REKENTHALER REPORT

When the 4% Rule Fails

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The Tin Lining

Last month's column, "Don't Believe the Retirement Defeatists" gave the happy talk. If retirees apply common sense to the overly rigid withdrawal rules used by computer simulations, and relax the stern requirement that they achieve 80% of their pre-retirement income for a full 30 years, much retirement advice looks to be too conservative. Despite the many articles to the contrary, retirees should be able to withdraw at least the rule-of-thumb of 4% annually, and perhaps significantly more.

That was accurate enough, as far as it went. But it presented only one side of the story. (Such is the nature of a 1000-word column; as with the picture that equals its words, it gives but one perspective.) Another side is more worrisome.

And that is the uncertainty of the returns forecasts—or, in plain English, the fact that we're only guessing at what stocks and bonds will do. Pretty much all asset-class forecasts, whether sophisticated or simplistic, assume that future U.S. market performance will look something like that of the previous several decades. The fancier ones take into account the level of current asset prices, make many adjustments, and run thousands of simulations; the simplest ones use historic averages. But either way, it's still a version of the U.S. past, projected forward.

The Broader View

That vision certainly could be wrong.

U.S. asset-class history, as commonly cited from the Ibbotson data, is long and varied. Dating back to 1926, it includes the Great Depression, World War II, the abolition of the gold standard, the oil-price spikes and inflation of the 1970s, and the 2008 financial crisis. There's no doubt that things have greatly changed during that 90-year period, and that more than a few terrible events have occurred along the way.

Nonetheless, it is but one sample—other samples can tell different stories. My email friend Javier Estrada, Professor at Spain's IESE Business School (the best MBA in Europe, says *The Economist*) sent me his latest paper, "Redefining the Failure Rate." With apologies to Javier, I am taking his research in a slightly different direction than he intended. His paper introduces two new calculations to complement the failure rate that is used to judge the success (or not) of retirement-withdrawal strategies. His measures, shortfall years, and sustained percentage, are indeed improvements to the literature. But what struck me most about the paper were the implications of his global database.

Estrada tested the customary 4% withdrawal rate, for various asset allocations, for 21 countries, starting in 1900. That exercise yields two conclusions. One, it's been good to be born within recent memory, rather than in (say) 1840. Two, it's been good to be American.

To the first point. Starting the study in 1900 rather than 1926 eliminates the 4% rule's invulnerability. Using the longer time period, no longer does a U.S. investor withdrawing 4% per year from a fixed pool of assets (adjusted for inflation, so that each year that initial amount increases by the previous year's CPI), invested in a 60/40 mix of stocks and bonds, always survive for 30 years. On 4.7% of occasions, the pool depletes. True, this depletion happens near the very end of that time period, but nonetheless, the exercise fails.

America First (OK, Third)

While 4.7% might seem negligible, 23.3% is not. Which brings us to the second point. The latter figure represents the failure percentage of the world portfolio, again using rolling 30-year periods, beginning in 1900. The world portfolio also consists of 60% equities, 40% bonds, allocated according to global market capitalizations. It has fared much worse than the U.S.-only strategy.

Of course, as few (if any) investors hold the world portfolio, its struggles tell no direct tale of woe. But it's pretty clear that if U.S. investments have performed better than the world portfolio, and the U.S. makes up a large part of the latter, that many countries have been outright wretched. And indeed, they have. Of the 21 countries, two have beaten the U.S., one has drawn, and one has narrowly trailed. The remaining 17 have ranged from noticeable worse to oh-my-goodness awful.

Failure Rates for 4% Withdrawal Strategies: 60/40 Portfolios, 30-Year Time Periods Starting in 1900

Good		Bad		Ugly	
Canada	1.2%	Australia	12.8%	Ireland	36.0%
New Zealand	2.5%	Sweden	16.3%	Japan	36.0%
Denmark	4.7%	United Kingdom	22.1%	Portugal	36.0%
United States	4.7%	Netherlands	23.3%	Finland	38.4%
South Africa	5.8%	World	23.3%	Spain	43.0%
		Switzerland	25.6%	Austria	44.2%
				Norway	50.0%
				Belgium	53.5%
				Germany	53.5%
				France	58.1%
				Italy	70.9%

Source: Javier Estrada. Dimson, Marsh, and Staunton.

Worse, this chart's percentages are inflated by survivorship bias. These countries are the century's winners. They appear in the database largely because they are major and thriving financial markets today. In 1900, by one estimate, Argentina, Chile, and Hungary were among the top 20 nations in gross domestic product per capita, with Mexico, the Philippines, Colombia, Venezuela, and Peru landing in the next 10. You wouldn't have wanted to bet on the success of 4% withdrawal strategies in those countries.

No Easy Fix

There's no obvious solution for the bad news. Avoiding stocks isn't the answer. As Bill Bernstein has pointed out, from the truly long-term perspective—or, as he puts it, from the viewpoint of adult investors—stocks are safer than bonds. For the most part, bonds are issued by governments, and when governments go under (typically because they lost wars), those bonds can go pretty much to zero. Whereas even under catastrophic situations, most companies tend to retain at least some value, and thus their stocks survive.

Nor is lowering the withdrawal rate a reliable cure. Estrada tested how a 3% withdrawal rate would have fared. That pretty well addressed the world portfolio's ills, as its failure rate declined to a modest 3.5%, but it did not fix many of the individual countries. Ten of the 21 nations retained failure rates that exceeded 10%, with Germany at 44% and Italy at 54% landing in the bottom. (Investment note: Don't lose world wars.)

In Conclusion

The lessons, I think, are clear.

1. Go global — The American card was among the highest for the games that have been played. It may not be so during your retirement. Reducing individual-country risk by holding more of a world portfolio makes sense.
2. Appreciate the possibility of uncertainty — It may well be that the next 30 years of U.S. (or world) market behavior will look at least vaguely like the previous few decades. If so, then standard retirement advice, including of the sort given in this column, should apply. But certainly, something—an unknown unknown—could trigger a very different path. That possibility should always be considered.
3. Be flexible — Flexibility is the investor's trump card. (No political jokes will be forthcoming.) Simulations inevitably understate what retirees can accomplish, because they are governed by rules that don't adequately adjust to new information. The unknown unknowns can't be known. But they might show a few signs as they arrive—and people, unlike investment simulations programs, can adjust.

Been There, Done That

My son now works at Morningstar. To his great amusement, he received an email complaining about how "this column is repetitive." (His response: *You think you have it bad* …) There's a bit of truth to that complaint. All columnists quickly learn that there are fewer subjects than there are scheduled columns. They also learn, as do teachers and politicians, that you can say what seems to be the same thing again and again and again, and there's always somebody who thanks you for the fresh insight. We're not all the sharpest knives in the drawer, at least not on all occasions.

But today's column is reasonably new material. So if you've been thinking about sending me a line to such effect, do wait a few days, until I more richly deserve it.

John Rekenthaler has been researching the fund industry since 1988. He is now a columnist for Morningstar.com and a member of Morningstar's investment research department. John is quick to point out that while Morningstar typically agrees with the views of the Rekenthaler Report, his views are his own.

John Rekenthaler does not own shares in any of the securities mentioned above. Find out about Morningstar's editorial policies.