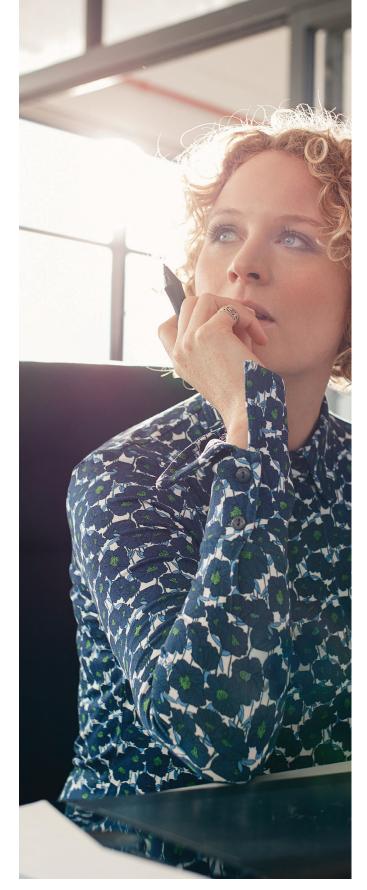


Source: Bloomberg. This chart illustrates the value of a \$10,000 investment in the S&P 500® made on December 31, 2009, through December 31, 2018, assuming the investment remained invested the whole time (first bar) and then assuming the investor missed the market's 10, 20 and 50 best days, respectively.

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RMAs attempt to mitigate investors' emotional conflict by putting more of the decision-making in the hands of investment professionals. This may equate to a higher income replacement rate in retirement.

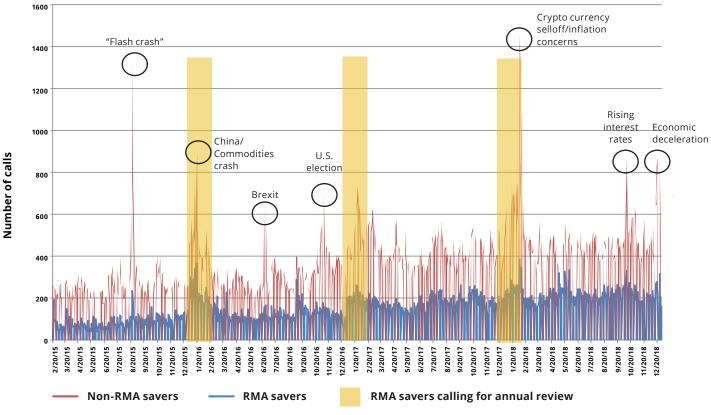
Researchers have identified a number of behavioral biases such as loss aversion, inertia and anchoring.⁴ RMAs mitigate some of these behavioral biases by shifting an investor to a personalized portfolio investment strategy. Empower Retirement call center data provide evidence of such mitigation of behavioral biases as employees with RMAs call in far less during market drops than employees without RMAs.



4 Empower Institute, "Road to Retirement Success," 2018.



Impact of market events on call volume



Source: Empower Retirement participant call center data

2. RMAs encourage increased savings rates.

Studies also show that RMA savers save more, and more regularly, than do-it-yourself savers.⁵ According to Empower participant data, RMA savers save an average of 7.5% compared with 7.2% for other savers.⁶ This means their saving rate is 4% higher. Compounded over 20 years, this can make quite a difference in outcomes. Enhanced participant communications associated with RMA products are likely the driver of higher contribution rates. These enhanced communications and engagement strategies typically include recurring reports on personal progress toward goals and call center representatives who can explain to savers the benefits of increased savings rates.⁷ While target date funds offer an investment solution, they do not provide additional support.

3. RMAs provide personalized and appropriate diversification.

Diversification matters because it allows investors to balance risk and reward in their investment portfolios. Assets are spread around so exposure to any one fund or asset class is limited, thus potentially decreasing volatility in a portfolio.

Evidence from Empower participants suggests that RMA savers' accounts are more diversified than the accounts of do-it-yourself savers.⁸ While RMA savers have assets in an average of nine asset classes and 11 funds, do-it-yourself savers are invested in an average of four asset classes and four funds. In addition, RMA savers have funds that are chosen for them by professionals based on personalized data.

5 Blanchett, David, Ph.D., CFA, CFP[®]; Bruns, Daniel; and Voris, Nathan, "The Impact of Default Investment Decision on Participant Deferral Rates: Managed Accounts vs Target-Date Funds," October 2017.

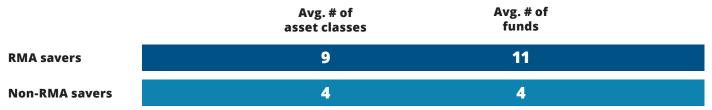
6 As of November 17, 2018. Analysis of over 17,000 plans and 2.6 million Empower participants for which Empower is the deferral recordkeeper.

7 Cosmano, Brian, Empower Institute, "Made to Measure: Evaluating the impact of a retirement managed account," August 2018. 8 As February 2018. Analysis of over 3.5 million Empower participants for which Empower is the deferral recordkeeper.





Asset class diversification



Source: As of February 2018. Analysis of over 3.5 million Empower participants for which Empower is the deferral recordkeeper.

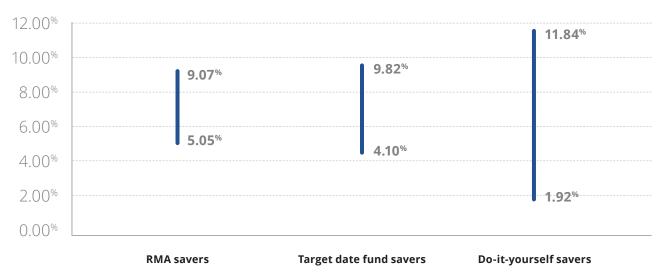
In comparison, target date funds are composed of many different asset classes, but this diversification is not personalized based on individual circumstances. Instead, target date funds offer a one-size-fits-all glide path. In addition, three out of four target date fund savers invest 10% to 99% of their savings outside their target date funds, throwing off the intended diversification advantages of their funds.⁹ The personalized and appropriate diversification of RMA savers' assets makes them less dependent on the performance of any specific class. Consequently, RMA savers are better equipped to ride out market declines that adversely impact some asset classes more than others.

One way to demonstrate the effect of diversification is to look at the range of possible returns. RMA savers typically see a smaller range in outcomes.

9 Financial Engines, "Not so simple: Why target-date funds are widely misused by retirement investors," March 2016.



Range of returns 4/1/2011 to 3/31/2018 (net of fees)



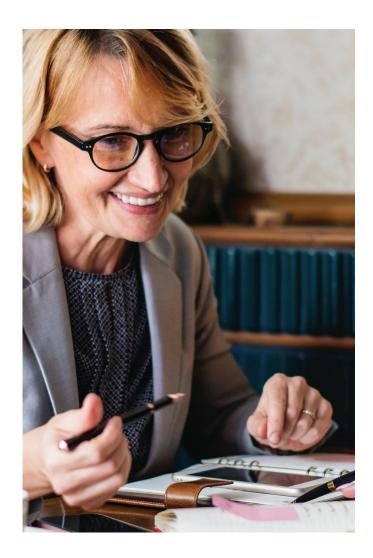
Source: Advised Assets Group, LLC (AAG), Internal Rate of Return (IROR) All Segments Study, 2017. The participant return distribution included in this study is used to illustrate the difference between those participants within the 90th percentile and the 10th percentile to preserve statistical integrity of the data reported. Data sourced from a managed account provider and individuals had to be in the category the whole time period.

The above chart compares the results of top RMA savers with those of the top do-it-yourself and target date fund savers (the 90th percentile) as well as the results of bottom RMA savers with those of the bottom do-it-yourself and target date fund savers (the 10th percentile) over a seven-year period. The discrepancy in results is dramatic: RMA savers saw 168% more consistent returns than do-it-yourself savers and 42% more consistent returns than target date fund savers.¹⁰

While the top do-it-yourself and target date fund savers outperformed the top RMA savers, it's important to look at the range and the bottom numbers.

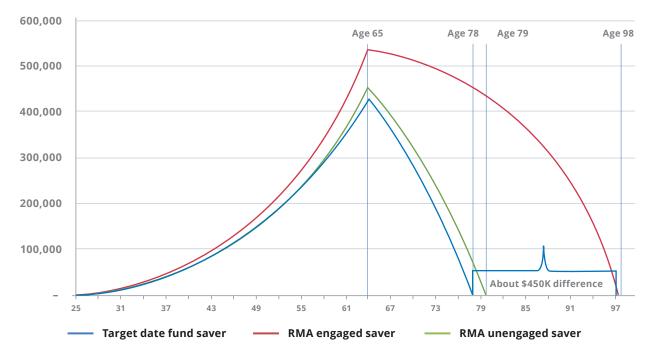
The bottom do-it-yourself savers had a median annualized return of 1.92% compared with 5.05% for RMA savers. RMA savers don't experience the low lows that the do-ityourself and (to a lesser extent) target date fund savers are susceptible to, largely due to behavioral biases that result in reactionary decision-making among the latter two groups. This consideration is especially important because there is no way to predict which employees will be in the 90th percentile of do-it-yourself savers and which will be in the lowest percentile.

10 Advised Assets Group, LLC (AAG), Internal Rate of Return (IROR) All Segments Study, 2017. The participant return distribution included in this study is used to illustrate the difference between those participants within the 90th percentile and the 10th percentile to preserve statistical integrity of the data reported. Data sourced from a managed account provider and individuals had to be in the category the whole time period.









Source: The illustration is based on average household income and average contribution rates for hypothetical target date fund savers. Income for hypothetical engaged and unengaged RMA savers is based on research from the following white paper: Cosmano, Brian, Empower Institute, "Made to Measure: Evaluating the impact of a retirement managed account," August 2018.

4. RMAs help provide lifetime income.

The whole point of saving for retirement is to ensure your money lasts through retirement. One last way to assess RMAs is to see if they help meet this objective.

To test the effectiveness of RMAs at providing lifetime income, we can look at hypothetical account balances, Empower participant data and industry data. The chart above illustrates the impact RMAs can have on retirement outcomes, particularly for engaged employees, defined here as workers who have provided additional information about themselves or their families and their retirement goals beyond the six to eight data points automatically provided through a payroll file.¹¹ As the chart on the next page shows, an engaged employee with an RMA can expect 16% more income at retirement than a target date fund saver.¹¹ Even an unengaged employee with an RMA can expect 5% more income at retirement.

Crucially, more income translates into longer-lasting savings. While target date fund savers can expect to deplete their savings by age 78, engaged employees with RMAs have a better chance of maintaining income through retirement. RMAs achieve their best outcomes when employees are engaged with them.

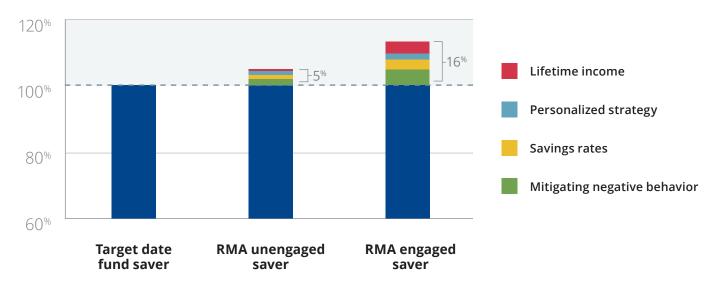
11 The illustration is based on average household income and average contribution rates for hypothetical target date fund savers. Income for hypothetical engaged and unengaged RMA savers is based on research from the following white paper: Cosmano, Brian, Empower Institute, "Made to Measure: Evaluating the impact of a retirement managed account," August 2018.



How did each of these four benefits impact the lifetime income for each saver?

The chart shows the individual and combined impact of each benefit to potential income relative to a target date fund.¹² The benefit for an unengaged RMA saver is an additional 5% more income while the benefit for an engaged RMA saver is

16%. For a retiree who generated \$50,000 in annual income, this equates to an additional \$8,000 per year in retirement and potentially \$200,000 more over a 25-year retirement.



Relative and combined impact of each RMA benefit

Source: The illustration is based on average household income and average contribution rates for hypothetical target date fund savers. Income for hypothetical engaged and unengaged RMA savers is based on research from the following white paper: Cosmano, Brian, Empower Institute, "Made to Measure: Evaluating the impact of a retirement managed account," August 2018.

12 The illustration is based on average household income and average contribution rates for hypothetical target date fund savers. Income for hypothetical engaged and unengaged RMA savers is based on research from the following white paper: Cosmano, Brian, Empower Institute, "Made to Measure: Evaluating the impact of a retirement managed account," August 2018.



Best practices in selecting an RMA provider.

There are many types of personalized investment and RMA options. Some only provide asset allocations, a few are offered through limited channels and still others act like an RMA but don't meet all the requirements (such as 3(38) fiduciary protection).

Given the variation in products, it's easy to understand why benchmarking an RMA requires careful consideration. Remember, managed accounts must offer:

- Participant-level 3(38) fiduciary protection.
- Periodic, automatic updates of participant investments.
- An interactive online user experience.
- Dedicated investment adviser representative call center support.

But RMAs may offer these benefits in different ways and to varying degrees. Given the different RMA options, how then do you choose the right one? While historical performance is important, we believe the true measurement of RMA value lies in the four advantages we've discussed. RMAs:

- 1. Influence investor behavior by calming investor sentiment.
- 2. Encourage increased saving rates.
- **3.** Provide personalized and appropriate diversification.
- 4. Help provide lifetime income.

The chart below provides a framework that can help you properly define and evaluate various RMAs using key differentiators.

Framework to define and evaluate RMAs

Personalization

Investment personalization	Strategies are individualized using multiple data points, not just date of birth.
Financial planning features	
Savings rate advice	Communication and engagement strategies result in higher savings rates for enrollees.
Roth vs. pretax advice	Optimal contribution types are suggested for each employee.
Dynamic withdrawal advice	Recommended withdrawal amounts are updated to reflect life expectancy and market movements.
Allocations to lifetime income solutions	If a plan offers in-plan guaranteed income products, 1:1 advice can help educate employees and support utilization.
Tax-efficient withdrawal strategies	The proper order of withdrawal helps maximize after-tax benefits and minimize liabilities.
	help educate employees and support utilization. The proper order of withdrawal helps maximize after-tax benefits

Influence investor behavior by calming investor sentiment

Personalized support to help mitigate negative behavior	Consultations help employees avoid making poorly timed decisions
	based on their emotions.



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