## The Crushingly Expensive Mistake Killing Your Retirement

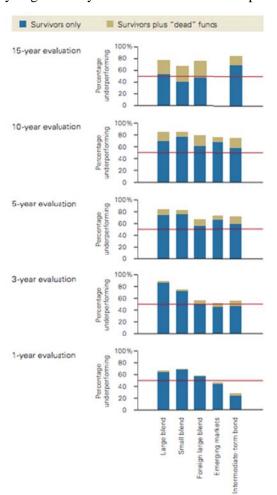


## By Matthew O'Brien

Humans are horrible at understanding compound interest, and it's making our golden years much less so.

Think about your 401(k). The first thing you probably look at when you pick your funds is their returns. It's only human nature. Everybody likes to think about their nest eggs growing and growing and growing—especially if they're growing *a little* bit faster than everybody else's. But, in this case, human nature is costing you hundreds of thousands of dollars.

The sad fact is that returns aren't certain, but fees are. Now, maybe everything will go according to plan, and your 401(k) will be partying like it's 1999. Maybe the 1 percent—or more—that you're paying in fees will actually buy you market-beating returns. But probably not. You can see this in the chart to the left from <a href="Vanguard">Vanguard</a>. It shows the percentage of actively managed funds that have underperformed index funds over the short and longer hauls, net of fees. Which is to say, most of them. It's hard enough for funds to beat their benchmarks over just one to three-year periods. But that gets damn near impossible the longer you go. Once you account for survivorship bias—that bad funds go bust, and disappear from the



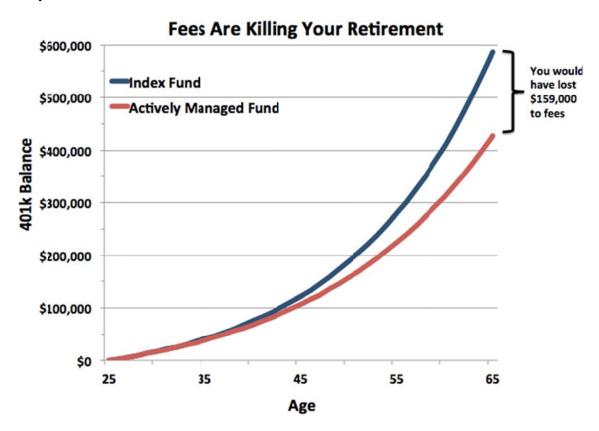
sample—almost 80 percent of actively managed funds don't beat simple index funds over 10 to 15-year periods.

In the meantime, you're stuck paying fees. Those fees don't sound too bad—just 1 percent!—but this is where our total lack of intuition for how compounding works really hurts us. Let's try an example: what's 0.99 to the 40th power? It's not exactly a calculation you can do in your head. It's not even one you can estimate. But it's the kind of calculation that you need to do to figure out how much your 401(k) fees are costing you.

The answer is a lot more than you think. (No cheating with a calculator before we get to the big reveal). Now, let's say you contribute \$3,000 to your 401(k) every year, which is a little more than the national average, starting when you're 25. Let's also say that you're choosing between two investments: the lowest-cost index fund with a 0.08 percent fee, and a typical managed stock fund with, according to Morningstar, a 1.33 percent fee. And finally, let's say that, though you don't know it, they both return 7 percent a year, because, as we saw above, most managed funds don't beat the market.

This 1.25 percent difference in annual fees adds up to a six-figure difference in lifetime earnings. That's because

you don't just lose the money you pay in fees. You lose the returns you could have had on the money you pay in fees, too. As you can see in the chart below, this compounding effect doesn't matter much for the first 20 years or so, but really accelerates after that. If you chose the lowest-cost index fund, you'd have \$15,000 more at age 45, \$55,000 more at 55, and \$159,000 more at 65. That would balloon to \$257,000 more if you waited to retire at 70.



This is some brutal math. It's 27 percent of your retirement going to Wall Street for nothing. Actually, less than nothing. Remember, about 80 percent of actively managed funds do worse than index funds after you take fees into account. It's a Wall Street handout that you can't afford to make.

Skip the fees, and save your retirement.

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