

Safeguarding your retirement in bearish markets

When you're investing for a retirement that's years away, market downturns typically feel unpleasant, but not dire: That's because you can have confidence your retirement nest egg has time to recover, receive additional contributions, and keep growing. But once you've actually retired, the picture changes. That money is supposed to last you the rest of your life; so any big, unscheduled drawdown of your retirement account could put your plan in jeopardy.

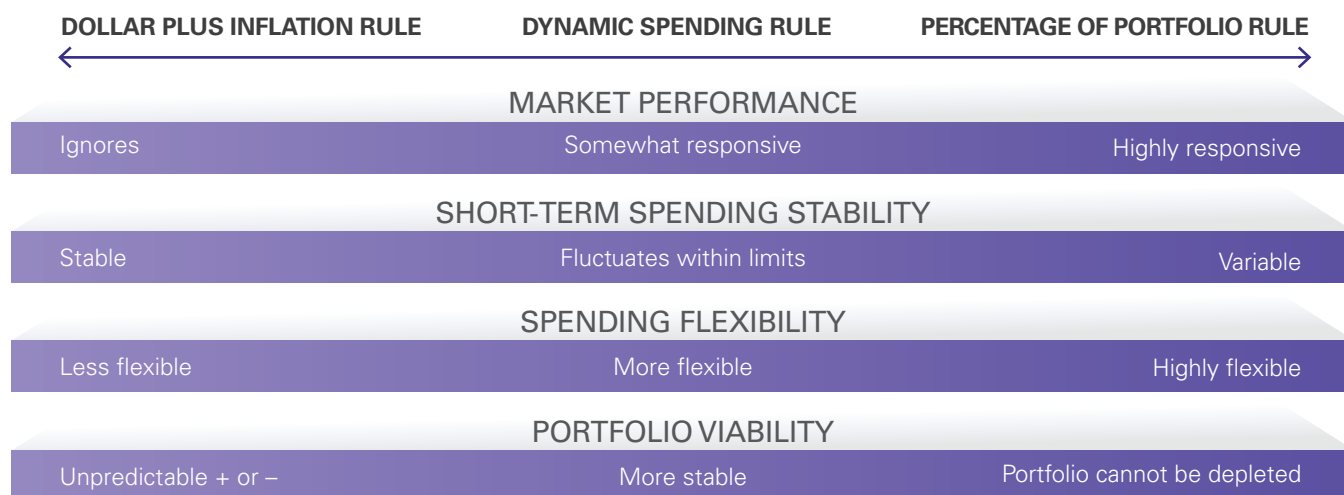
The problem

You depend on your retirement assets to deliver a certain return year after year—from interest, dividends, and capital appreciation of your investments. When a market downturn knocks down the value of your nest egg, it also takes a large bite out of current and future earnings potential. That problem compounds when the downturn happens toward the beginning of retirement or lasts for multiple years in a row.¹

That doesn't mean you'll have to go back to work—if that's not your desire—nor do you necessarily have to pinch pennies until it hurts. Your portfolio spending strategy can make all the difference. Three popular strategies are:

- **Dollar plus inflation**—You determine a set amount to spend and add the cost of inflation annually.
- **Dynamic spending**—You adjust spending each year to adapt to market conditions. Set a ceiling and floor for how much to take from your portfolio (for instance, 5% greater than the previous year's spending in exceptional market conditions or 1.5% less than the previous year in a poor market).
- **Percentage of portfolio**—You determine a set percentage to spend each year, no matter the size of your portfolio.

Figure 1. Comparing spending rules



Source: Vanguard.

¹ Kevin I. Khang and Andrew S. Clarke, 2020. *Safeguarding retirement in a bear market*. Valley Forge, Pa.: The Vanguard Group.

Figure 2 shows what could happen over a 30-year timeframe with a hypothetical retiree who has \$1 million in assets and an annual spending budget of \$50,000, using two different spending strategies. The scenario on the left shows the predicted success rate (not running out of money in retirement) prior to a financial crisis. The scenario on the right shows the probability of success if a financial crisis knocked down the retiree’s initial \$1 million portfolio to \$800,000.

In Figure 3, the retiree reduces their annual spending by \$10,000, causing the probability of success to increase for both strategies, across scenarios.

Figure 2.

Probability of success in times of crisis with \$50,000 spending target

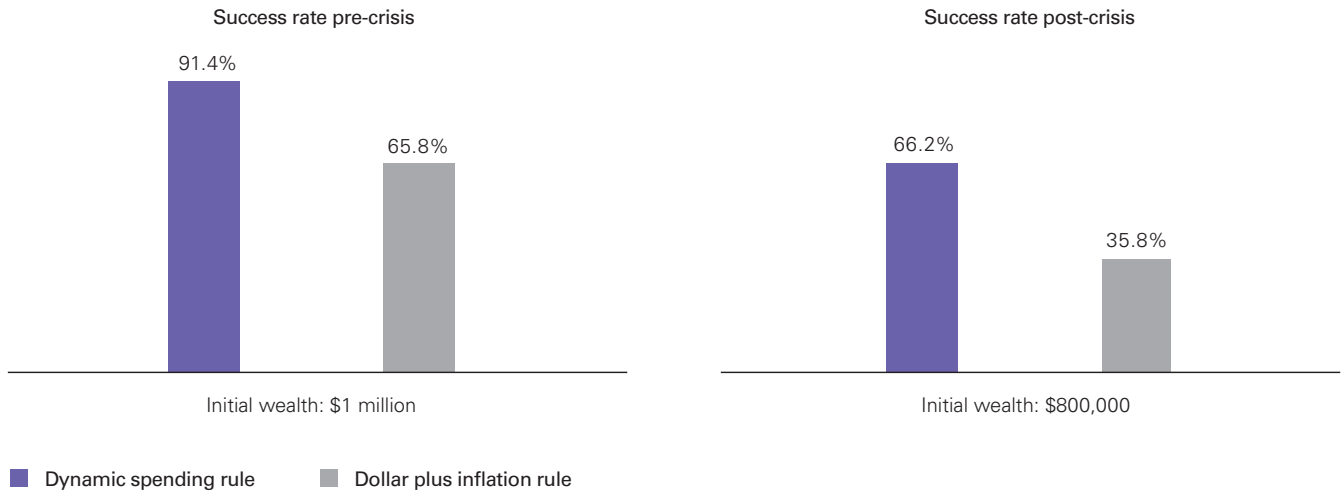
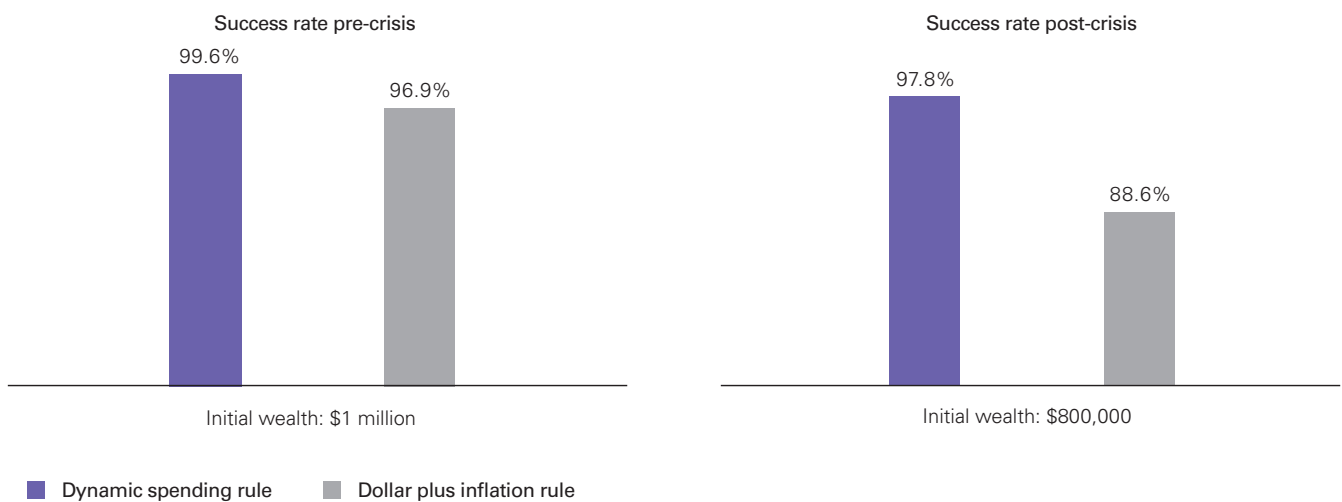


Figure 3.

Probability of success in times of crisis with \$40,000 spending target



Notes: The results assume a starting withdrawal of \$50,000. The time horizon pre-crisis is 30 years after December 2019. The time horizon post-crisis is 30 years after March 2020. The ceiling is 5% and the floor is -1.5%. Asset allocation is domestic equity 30%, international equity 20%, domestic fixed income 35%, international fixed income 15%. Forecast corresponds to distribution of 10,000 Vanguard Capital Markets Model® (VCMM) simulations for 30-year annualized nominal returns as of December 31, 2019, and March 31, 2020, in U.S. dollars.

Source: Vanguard.

IMPORTANT: The projections and other information generated by the VCMM regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Distribution of return outcomes from VCMM are derived from 10,000 simulations for each modeled asset class. Simulations as of December 31, 2019, and March 31, 2020. Results from the model may vary with each use and over time. For more information, please see the last page.

Key conclusions

A reduction in annual spending (even a small reduction), can significantly boost the chances of your retirement portfolio lasting the rest of your lifetime. Further, a dynamic spending strategy gives you the flexibility to spend more in good market conditions while only having to cut back a little when markets retreat.

Note that the calculations here exclude Social Security and other possible income, such as pensions, rental property, or supplemental employment after retirement. Such income streams can enhance the chances of an individual successfully maintaining their portfolio through the end of retirement.

Your financial advisor can help you assess your particular retirement spending situation and provide guidance on implementing a dynamic spending strategy. Remember that bearish markets are inevitable. While it's impossible to accurately predict when they will appear, you can take steps ahead of time to minimize their long-term impact on your retirement.

IMPORTANT: The projections or other information generated by the Vanguard Capital Markets Model regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. VCMM results will vary with each use and over time.

The VCMM projections are based on a statistical analysis of historical data. Future returns may behave differently from the historical patterns captured in the VCMM. More important, the VCMM may be underestimating extreme negative scenarios unobserved in the historical period on which the model estimation is based.

The Vanguard Capital Markets Model is a proprietary financial simulation tool developed and maintained by Vanguard's primary investment research and advice teams. The model forecasts distributions of future returns for a wide array of broad asset classes. Those asset classes include U.S. and international equity markets, several maturities of the U.S. Treasury and corporate fixed income markets, international fixed income markets, U.S. money markets, commodities, and certain alternative investment strategies. The theoretical and empirical foundation for the Vanguard Capital Markets Model is that the returns of various asset classes reflect the compensation investors require for bearing different types of systematic risk (beta). At the core of the model are estimates of the dynamic statistical relationship between risk factors and asset returns, obtained from statistical analysis based on available monthly financial and economic data from as early as 1960. Using a system of estimated equations, the model then applies a Monte Carlo simulation method to project the estimated interrelationships among risk factors and asset classes as well as uncertainty and randomness over time. The model generates a large set of simulated outcomes for each asset class over several time horizons. Forecasts are obtained by computing measures of central tendency in these simulations. Results produced by the tool will vary with each use and over time.

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