Rethinking Retirement Spending Rules: A Market-Based Approach

Starting portfolio yields may be a better guide to optimal spending than knowledge of future market returns.

AUTHORS

Sean Klein
Executive Vice President
Client Solutions and Analytics

Georgi Popov
Senior Vice President
Product Strategist

Alan M. Taylor
Senior Advisor

Determining a feasible rate of spending in retirement ranks among the most vexing challenges in finance. Too many variables are unknowable: How long will an individual live? How will markets perform? What unexpected spending needs will arise? We believe portfolio yields may help determine feasible spending.

Rules of thumb – such as "the 4% rule" for annual withdrawals advanced by William Bengen in the 1990s – offer convenient solutions that seek to maximize consumption without undue risk of running out of money. Bengen updated his rule to 4.5% in 2006, noting the "safe withdrawal rate" can vary depending on taxes and other factors.

Morningstar in November said a prudent annual withdrawal rate is 4%, up from 3.3% two years ago and 3.8% last year. Higher bond yields help explain the increase, which is based on a common retirement portfolio allocation of 40% stocks and 60% bonds. Other strategies include adjusting the withdrawal rate based on the performance of the investment portfolio; altering the rate based on mortality risks; and determining a "safe withdrawal rate" based on Monte Carlo simulations.

A problem with these approaches is that they are based on past performance and assumptions about the evolution of markets, interest rates, longevity, and spending patterns over several decades in retirement. And these assumptions need regular updating.

However helpful these rules of thumb may be, retirees appear to largely ignore them. Wary of running out of money, nearly 60% of retirees plan to spend little of their savings or even grow balances.[1]

The upshot is that many retirees underconsume. They forgo travel and leisure activities, health and wellness expenditures, charitable contributions, and other uses of savings accumulated over a lifetime.

Fortunately, there may be a simple, reliable, and stable guide to feasible spending in retirement – the level of portfolio yields, including dividends, interest, and other investment income. PIMCO research finds that anchoring spending to the starting yield has the potential to preserve asset balances over 30 years.

In fact, it turns out that in addition to being easy to determine and understand, starting portfolio yields may be a more accurate guide to feasible spending than common rules of thumb. **What's more, our research finds that this number may be an even better guide to managing withdrawals than knowledge of future market returns and inflation over the planning horizon.**

This sounds implausible. So let's take a look at how we came to this result.

THE PREDICTIVE POWER OF PORTFOLIO YIELD

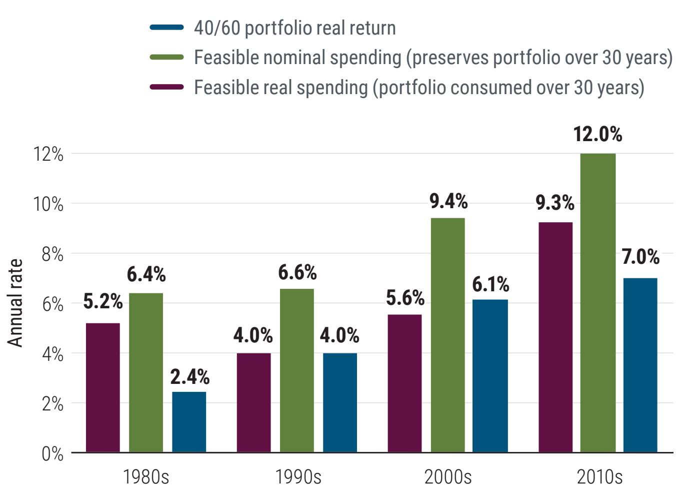
Looking out over the past four decades of market performance, we calculated feasible spending, defined as the annual percentage withdrawal from a 40/60 stocks-and-bonds portfolio that seeks to preserve funds at least 30 years. We also calculated a constant feasible spending amount in real (inflation-adjusted) terms at a rate that consumes portfolio assets over 30 years. (The 40/60 portfolio approximates the average in-retirement allocations of target date funds, according to 2022 year-end Morningstar data.)

Feasible spending, in both real and nominal terms, has varied over each of the past four decades (see Figure 1).

These data are retrospective. And it's impossible, of course, to know future market performance. Thus, the natural question remains: How could a retiree know how much to prudently withdraw?

Figure 1: The 4% rule looks conservative

Feasible spending and investment returns per decade



Source: PIMCO and the Jordà-Schularick-Taylor Macrohistory Database as of April 2023. **For illustrative purposes only.** Returns based on asset class returns (including coupons, dividends and capital gains), and do not take into account taxes, fees or other expenses. Figure is provided for illustrative purposes and is not indicative of the past or future performance of any PIMCO product.

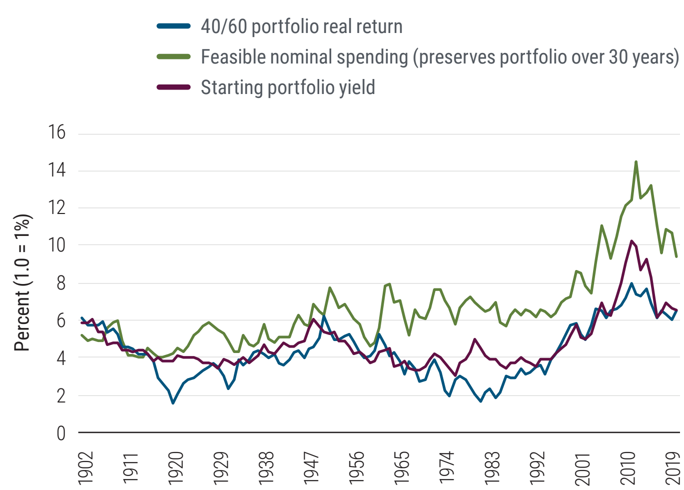
To answer this, we calculated feasible spending levels (in nominal terms with a preservation goal and in real terms with a spend-down goal) and historical portfolio returns. We then plotted nominal and real spending against starting yields of the 40/60 portfolio for each 30-year retirement horizon since 1902. Figure 2 shows that starting yields (the wine-colored line) were clearly related to future market performance (blue line). Not surprisingly, when yields were higher, future returns were likely to be higher.

Nonetheless, the informativeness of starting portfolio yield is remarkable. In nominal terms, the correlation between starting yield and feasible spending was 82%, higher than the 65% correlation between returns and feasible spending. In real terms, the correlation between portfolio returns and feasible spending was 68%.

Put simply, starting yields on a portfolio provided a better guide to nominal feasible spending over the planning horizon than foreknowledge of the market's future performance would have.

Figure 2: Starting yields are a more informative guide to feasible spending than future returns

Future spending and returns vs. starting portfolio yields



Source: PIMCO and the Jordà-Schularick-Taylor Macrohistory Database as of April 2023. **For illustrative purposes only**. Returns based on asset class returns (including coupons, dividends and capital gains), and do not take into account taxes, fees or other expenses. Figure is provided for illustrative purposes and is not indicative of the past or future performance of any PIMCO product.

ASSET ALLOCATION

This finding has an important practical implication: A retiree could base nominal spending on starting yields and feel relatively confident they could prudently preserve their assets. In fact, they could potentially spend a bit more than the starting yields. In our calculations based on data since 1902, which do not consider taxes or fees, retirees could have spent in excess of the starting yields by 1.9 percentage points annually and still retained their original principal 30 years into retirement.

Thus far, we have focused only on the 40/60 stocks-and-bonds portfolio typical of retirement income balanced funds and at-retirement target date fund allocations. However, asset allocation obviously impacts current and future portfolio yields. It also affects the informativeness of starting yields as a guide to feasible spending.

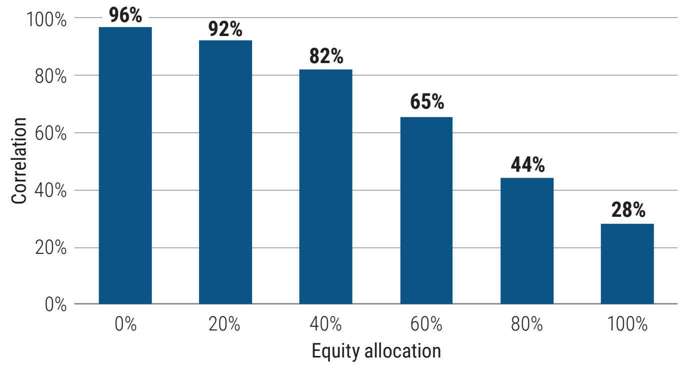
In the current market environment, bond-heavy portfolios will tend to generate higher income but have lower prospects than equities for long-run capital appreciation. Depending on the investment horizon, higher equity allocations usually result in higher levels of feasible spending due to embedded long-term capital gains.

However, higher equity allocations also increase risk (which may be too much for someone in or near retirement) and, importantly, reduce the informativeness of starting portfolio yields as a guide to feasible spending. As Figure 3 shows, the correlation between feasible spending and starting yields drops rapidly when equity allocations exceed 40%, signifying a weaker linkage and less informative power (we view 70% and above as high correlation).

An implication is that asset allocations that emphasize high, consistent yields may be desirable for retirees seeking optimal consumption without excessive risk of depleting funds.

Figure 3: Information in starting yields is less predictive when equity allocations exceed 40%

Correlations between feasible spending and starting yield



Source: PIMCO and the Jordà-Schularick-Taylor Macrohistory Database as of April 2023. **For illustrative purposes only**. Returns based on asset class returns (including coupons, dividends and capital gains), and do not take into account taxes, fees or other expenses. Figure is provided for illustrative purposes and is not indicative of the past or future performance of any PIMCO product.

CONCLUSION

Our research builds upon the widely accepted belief that bond yield-to-maturity is among the best indicators of future bond returns. We extend this understanding by demonstrating that starting portfolio yield also holds predictive value, particularly in determining feasible retirement spending rates. Our findings suggest that portfolio yields may offer more insights than portfolio returns.

As starting yields can be easily observed at various times, they can serve as a valuable tool for retirees planning their spending and for younger workers assessing their retirement readiness. While further research is needed to fully explore the predictive power of starting portfolio yields, this discovery presents a promising solution to the complex task of establishing prudent retirement spending rates, especially given the constraints of existing rules-of-thumb approaches.

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Martel, Rene, Steve Sapra, and Georgi Popov, "A Framework for Understanding Sequence-of-Returns Risk in DC Plans," PIMCO In Depth, February 2021.

FOOTNOTES

1 "2022 Spending in Retirement Survey: Understanding the Pandemic's Impact," Employee Benefits Research Institute

The "safe withdrawal rate" is an economic theory intended to help investors withstand market downturns by limiting their withdrawals. All investments contain risk and may lose value. There is no guarantee that an investor will not run out of money during retirement.

Past performance is not a guarantee or a reliable indicator of future results.

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