



Making Your Portfolio Last Throughout Retirement



For many individuals, the prospect of retirement can seem like a long and winding road. Even if you are one of the lucky few to have amassed sufficient resources to achieve financial independence in your 50s or 60s, the prospect of living for 35 or 45 years without employment income can be daunting.

The bottom line is that, even for individuals with sizeable portfolios nearing retirement, the burning question changes irrevocably. It is no longer “*How large will my*

portfolio grow”, but rather, “*How long will my money last?*”

In spite of the obviousness of this issue, it has only been very recently that the financial planning community has done any serious research on what is known as the *distribution phase* of personal finance.¹ With the prospect of 78 million Baby Boomers nearing retirement, however, a small cadre of financial planning practitioners began to take a serious look at portfolio sustainability in the early 2000s. Their efforts have given us all some fascinating results to ponder.

¹ Since the beginning of the financial planning profession in the 1980s, virtually all attention has been focused on the *accumulation phase* of the personal financial cycle – not surprisingly, since the Baby Boomer generation was in the middle of its *accumulation phase* at that time.



The 4 Percent Solution

These days, it is difficult to find an article on retirement finances that does *not* cite 4 percent as the accepted sustainable portfolio withdrawal rate. Indeed, the first truly in-depth analysis of sustainable portfolio withdrawal rates concluded that, in order to have a 95% chance of not running out of money during a 30-year retirement span, the *maximum* sustainable portfolio withdrawal rate was approximately 4.15%.

4%

Just a hair over four percent! This turned out to be a far smaller percentage than most individuals – and even some advisors – had anticipated. And for the first time both practitioners and retirees began to realize just how large portfolios would need to be in order to truly support their owners' lifestyles in retirement. According to these calculations, a retiree would need approximately a million dollars for each \$40,000 of retirement income he or she required. Could you live on

\$40,000 a year? And if the funds were coming from retirement accounts that would be taxed upon withdrawal – such as IRAs and 401(k)s – then at least 25% of each withdrawal would go to paying Uncle Sam his share – leaving only \$30,000 for the retirees themselves and thus lowering the effective withdrawal rate even further. Even in the days of inflated portfolio values earlier this decade these numbers looked ominous for many – not to mention how they look now that markets are lowering asset values and are signaling slower long-term economic growth.

The Three P's: Portfolio Construction, Portfolio Longevity, Purchasing Power

Fortunately, the financial whizzes who had undertaken the original research were not simply academics; they were also financial planning practitioners who worked with clients every day and worried about these issues in a very human context. It was important, they realized, not merely to ask “*How long will my money last?*” but also “*How can I maximize my use of available resources in retirement?*” and “*What is the true nature of the risks involved?*” They realized that the decision to implement a “four percent solution” meant making certain tradeoffs. And they believed that it is important for all of us to understand the nature and extent of those tradeoffs.

Portfolio Construction. One of the first issues that this new research raised was the

question of portfolio construction, i.e., what kinds of assets should be held in retirement. Previously, accepted wisdom had been that as an individual neared retirement, the stocks (equities) in his or her accumulation portfolio should be traded in for high-quality bonds. The theory was that bonds would provide income stability in retirement – an important virtue when compared with volatile stock valuations.

Reality, however, turned out to be different – or at least more complex. True, bonds can provide a steady stream of cash. The *problem* with such a simple approach, however, is that bond payouts do not keep up with inflation, nor are bond prices themselves immune from losing value in rising interest rate environments.



Simply relying on bonds in a retirement portfolio – at least for one that needs to last for 30–40 years – turns out to be *riskier* than maintaining a balanced portfolio of stocks, bonds, and cash. Though inherently more volatile, such a portfolio has the long-term advantage of being able to recover more effectively from periods of economic stress than an all-bond portfolio can. Stocks, it turns out, have the almost-magical property of (eventually) growing their way out of most economic messes, a quality that turns out to be absolutely critical if one is looking at anything longer than ten years. The role of stocks in a retirement portfolio is so important, in fact, that most serious studies now recommend that most retirement portfolios should maintain at least a 60% to 70% allocation to them.

Portfolio Longevity. The second question that received more serious scrutiny was that of portfolio longevity itself. Given that estimating portfolio longevity is trying to forecast the future, it should be obvious that no one can do so with absolute assurance. What all researchers do – either by relying on an analysis of past economic data or by building models of likely future economic behavior – is gauge the *probability* of a particular outcome. The very first thing to remember, therefore, is that *all* withdrawal rate proposals are inherently associated with *probabilities of success*, where success is defined as not running out of money over a specific period, say 30 or 40 years. This fact has profound implications for withdrawal rate recommendations. The simplest of these is



that raising one's portfolio withdrawal rate doesn't necessarily mean that one will run out of money; what it does is *raise the probability* that one will do so.

A closer look at these early studies also reveals two facts that are absolutely crucial to a more sophisticated understanding of this issue. The first is that, as far as economics is concerned, the tail ends up wagging the dog. In other words, it is the *extremes* of economic experience that tend to drive the probabilities. If one is doing historical research, this means three periods: (a) the period of the Great Depression, (b) the great stagflation and oil shock of the mid-1970s, and (c) the tech bust and mortgage-banking crises of the past ten years. Unless one is unlucky enough to have begun retirement near the *onset* of one of these major events, one could have safely increased one's withdrawal rate. The problem, of course, is that we cannot see such events coming.

The second fact that emerges from early longevity studies relates, in fact, to our ability, if not to foresee, then at least to react to adverse economic forces. All of the early studies assumed that the portfolio owner would maintain a *consistent* rate of withdrawal throughout the study period. In other words, through thick or thin, and no matter what was happening in the world of economics, it was assumed that the retiree would continue to withdraw money at the same rate, adjusted upward for inflation. The maximum allowable portfolio withdrawal rate recommendation of 4.15% was, in fact, set as low as it was to save portfo-



lios from this lethal combination of *relentlessly rising withdrawals* in the face of *extreme economic circumstances*.

We still cannot control or even consistently forecast economic contractions. In the real world, however, *one can choose to adjust one's behavior* to the economic realities that present themselves. This gives us the flexibility, if we are willing to adopt it, of ad-



justing portfolio withdrawal rates to the economic environment in a way that *materially raises the allowable withdrawal rate without significantly lowering the probability of portfolio success*.

Most middle class retirees are indeed able to forego that inflation adjustment – or even to pare back on their retirement spending – if events really require it. They may not want to give up that trip to Europe this year, but if promising to do so means that they will be able to begin their retire-

But Wait, There's More...

Unfortunately, however, that's not the end of the story. The culprit, as is so often the case, is the insidious nature of inflation and its affect on long-term purchasing power. True, one can safely with draw larger sums from one's retirement portfolio than previously thought without running out of money. But the real question, one can imagine, is not simply whether or not one is likely to run out of money but rather whether or not one is likely to *run out of purchasing power*. And there our analysis reintroduces cause for conservatism, even if it doesn't argue for a full return to the four percent standard.

ment withdrawals at \$65,000 per year rather than \$40,000 per year they may be willing to do so.

“Bumper Rails” on the Portfolio. In fact, this ability to adjust one's withdrawals to current economic (market) forces effectively provides a kind of “bumper rail” for the portfolio, keeping the owner from straying too far from a prudent path at precisely those times when such behavior would be most detrimental to the portfolio's long-term health.

While the specifics of these rules are beyond the scope of this article, they do not call for more than a 10% cut in withdrawals in any economic cycle. Moreover, they provide for the possibility of a 10% *increase* in withdrawals if the economy (market) surprises us on the upside.

The bottom line: following the “rules” established by this model, a retiree could choose to raise his or her initial portfolio withdrawal rate to 6.3% with a 100% probability of success – or as high as 7.8% with a 95% probability of success.

Based on a million-dollar portfolio, that comes to a *difference* of between \$1,917 and \$3,167 per month vis-à-vis the old 4 percent rate. And for many retirees, such sums will represent a significant enhancement to their lifestyle in retirement.



Purchasing Power. The trick, it seems, is not merely leaving enough money in one's portfolio to maintain a balance for 40 years. The trick is leaving enough of a balance to enable the portfolio to grow enough to *overcome the effects of inflation* over time.

As discussed previously, bond portfolios do not grow their purchasing power over time. Even stock portfolios, however, need enough time to reliably reflect the increased economic activity of the companies that underlie them, particularly in tough economic times.

It turns out that a retiree who wants to be 99% certain of being able to maintain his or her purchasing power in retirement should count on withdrawing no more than 5.4%



from his portfolio when he first retires. If the retiree is comfortable with accepting a 95% chance of maintaining her purchasing power, that rate can be pushed up to 5.7%. Keep in mind, once again, that these numbers assume that the underlying portfolios have at least a 65% allocation to stocks (i.e. they will be somewhat volatile). They also assume that the retiree is still willing to follow the “bumper rail” rules that can keep portfolio payouts in check if markets fail to perform. Even with such additional restraint aimed at preserving purchasing power, however, an informed retiree with an appropriately allocated and managed portfolio should be able to withdraw an additional 1.5% – or \$15,000 per year for each \$1 million of assets – from a retirement portfolio without undue risk. Naturally, if the retiree wishes to accept greater risk, he or she can draw down more aggressively on the portfolio.



In either case, we now have a much more sophisticated picture than we once did of what it will take to maximize our chances of maintaining not only portfolio balances but also client purchasing power throughout long retirements. Happy Trails!