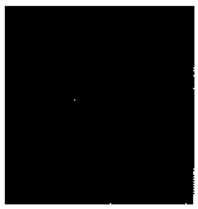
The Continental Operation

Portfolio

Retirement Planning

Making It Last Forever

Investing For Keeps



by Frank Armstrong

Fee-only planner Frank Armstrong recognizes that most investors need to balance good returns with a good night's sleep. His *Investing for Keeps* series of columns explores how modern financial theories can help you execute a superior strategy effectively and economically with no-load mutual funds.

The one giant disaster most retirees would like to avoid is running out of money while still alive. Everything else pales in comparison to that fear. The problem, simply stated, is to make limited capital provide an income that lasts a lifetime.

Most investors focus on market risk and rate of return as the main factors affecting how long their portfolio will last. That's right as far as it goes. However, one other key factor remains, and that one is directly under their control: the withdrawal rate. Retirees need to focus serious attention to the question of how much they can safely withdraw from their portfolio. It would be easier if they could rely on "average" returns when planning. But in real life, returns are variable. As any retiree gets only one throw of the dice, averages provide little comfort.

Precious little guidance was available until three professors from Trinity University, Philip Cooley, Carl Hubbard, and Daniel Walz, studied the problem--by focusing on actual historical annual stock and bond returns, rather than average historical performance. Their paper, *Retirement Savings: Choosing a Withdrawal Rate That is Sustainable*, should be required reading for every potential retiree. It is available by special arrangement with the American Association of Individual Investors (AAII) this month.

The Study, Simplified

Using data from 1926 to 1995, the paper looks at five possible portfolios ranging from 100% stocks to 100% bonds, and evaluates the impact of fixed annual distributions ranging from 3% to 12% of the initial portfolio value. (Stock returns are represented by the S&P 500, while long-term, high-grade, domestic corporate bonds were the proxy for the bond portfolio.) The authors examined each portfolio/distribution combination over four payout periods ranging from 15 to 30 years, and calculated the probability of maintaining a given withdrawal amount for each period--the portfolio success rate. A successful portfolio was one that had a terminal value greater than zero at the end of the period.

They repeated the entire process for withdrawals with inflation adjustments. For good measure, the exercise was also duplicated using only the past 50 years' data. (As we would expect, eliminating the Depression improved results across the board.) Finally, they compiled a terminal value range for each portfolio.

The Findings

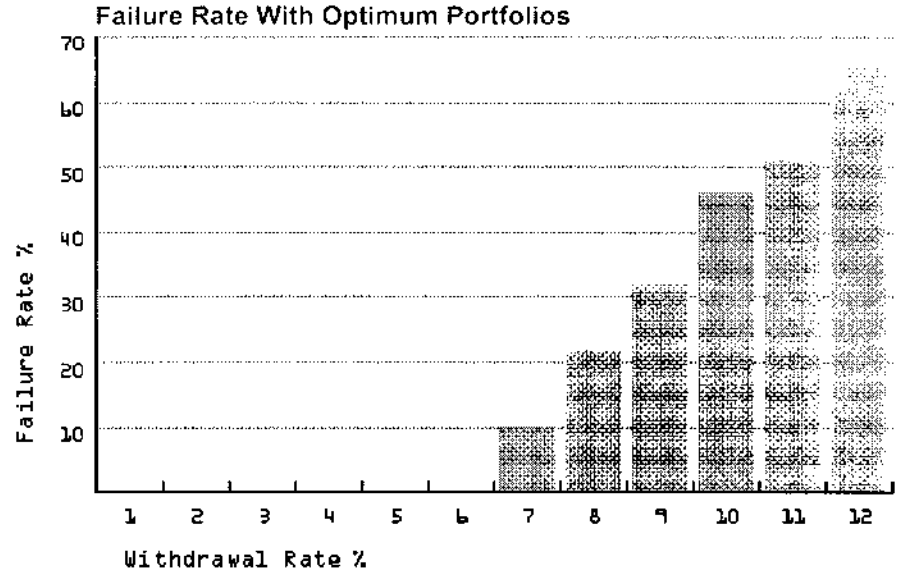
We can learn a lot from this exercise. I strongly urge you to read the paper for yourself. The following remarks address the critical findings of the first table in the article (labeled "Portfolio Success Rates"), with emphasis on the 30-year time horizon most recent retirees face.

As we would expect, very small withdrawals generate high success rates. At 3% withdrawals, we saw a 100% success rate with every portfolio, regardless of composition, for every time period.

At 4% and 5% withdrawals, we begin to see the impact of asset allocation. Portfolios with some bonds fare better than 100% equity portfolios. Then again, an all-bond portfolio has only a 51% chance of lasting over a 30-year period at a 5% withdrawal rate. Bonds are not the entire answer for retirement accounts. But by reducing portfolio volatility, the use of some bonds can improve success ratios, assuming reasonable withdrawal rates.

At 6% withdrawals, the three mixed stock/bond portfolios outperform either all stocks or bonds. One retiree in ten would have gone broke with a 100% stock portfolio. Only 27% would have had their money last 30 years with a 100% bond portfolio. The 25%/75% stock/bond mix produced a 100% success rate.

Assuming 7% withdrawals, a 50%/50% blend is the favored mix. But the best that can be hoped for based on past data is a 90% chance of success. What happens to the remaining 10% of investors? Do they call for Dr. Jack?



Once withdrawal rates exceed 7%, things go downhill rather rapidly. Due to their higher average returns, stock-heavy portfolios beat those focused on bonds. But risk of failure increases dramatically. The favored mix becomes 100% equities--but at an 8% withdrawal rate, more than one investor in five risks going broke.

None of us should be surprised that increasing withdrawal rates to offset inflation further stressed the portfolios and increased failure rates, as shown in Table 3 in the article.

I have deliberately ignored the tables in the article regarding the most-recent fifty-year time period. Pretending that the stock crash of '29 could never repeat is an exercise in delusion.

Complications

Significantly, the article used raw index numbers for analysis. No adjustment was made for fees or any other expenses. Even the cheapest index funds involve such costs, which would decrease real returns. Granted, a select few investors may be able to regularly outperform the indexes even after expenses, and enhance their portfolio success rates, but it would be risky to base a retirement plan on such an assumption.

It's highly possible that a more-sophisticated asset-allocation plan such as we developed in earlier articles would increase success rates. But, unfortunately, the data on alternative asset classes is not available over the study's entire period. So, we are unable to directly "prove" that assumption with parallel data.

The authors are silent on their end-of-year re-balancing strategy. I assume that the distributions were drawn proportionately from both the stock and bond portfolios. It's probable that a policy of harvesting bonds during bad years and stocks during good years would have increased success rates. However, any such gains would not dramatically improve results.

For all the above reasons, it would be very unwise to inflate the study's return assumptions for planning purposes.

Lessons

The moral is clear: Asset allocation matters, but even with the best mix, chances of failure rise directly with withdrawal rates. Any withdrawal rate exceeding 6% of the initial portfolio value produces a significant likelihood that a portfolio won't last the duration.

Fortunately, the withdrawal rate is directly under the control of the retiree. Retirees that stress their portfolios with excessive withdrawals run a serious risk of exhausting their capital during their lifetimes. And my experience in working with a variety of retirees is that many tend to seriously overestimate the appropriate sustainable withdrawal rates.

There are, of course, important corollaries:

1. More is better than less in a retirement nest egg.
2. It's never too early to begin to accumulate a sizable retirement nest egg. Each day of delay only increases the chance of not having enough.
3. Those that don't have enough when retirement comes around must consider downscaling their lifestyle or bear an increased risk of financial disaster down the road.

The study's assumption that a retiree will continue a fixed dollar withdrawal program regardless of investment results is simplistic. (However, without that assumption, no guidelines could be derived.) In fact, a retiree may be in a position to temporarily decrease withdrawals during down markets until his capital recovers. Or, assuming early results in excess of expectations, the retiree may elect to increase her withdrawals as capital increases. In many cases, terminal values were a gratifying multiple of starting capital (Table 4). So, mid-course adjustments to withdrawal rates are possible and may very well be positive.

If income requirements are variable or capital permits, an alternative policy of making fixed percentage withdrawals against the annual principal values may be an acceptable solution for many retirees. This policy will provide a variable income stream that is automatically adjusted for investment results.

Retirees that can accept a variable income, and withdraw a constant percent of remaining capital rather than make fixed dollar withdrawals, never face the prospect of zeroing out their accounts--no matter how bad their investment results are in the short term. This option is generally only acceptable to retirees with modest income needs relative to their available capital. And this leads us back to the concept of planning early to have enough for a stress-free and enjoyable retirement.

(For further commentary on the subject, be sure to check out some of Scott Burn's great articles.)

Coming up next: Structuring a portfolio for survival.

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 Frank Armstrong is author of Investment Strategies for the 21st Century, and president of Managed Account Services, Inc, a fee-only advisor specializing in global asset allocation strategies utilizing no-load mutual funds. Frank is a Certified Financial Planner (CFP) with 24 years' experience helping investors build wealth.

Got a question for Frank? A comment on asset-class investing? Join the discussion in the Frank Armstrong/Investing for Keeps forum in the Conversations.

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