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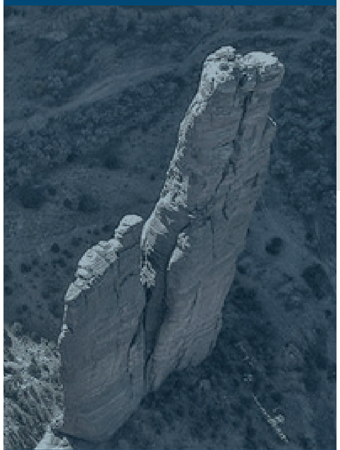

Solving the 60/40 Portfolio Problem

Using options for income, diversification, and tax management

How an 80/20/40 portfolio of stocks, bonds, and an option overlay may be a better solution for today's market

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KEY TAKEAWAYS:

» A traditional 60/40 portfolio may be challenged during a period of higher inflation and interest rates coupled with rising correlations between equities and fixed income.

» An 80/20/40 portfolio with an option overlay to generate income and diversify equity exposure is a potential solution.

» Working with an experienced partner that specializes in option strategies can make it easy to implement 80/20/40 portfolios with minimal tax consequences.

The traditional 60/40 portfolio—a mix of 60% stocks and 40% bonds—is suffering through one of its worst periods in history. Although the demise of the 60/40 portfolio has been predicted before, investors may now face a new regime of high inflation and rising correlations between equities and fixed income.

It's been a tough year for 60/40 portfolios. In late October 2022, most 60/40 portfolios were down nearly 20% and on track for one of their worst performance years in a century.[1] The most common way to measure 60/40 performance is a portfolio of 60% in the S&P 500 Index and 40% in the Bloomberg US Aggregate Bond Index.

For investors in hard-hit 60/40 portfolios, there is an alternative that may provide diversification without triggering adverse tax consequences, and may exhibit a better risk-reward profile, with lower volatility.

> "60/40 portfolios suffered one of their worst years in a century in 2022 due to losses in both stocks and bonds."

The answer for challenged 60/40 portfolios:

An 80/20/40 portfolio comprised of 80% stocks, 20% bonds, and a 40% option overlay that sits on top of the 80/20 portfolio. The option overlay is a call writing program—the investor essentially sells call options for income, hedging the equity allocation, subsequently lowering volatility and supplying further diversification.

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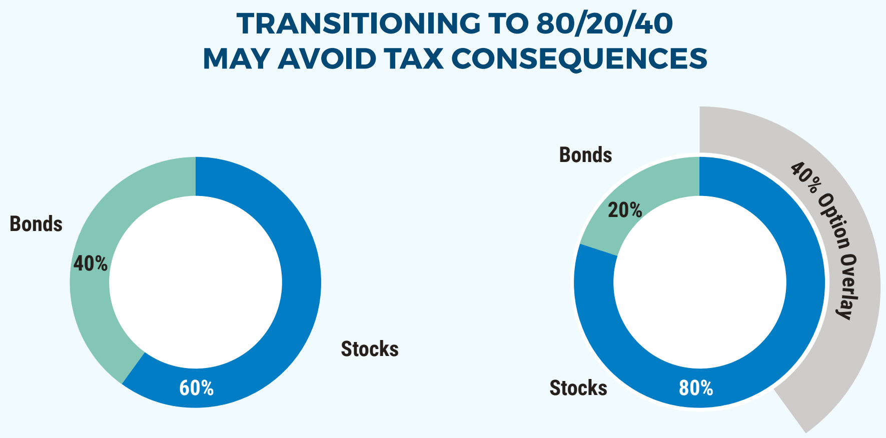
FIGURE 1: TRANSITIONING FROM 60/40 TO 80/20/40

Investors can transition from a traditional 60/40 portfolio to an 80/20/40 portfolio with an option overlay to provide potential diversification and income without triggering a taxable event.



Source: SpiderRock Advisors.

But before getting into technical details of how an 80/20/40 portfolio works, it's helpful to take a step back and examine the current market environment, the history of traditional 60/40 portfolios, and why 80/20/40 might be a better solution now.

60/40 portfolios and the end of the 'Great Disinflation?'

The long 40-year period of low inflation and declining interest rates has been a major tailwind for 60/40 portfolios. Indeed, ever since former Federal Reserve Chairman Paul Volcker broke the back of inflation in the 1980s, U.S. Treasury yields have been in a protracted decline. Interest rates, though, may have hit bottom in the midst of the COVID-19 pandemic in the fall of 2020.

FIGURE 2: ARE RISING INTEREST RATES THE NEW NORMAL?

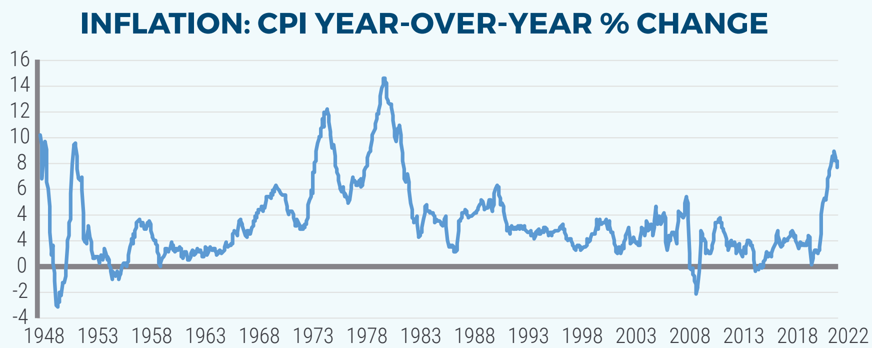
The secular downtrend in interest rates that lasted for 40 years may have come to an end, with potential consequences for traditional 60/40

Source: Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis [DGS10], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/DGS10, November 21, 2022.

One significant reason why rates may continue to rise from here: inflation. Inflation as measured by the Consumer Price Index was running at more than 8% year-over-year in early 2022. Inflation is at the highest level in about 40 years.[2]

FIGURE 3: RISING INFLATION IS NOT IDEAL FOR 60/40 PORTFOLIOS

Supply shocks, monetary and fiscal stimulus, and other factors pushed inflation above 8% in early 2022. Inflation is a major headwind for bond investors and may also trigger higher volatility in the stock market.



Source: U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in U.S. City Average [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CPIAUCSL, November 21, 2022.

The recent rise in interest rates and resulting price declines in investment-grade bonds have been very tough on investors who rely on them for a safe haven and diversification. Essentially, the recent decline in bond prices has wiped out several years' worth of income—and the longer the bond duration, the worse the damage. For the 12 months ended November 14, 2022, the S&P U.S. Treasury Bond Current 2-Year Index was down 4.7%, while the S&P U.S. Treasury Bond Current 30-Year Index lost 34.2%.[3] For investors nearing or in retirement, these losses can be particularly painful and difficult to recoup. And of course, high inflation is bad news for bond investors because their fixed-rate income loses purchasing power on an inflation-adjusted basis.[4]

> **“Inflation is at the highest level in about 40 years.”**

Overall, the macroeconomic picture is summed up by the potential of a further rise in rates and inflation, coupled with volatile equity markets and compressing valuations. Suffice it to say it's not an ideal environment for 60/40 portfolios which are coming under fire from all directions following above-average returns the past decade.

Reaching for yield may not be the answer

Although 60/40 portfolios have been hit on both sides recently, it's the big setback in bonds that likely worries investors most. For 2022 through the end of October, the Bloomberg U.S. Aggregate Bond Index was down 15.5% and on track for the worst year in the benchmark's history.[5]

When bond yields are unattractive or when investors absorb bond losses, they may be tempted to try and make up the difference by taking on more risk in search of yield. That may not make a lot of sense for 60/40 portfolios because two key roles of the bond allocation are safety and diversification from the equity allocation.

Reaching for income with high-yield bonds, for example, could be a mistake. High-yield bonds are more volatile than U.S. Treasuries and investment-grade bonds. High-yield bonds are also sensitive to the economy and can move in the same direction as stocks.

> **“Reaching for income with high-yield bonds could be a mistake.”**

The correlation conundrum

Looking ahead, a potential change in the correlation regime between stocks and bonds might be the biggest challenge for 60/40 portfolios. It's almost accepted doctrine that stock and bond prices move in opposite directions. In other words, they have a negative correlation.

After all, the idea that Treasuries are a safe haven during stock market sell-offs is a lynchpin of the 60/40 story. Treasury bonds were an effective hedge during the tech sell-off in 2000 and the financial crisis in 2008, for example.

But investors who study market history know that there have been long periods when stocks and bonds moved together, or had positive correlations. These periods of higher correlations took place at times during the 1970s, 1980s, and 1990s. In particular, stocks and bonds tend to move lower during inflationary supply shocks like investors have experienced recently.[6] This year has been difficult for diversified investors because correlations between stocks and bonds are high and both asset classes have negative returns.[7]

> **“A potential change in the correlation regime between stocks and bonds might be the biggest challenge for 60/40 portfolios.”**

If we are moving to a period of increased correlations between stocks and bonds, the diversification benefit of 60/40 portfolio will lose a lot of its shine.

It wouldn't be surprising if stubborn investors cling to a traditional 60/40 portfolio though, even if the pain continues. That's because the past decade has been very kind to this simple approach. Over the past decade, the classic 60/40 portfolio has delivered a respectable 11.1% annualized return, nearly double its long-term average of 6%.[8]

The question, of course, is if we are entering a period of lower returns for 60/40. It certainly wouldn't be unprecedented. For example, during the “lost decade” from January 2000 through December 2009, a 60/40 portfolio lost value on an inflation-adjusted basis.[9]

Building 80/20/40 portfolios without a tax hit

An 80/20/40 portfolio is an elegant solution for investors looking for an alternative to 60/40.

To build an 80/20/40 portfolio from an existing 60/40, investors start by increasing the equity allocation from 60% to 80%. The bond allocation is reduced from 40% to 20%. Finally, a 40% option overlay is engineered to sit on top of the 80/20 portfolio.

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Investors may be able to transition to an 80/20/40 portfolio without any tax consequences because they may have losses in the bond positions they're selling.

The option overlay (call writing program) is 40% and intentionally designed to be half of the 80% equity allocation in order to maintain the risk profile of a 60/40 portfolio. In the overlay, investors are selling (writing) S&P 500 Index call options and generating income through the call option premium. The difference between implied vs. realized volatility is a persistent and structural source of alpha that options have historically provided.

The call premium generated by selling equity options increased dramatically at the beginning of the COVID-19 pandemic, and intermediate-dated volatility remains elevated, relative to the last several years. These higher volatility levels translate directly to higher call option premiums.

Selling call options also buffers against an equity drawdown. The trade-off for this protection is that investors don't capture 100% of the upside in equity markets.

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The option overlay may also help investor behavior during periods of equity weakness. The option premium can be used to deliver the income investors need to meet their spending requirements in times of market drawdowns. Rather than being forced to sell shares of stock while prices are lower (selling low), call premium is there when investors need it most.

Another benefit of the option overlay is that selling call options tends to have a negative correlation to the equity market. That diversification benefit may be valuable if stocks and bonds continue their recent positive correlation.

Putting it all together

In a period of rising interest rates and inflation, investors may have to rethink traditional 60/40 portfolios, especially with the headwinds for bonds.

An 80/20/40 portfolio with an option overlay seeks to provide similar overall market exposure as a traditional 60/40 portfolio, but with lower interest-rate risk. Compared to bonds, the overlay may exhibit a lower correlation to equities, which may improve diversification. Option premiums are elevated, which may provide more income generation from the overlay. Finally, investors may be able to build 80/20/40 portfolios in a tax-neutral transition.

Partnering with an experienced options manager can help deliver 80/20/40 portfolios that combine the benefits of options and separately managed accounts (SMAs) along with control and customization.

FIGURE 5: 60/40 PORTFOLIOS VS. 80/20/40 PORTFOLIOS

This table shows how 60/40 portfolios and 80/20/40 portfolios stack up in terms of sensitivity to stock market volatility (beta), income, interest-rate risk, and correlation with stocks. Beta is measured by the portfolio's volatility versus the S&P 500 Index.

	60/40 PORTFOLIOS	80/20/40 PORTFOLIOS
BETA	0.6	0.6
INCOME	Based on bond portfolio income and stock dividend yield.	Based on bond portfolio income and stock dividend income, as well as income from selling equity call options in the overlay.
INTEREST-RATE RISK (DURATION)	Based on duration of bond portfolio.	Half the duration of a comparable 60/40 portfolio due to a lower 20% bond allocation (rather than 40%).
CORRELATION WITH STOCKS	Bonds historically have a correlation of 0.3 vs. the S&P 500 Index.	Bonds historically have a correlation of 0.3 vs. the S&P 500 Index. The option overlay typically has a negative correlation with stocks, increasing diversification.

Historical bond correlation with stocks based on Bloomberg U.S. Aggregate Bond Index and the S&P 500 Index.

Source: SpiderRock Advisors.

ENDNOTES

1. "Stocks are cheap, but still not cheap enough vs bonds," Reuters.com, October 26, 2022.
2. "US inflation rate slows but remains close to 40-year high," The Guardian, May 11, 2022.
3. S&P Dow Jones Indices, as of November 14, 2022.
4. "Is the 60/40 Dead?", Goldman Sachs Asset Management, October 15, 2021.
5. Bloomberg, as of October 31, 2022.
6. "When stocks and bonds fall together," The Evidence Based Investor, May 10, 2022.
7. "What's Next for the Relationship Between Stocks and Bonds," Morningstar.com, October 17, 2022.
8. "Is the 60/40 Dead?", Goldman Sachs Asset Management, October 15, 2021.
9. "Is the 60/40 Dead?", Goldman Sachs Asset Management, October 15, 2021.

ABOUT US

SpiderRock Advisors is an asset management firm focused on providing customized option overlay strategies to advisors and institutions. Combining world-class technology with comprehensive derivative expertise, we are making it easy for institutions and financial advisors to add option strategies to their investment portfolios.

DAVE DONNELLY | MANAGING DIRECTOR

Dave is responsible for business development and client portfolio management at SpiderRock Advisors. He began his career at Lord, Abbett & Co. in 2003, and has since worked closely with advisor and institutional clients across a range of products, including traditional equity and fixed-income, managed futures, volatility arbitrage and private equity. Prior to SpiderRock Advisors, Dave was the Founder and President of the quantitative strategy firm Strategic Alpha. Dave earned his undergraduate degree in Mathematics and Economics from the University of Illinois at Urbana-Champaign, and received an MBA from the University of Chicago Booth School of Business.

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