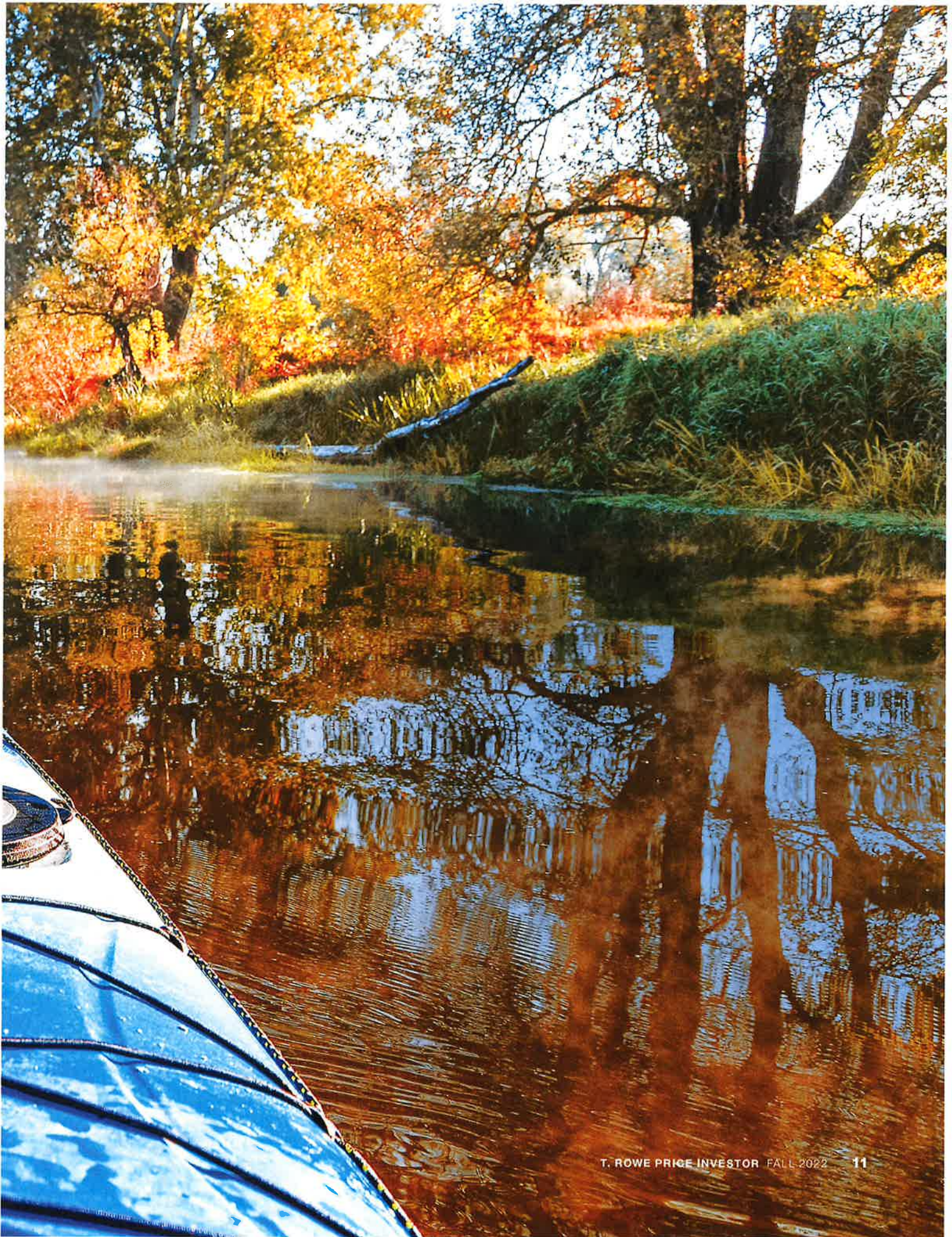


A blue kayak is positioned in the foreground, floating on a calm lake. The water reflects the surrounding autumn foliage, which is in shades of yellow, orange, and red. The sky is a clear, bright blue. The overall scene is peaceful and scenic.

# Navigating Retirement

## in Uncertain Markets

A conservative withdrawal approach is part of a sustainable retirement spending plan.





**P**eople nearing retirement—or just entering retirement—may be concerned about what a market downturn and higher inflationary environment may mean for their withdrawal strategy. They may also be thinking about the ability of their savings to support them throughout their retirement.

The sequence of returns (the order in which markets rise and fall) is important when it comes to your retirement withdrawal strategy. Market declines within the first five years of drawing down retirement assets can significantly impact the chance of the portfolio lasting, especially when planning for a retirement horizon that could span decades. To better understand the long-term impacts of this kind of early decline, we analyzed scenarios from three different time periods to gain insight on portfolio sustainability:

1. Retiring January 1, 1973, the most recent 30-year period that started with a bear market.
2. Retiring January 1, 2000, 22 years into retirement and already living through two bear markets.
3. Retiring January 1, 2008, on the cusp of the great financial crisis and about halfway through a 30-year retirement.

#### SCENARIO 1

### A 1973 Retirement Date

In 1973, the onset of the oil embargo and an energy crisis sparked a recession. The early 1970s was also

one of the highest inflationary periods in history, as prices more than doubled in 10 years. Our analysis assumed a starting portfolio of \$500,000 with an asset allocation of 60% stocks and 40% bonds throughout the entire horizon, using the S&P 500 Index and the Bloomberg U.S. Aggregate Bond Index.<sup>1</sup>

We tested the “4% rule,” assuming the investor started with an initial withdrawal amount that was 4% of the starting portfolio balance (\$20,000 the first year). This amount was adjusted each year based on actual inflation<sup>2</sup> in order to maintain purchasing power over the 30-year spending horizon. Many experts consider the 4% rule a safe starting point to help investors navigate an uncertain market environment, especially at the onset of retirement.

The beginning monthly withdrawal for this investor was \$1,667. But retirement would get off to a rocky start as they entered a bear market that would see the S&P 500 Index decline 48% within the next two years. (See “Retiring in 1973.”) Not only did the investor have to cope with watching their portfolio shrink to nearly \$328,000 by September 1974, but inflation was also a significant factor. Inflation ended 1972 at 3.4% and soared to over 12% by the end of 1974.<sup>2</sup> Money at that time didn’t go as far as it used to when it came to paying for everyday expenses like gas and food.

Recovery was around the corner, however, and the investor’s balance began to grow again with the help of two subsequent bull markets. The account balance recovered to over \$500,000 about 10 years into retirement in December 1982 and reached \$1 million

by the end of 1995. Those gains helped the investor weather the significant bear market in March 2000. And at the end of 30 years, the portfolio balance in this scenario was well above \$1 million despite all the market volatility during those decades.

## SCENARIO 2

### A 2000 Retirement Date

Now let's consider a more recent case: an investor retiring in 2000 using the same assumptions from our first scenario, although there are only data to cover part of a 30-year retirement. Assuming the same starting balance and use of the 4% rule, this retiree would start withdrawing \$1,667 per month in the first year of retirement and adjust each year based on actual inflation to maintain purchasing power.

In this scenario, the investor encounters the bear market that started in March 2000 as well as the great financial crisis of 2008. The S&P 500 lost 49% between March 2000 and October 2002 and just over 56% between October 2007 and March 2009. However, working in the investor's favor during this period was a benign inflationary environment.

The portfolio in this scenario declines to nearly \$300,000 in February 2009, but a subsequent period of

**Working in investors' favor has been the remarkably strong stock market performance of the last three calendar years in addition to the almost 10 years of market gains prior to 2018.**

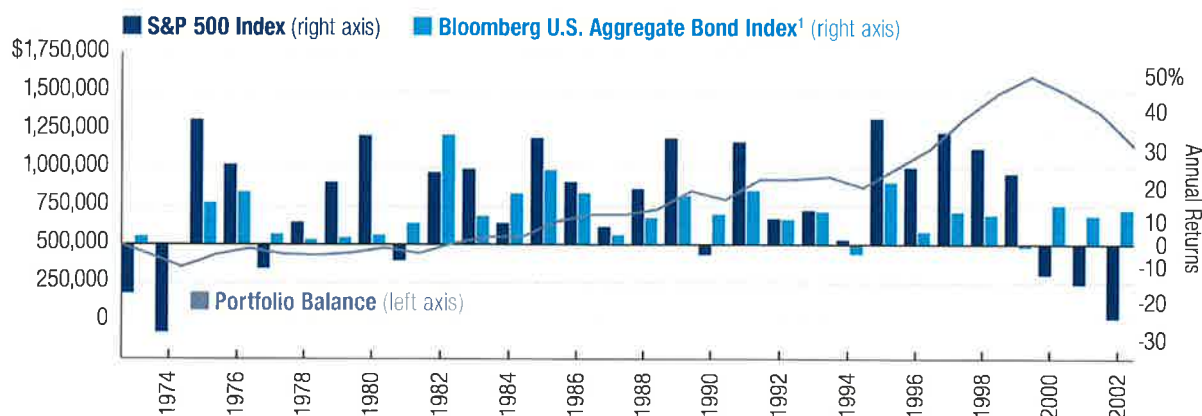
— Judith Ward, CFP®,  
thought leadership director

strong market growth helped it rebound—in this case, to over \$538,000 as of year-end 2021. (See “Retiring in 2000,” on page 14.)

This rebound coupled with a conservative withdrawal approach has helped this investor prepare to weather this most recent market volatility as their portfolio balance dropped to about \$503,000 by March 31, 2022. Although this investor is over two-thirds into a 30-year retirement horizon, they appear to be on a sustainable path so far. Using a

### Retiring in 1973

Newly retired investors weathered a large market decline early in their 30 year retirement.



Monte Carlo projection model to assess the next eight years of retirement,<sup>3</sup> we find the portfolio will accommodate continued spending, resulting in a simulation success rate of more than 95%. That means out of the 1,000 market scenarios, the investor had at least \$1 remaining in more than 950 of them.

**SCENARIO 3**

**A 2008 Retirement Date**

Now let’s consider a most recent case: an investor retiring in 2008 using the same assumptions from our other scenarios. Today, this retiree would be almost halfway through a 30-year retirement horizon. Assuming the same starting balance and use of the 4% rule, this retiree would start withdrawing \$1,667 per month in the first year of retirement and adjust each year based on actual inflation to maintain purchasing power. In this scenario, the investor encounters the great financial crisis of 2008 when the S&P 500 lost just over 56% between October 2007 and March 2009 and the pandemic-related downturn in early 2020. Working in investors’ favor, however, has been the remarkably strong stock market performance of the last three calendar years in addition to the almost 10 years of market gains prior to 2018.

The portfolio in this scenario declines to about \$326,000 in February 2009, but a subsequent period of strong market growth helps it rebound—in this case, to over \$870,000 as of year-end 2021. (See “Retiring in 2008.”)

This investor is about 14 years into a 30-year retirement horizon and appears well positioned to tackle future uncertainty even as their portfolio balance dropped to about \$819,000 by March 31, 2022.

Using a Monte Carlo projection model to assess the next 16 years of retirement,<sup>4</sup> we find the portfolio will accommodate continued spending, resulting in a simulation success rate of more than 95%.

And, stress-testing the portfolio assuming a 20% drop of the balance to \$655,788 and inflating future spending amounts by 9% over the next 16 years, the simulation success rate does drop to 78%. While it is a significant drop, it’s still within a moderate range of confidence.

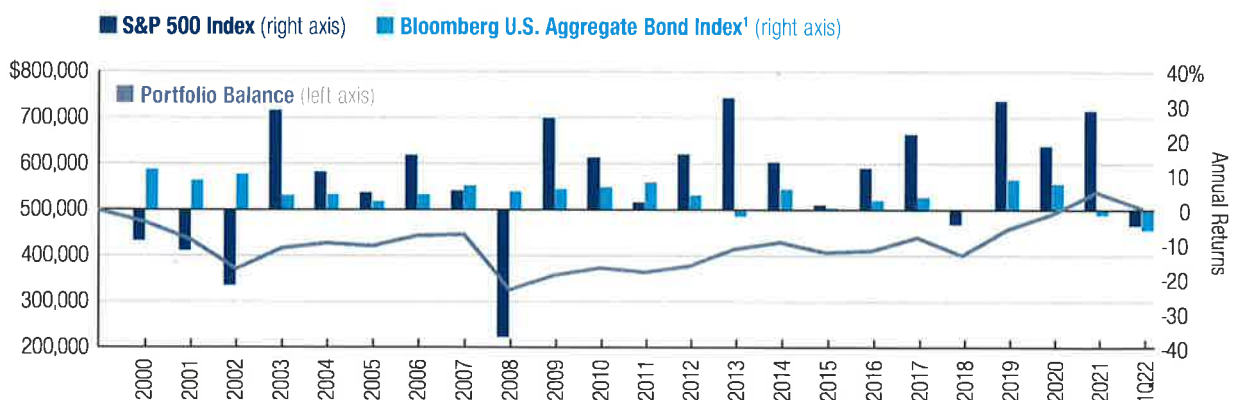
It is important to reassess the situation each year. For example, should the market continue to slide and a high inflationary environment persist, then spending adjustments may be warranted, but the approach can be measured rather than a panicked response.

**Approaching retirement and the unknown**

The idea of retirement itself may be overwhelming for many investors. And for those nearing or in retirement, it can be unsettling to see the market tumble. History

**Retiring in 2000**

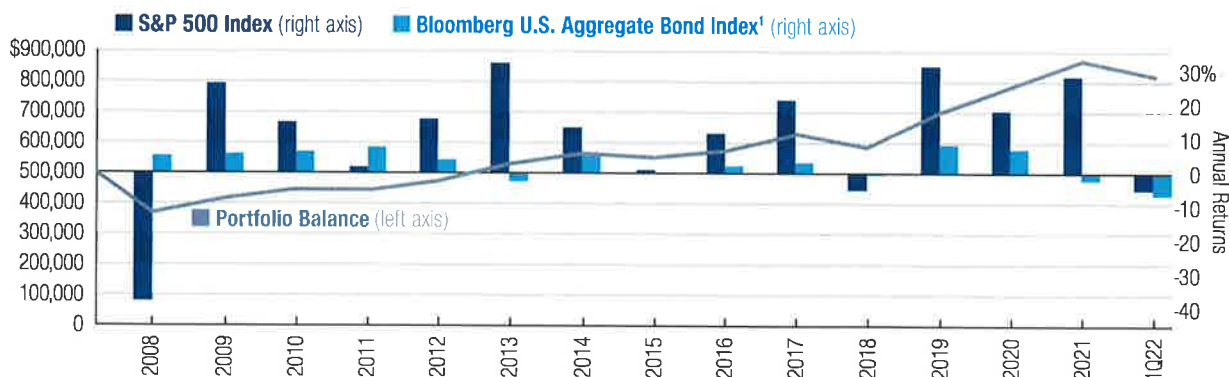
People entering retirement at this time faced two massive market declines in the first 10 years.



PHOTOGRAPH BY DANIEL CUI

## Retiring in 2008

Working in the favor of 2008 retirees is the strong stock market performance of the last three calendar years in addition to the almost 10 years of market gains prior to 2018.



has shown that down markets have typically been followed by healthy market recoveries. Investors have benefited from unprecedented market gains over the last dozen years. As a result, their portfolios may be able to withstand inflationary pressures and higher spending needs over the short term.

Additionally, these scenarios assume the investor didn't adjust their behavior due to the inevitable anxiety steep market losses likely caused. It's human nature to adapt and adjust, and retirees would likely want to modify their plans in some way. In fact, our research shows that, on average, every year from age 65 onward, inflation-adjusted retiree spending goes down about 2%.<sup>5</sup> If investors feel the need to make changes, systematic adjustments to spending can help

sustain portfolio balances throughout retirement. These seem like actions most retirees expect to make, which could give them an even larger margin of safety in the long term.

By following a conservative withdrawal approach early in retirement and planning for temporary adjustments along the way (if needed), retirees can weather the markets and have a truly fulfilling and enjoyable next phase of life. ■

### NEXT STEPS

Test out different scenarios for your retirement at [troweprice.com/ric](https://www.troweprice.com/ric).



<sup>1</sup>Benchmark reflects the Bloomberg Government/Credit U.S. Bond Index for the period 1973-1975 and the Bloomberg U.S. Aggregate Bond Index from 1975 to the present. <sup>2</sup>Consumer price index, seasonally adjusted. <sup>3</sup>We used the Monte Carlo analysis and assumed the following: an 87-year-old living with no spouse/partner in retirement with a balance of \$503,161 as of 3/31/22 and a hypothetical portfolio composed of 60% stocks and 40% bonds and ongoing monthly withdrawals from the portfolio starting at \$2,753 and increasing 3% annually to account for inflation. This resulted in a simulation success rate (i.e., the investor has at least \$1 remaining in the portfolio at the end of retirement) of 99% based on 1,000 market scenarios. No Social Security or other income was considered as we were only assessing the impact of withdrawals on personal savings. To assess a further decline of 20%, we decreased the starting portfolio balance to \$402,529 and increased the \$2,753 monthly withdrawal amount by 9% annually, which resulted in a simulation success rate of 93%. <sup>4</sup>We used the Monte Carlo analysis and assumed the following: a 79-year-old living with no spouse/partner in retirement with a balance of \$819,735 as of 3/31/22 and a hypothetical portfolio composed of 60% stocks and 40% bonds and ongoing monthly withdrawals from the portfolio starting at \$2,198 and increasing 3% annually to account for inflation. This resulted in a simulation success rate (i.e., the investor has at least \$1 remaining in the portfolio at the end of retirement) of 99% based on 1,000 market scenarios in each example. No Social Security or other income was considered as we were only assessing the impact of withdrawals on personal savings. To assess a further decline of 20%, we decreased the starting portfolio balance to \$655,788 and increased the \$2,198 monthly withdrawal amount by 9% annually, which resulted in a simulation success rate of 78%. <sup>5</sup>Source: T. Rowe Price estimates from Health and Retirement Study (2001-2015).