MarketWatch

Opinion: Target-date funds are more expensive and less effective than this simple investment plan

By Brian Livingston
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You can get a better lifetime return with a much simpler strategy

A previous version of this column misstated the holdings of VBIAX. It has been corrected.

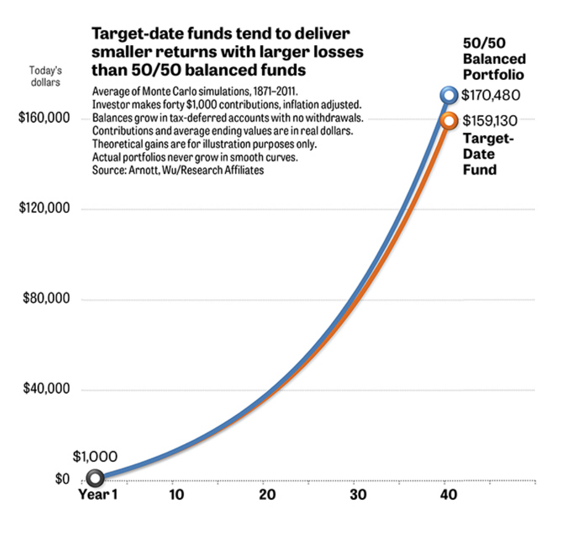
This may be like trying to persuade true believers that the Easter Bunny doesn't really bring those candy eggs, but here goes.

About 70% of U.S. companies automatically enroll employees into 401(k)-type plans, and more than 86% of these firms now direct people's money by default into "target-date funds" (TDFs). These financial products were little-known before Congress formally recognized them as recently as 2006.

Now that they've taken over, target-date funds are under fire from experts who say the products don't work as well as simpler and cheaper investment strategies.

Citing studies by institutional advisory firm Research Affiliates, Barron's associate editor Randall W. Forsyth wrote on Feb. 2: "They show that the standard 'glide path' of target-date funds, which start heavily weighted in stocks and reallocate to bonds in later years, doesn't produce the desired results."

It's long been known that target-date funds impose higher annual fees than basic index funds. Now it turns out that their expected returns are worse than some easy, well-understood, "set it and forget it" investment plans.



The chairman of the board of Research Affiliates, Rob Arnott, recently co-authored a detailed study of target-date funds with Chief Executive Katrina Sherrerd and Vice President Lillian Wu. Titled "The Glidepath Illusion," the paper examined how well TDFs would have performed in every 40-year period from 1871 through 2011. I've composed the graph above from their raw data, which isn't shown in their white paper.

The next 140 years won't be exactly like the past, of course. So the group used a statistical procedure called Monte Carlo analysis to sort the returns into hundreds of random sequences. (Monte Carlo can't predict your returns, but it's great to estimate the worst outcome you might experience.)

The randomized market histories revealed the same problem as the 140-year history. Target-date funds didn't do well when compared with a no-brainer: traditional balanced portfolios that simply invest 50% in U.S. stocks and 50% in U.S. bonds.

"We found on average that a 50/50 portfolio beats TDFs 69% of the time," Wu says.

Target-date funds generally invest 80% in stocks and 20% bonds before an investor is about 45 years of age. After that point, the percentage of stocks declines gradually. Around age 70, the investor holds only 20% or so in stocks, with the rest in bonds.

In the randomized histories, the average 50/50 portfolio would have turned your 40 years of $1,000 annual contributions into $170,480 in today's dollars. The average target-date fund would have given you only $159,130.

The lesser amount isn't a gigantic haircut. It's about 7% fewer dollars than the balanced portfolios gave you. But it shows that target-date funds can't claim to produce better outcomes than simple strategies that have lower fees. (Research Affiliates didn't subtract fees from each portfolio's theoretical ending value, which would make TDFs look even worse.)

Arnott and his crew repeated the study, slashing the returns and interest rates you might get from stocks and bonds in a given 40-year period, compared with average levels. The results were the same. The average TDF generated thousands of dollars less than the average 50/50 portfolio.

If you had worked during the very worst 40-year history, TDFs and balanced funds would have ended up with about the same amount: $82,360 vs. $81,000, a statistically insignificant difference. But the most roaring 40 years made the contrast clear: you'd have only $309,380 in a target-date fund vs. a lavish $356,420 in a 50/50 account. Pass the caviar.

Research Affiliates' work was replicated by other statisticians. Javier Estrada, a finance professor at the IESE Business School in Barcelona, Spain, reproduced the findings in the Journal of Portfolio Management, and not just for U.S. stocks. He also calculated the results for European stocks and the combined equity markets of the entire world (the so-called global portfolio).

Remarkably, both Research Affiliates and Estrada found that target-date funds would do better by taking the exact opposite approach. You could start with only in 20% stocks and a whopping 80% in bonds during your 20s and 30s. Then you'd gradually increase equities to an aggressive weight of 80% over the course of your 40-year career. That plan, believe it or not, easily outperformed both the standard TDFs and the balanced portfolios.

Numerous MarketWatch columnists have sounded alarms about target-date funds. For example, William Birdthistle, a law professor at Chicago-Kent College of Law and author of "Empire of the Fund", reported that the average TDF imposes an annual fee of 0.73%. (Some charge more than 1.0%.) By comparison, you can own the Vanguard Group's VBIAX balanced mutual fund for only 0.07%. That's one-tenth the average.

If target-date funds don't offer better performance, and their costs are higher, why did corporate 401(k) planners go crazy for them?

Behavioral scientists have demonstrated that people have a baked-in love of stories. Taking advantage of this, sponsors have promoted TDFs to investors using two principal story lines:

• Younger workers in their 20s to 40s can supposedly tolerate stock-market crashes better than older people. Employees who are starting out have time to wait for their portfolios to eventually recover.

• Workers in their 50s and 60s, on the other hand, supposedly can't afford bear markets. Since 1926, U.S. equities have crashed worse than 30% once every 10 years, on average. If you're close to retirement, you don't want to lose almost half your life savings, which can seriously reduce the amount you can withdraw in your golden years.

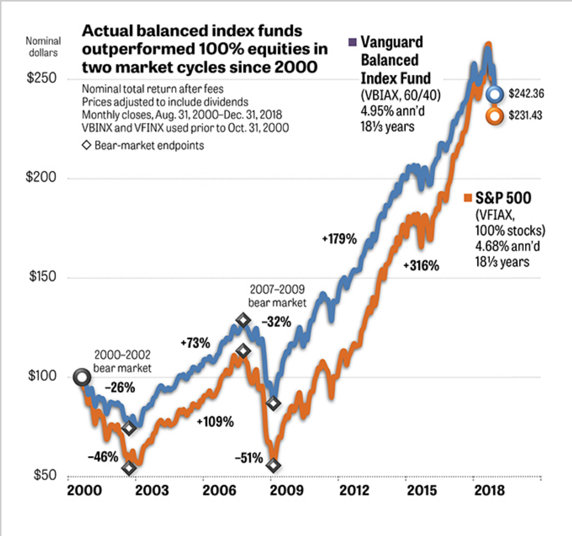
Arnott says these two beliefs are myths that do great harm to investors. He cites a 2014 Fidelity study, which showed that more than 40% of workers between the ages of 20 and 39 liquidated part or all of their 401(k)-type assets when they changed jobs or were laid off. Cashing out cost these younger people dearly. They paid taxes on the gains plus a 10% penalty for withdrawing the funds before age 59½.

So why did these workers drain their tax-deferred accounts? Because they had to. A younger person's 401(k) might be his or her only real savings. Young adults who take a new job have moving expenses and many other bills. Worse, people who lose their jobs still have to pay for rent and groceries.

In a separate paper, Arnott and Wu say young workers should build up a low-risk "starter portfolio." Until they've set aside a reserve fund of six months' income, they shouldn't be gambling 80% of their limited funds on stocks.

"You now have a trillion-dollar industry based on ideas that were never tested," Arnott said in a telephone interview.

A trillion dollars is an understatement. In the U.S. alone, target-date funds held $1.11 trillion in assets at the end of 2017 and were growing about 7% a year, according to a MarketWatch report.



A lack of financial education is part of the problem. Many individual investors have the mistaken belief that maintaining 50% of a portfolio in bonds produces **half** the return of the S&P 500 SPX, -0.36% Nothing could be further from the truth.

The above graph shows that simple balanced index funds—such as Vanguard's Balanced Index Fund VBIAX, +0.24% which always holds 60% stocks and 40% bonds—actually outperform the S&P 500 when appropriately measured over complete bear-bull market cycles. (Shorter periods should never be used to evaluate long-term investing strategies.)

Balanced portfolios outperform 100% equity allocations because a 50/50 portfolio loses so much less than the stock market during bear markets. VBIAX, including dividends, lost only 26% in the 2000–2002 dot-com collapse and 32% in the 2007–2009 financial crisis. By comparison, the S&P 500 horrendously crashed 46% and 51%.

When an index loses 50% of its value, the market must gain 100% just to get back to even. A portfolio that loses only 25%, by contrast, must gain only 33.3% to recover. Keeping its losses small is the "secret sauce" of balanced portfolios. Diversification is a better deal for investors than a 100% bet on equities. Your age doesn't matter, it's whether you're willing to watch half your life savings be vaporized by a crash.

The late Jack Bogle, who founded Vanguard in 1974 but lost a battle to cancer last month, was a tireless advocate of simple 50/50 portfolios. Early on, he recommended this approach in a speech to college endowment fund managers in 1996. He delivered a triumphant presentation to the same group 15 years later. His super-basic allocation plan had beaten the performance of the average endowment fund that was managing less than $1 billion. His balanced portfolio even beat the funds that did handle over $1 billion, when measured on a risk-adjusted basis.

Like any trillion-dollar industry, of course, target-date funds have their defenders. I spoke with John Croke, who for the past three years has been the head of multiasset product management (which includes TDFs) at Vanguard. He says he himself has most of his personal retirement savings in Vanguard's Target Retirement 2045 Fund.

"We are serving investors who don't have the time, willingness, and ability to build an asset allocation for themselves and rebalance it," Croke says.

"There is a behavioral and also a quantitative piece here," he adds. "If we were quantifying for just one factor, we could advocate 100% equity, all the time, every time. But people would say [during crashes], 'You know what, I'm going into cash.' We don't recommend to anyone that they have a 100% equity portfolio."

It's laudable to avoid a 100% equity allocation. However, Vanguard's Target Retirement Funds subjects investors who are 25 to 45 years of age to a 90% equity position, which has almost the same crash risk. That's higher than the initial allocation of many other TDF providers. Vanguard's 2045 TDF won't decline to a 50/50 weighting until (surprise) 2045. Then the equity portion declines to 30% over the next seven years and stays there for life. Croke says that this "seven years after retirement" glide path was chosen because people wait an average of seven years after leaving the workforce before tapping their tax-deferred savings.

Arnott scoffs at this concept, which he considers unscientific. "The target-date funds start out too aggressive and finish too conservative, when you have the money to grow."

If you're building a nest egg so you can someday say "sayonara" to your job and enjoy living off your savings, what's the answer?

• A 50/50 balanced portfolio, as Bogle recommended, can be achieved by making a single purchase of a low-cost mutual fund. No rebalancing is required; everything is done for you. VBIAX holds 60% in U.S. stocks and 40% in U.S. government and corporate bonds at all times. As I mentioned earlier, the annual fee for VBIAX is only 0.07%. The fee for Vanguard's Target Retirement 2045 Fund is 0.15%, more than double.

• There's nothing forcing you to subject your life savings to your employer's choice of a target-date fund. If your employer's plan doesn't use Vanguard balanced funds, almost every 401(k)-type provider offers very similar 50/50 or 60/40 funds from other providers. (Bogle commonly said 50/50 and 60/40 portfolios delivered similar performance. Don't sweat exact percentages.) With any managed plan, drill down to determine its fees. Many 401(k) plans take surcharges on top of the fund providers' fees. Keep 'em low.

• For those outside the U.S.—or for Americans who believe a global portfolio will perform better—you can achieve extensive international coverage with a single purchase: the Vanguard Global Wellington Fund VGWAX, +0.38% It currently holds a balance of about 64% in stocks and 36% in bonds, almost all of them within North American, European, and Asian developed markets. Its annual fee is 0.36%.

• Investors who want a more hands-on approach can try Lazy Portfolios, which offer many more classes of assets than just stocks and bonds. But MarketWatch's 16 years of tracking have shown that Lazy Portfolios have underperformed the S&P 500 by 1 to 2 percentage points or more annually. Alternatives include Muscular Portfolios, but maintaining good performance requires you to check them once a month.

For people whose retirement is a decade or more away, a single balanced index fund can perform better and subject you to much smaller losses than a target-date fund. You can make one simple purchase and rest easy until your withdrawal date finally comes. Or perhaps you'd rather put the Easter Bunny in charge of delivering your nest egg.

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Brian Livingston

Brian Livingston is the author of "Muscular Portfolios," which shows how to achieve greater returns with smaller losses than Lazy Portfolios, and editor of the free Muscular Portfolios Newsletter.

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