What's a Sustainable Portfolio Withdrawal Rate for Retirees?

In retirement planning, 4% is typically referenced as a magic number: the percentage of your portfolio that you can withdraw each year so that you won't outlive your savings. Considering some current market trends—inflation is creeping up, stock valuations are high, and interest rates are rising—we thought it was a pertinent time to investigate this assumption anew.

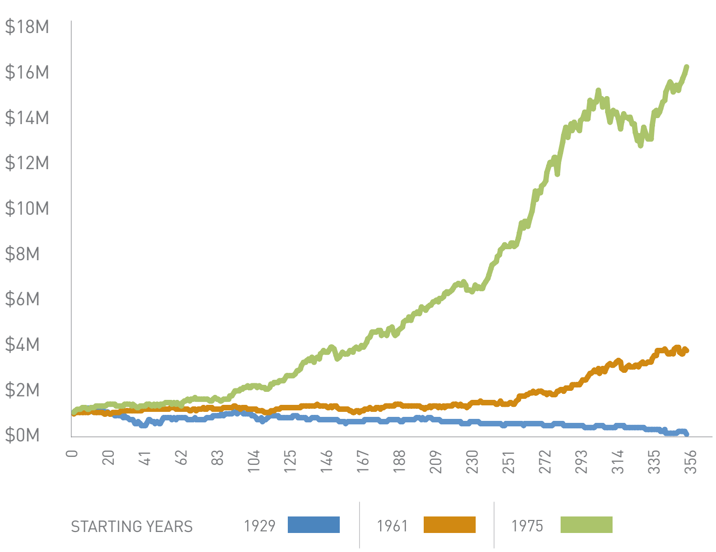
Modeling Retirement Scenarios

We analyzed each of the 63 30-year periods from 1926 to 2017, testing the outcomes using withdrawal rates ranging from 3% to 7%.

We assumed our investor retires with a $1 million portfolio, making withdrawals for 30 years while the portfolio was invested 50/50 (50% stocks, as measured by the S&P 500 Index; 40% U.S. bonds—half 5-year Treasury notes and half long-term government bonds; and 10% cash). Our investor withdraws a percentage of the initial portfolio, and adjusts the amount each year according to inflation. Example: with a 4% initial withdrawal and inflation-rate scenario, the retiree withdraws $40,000 in year one, $41,600 in year two, $43,264 year three, and so on.

GROWTH OF A BALANCED PORTFOLIO WITH 4% WITHDRAWALS AND 3% INFLATION

VALUES OVER TIME (BY MONTHS)



Sources: Standard & Poor's, Morningstar, Gerstein Fisher Research

Lesson 1:
Inflation Has a Big Impact

We observe that even a one-percentage-point increase in the cost of living substantially impacts a portfolio. For instance, with a 4% starting withdrawal rate, a 4% rather than 3% inflation rate raised portfolio withdrawals by $340,000 over 30 years.

Lesson 2:
Starting Year Matters

We also see that the starting year makes a big difference. The portfolio averaged 8% - 9% annual returns across all 30-year periods, but individual periods ranged from just 6% to almost 12%. Assuming a 4% withdrawal rate and 3% inflation, the portfolio starting in 1929 (on the eve of the Great Depression) was depleted, while the portfolio beginning in 1975 grew significantly in value, despite the same withdrawals (See 'Growth of a Balanced Portfolio' chart at left).

Lesson 3:
4% Works, Except With High Inflation

Looking at all 30-year periods, a 3% withdrawal rate was sustainable in nearly every period, even with elevated inflation. A 4% withdrawal rate was successful except in cases where inflation reached 5%. Withdrawal rates of 5% or higher appear to be downright risky, even when inflation is a fairly modest 4%.

Gregg S. Fisher, CFA

Portfolio Manager,
Head of Research & Portfolio Strategy