

IN THIS PAPER: With a challenging market expected ahead, the classic 60/40 stock/bond strategy will likely struggle to build wealth and fund retirement spending for investors. Allocating some traditional core bond exposure to a fixed index annuity could change the game.

EXECUTIVE SUMMARY: THE BIG PICTURE

The time-tested 60/40 portfolio faces a new test today, with market returns likely to be a challenge. The risks are intensified for retirees who regularly withdraw money from their accounts: big market declines early in retirement could create a much greater likelihood of running out of money.

It's more important than ever for savers to use every tool at their disposal to build up their retirement accounts and—ultimately—improve their potential retirement outcomes. These tools include enhancing the return path, or sequence of returns, through better up/down capture: improving a portfolio's participation in rising markets (better up capture) while reducing losses in down markets (better down capture).

A wide array of market-based solutions may improve a portfolio's beta—its volatility relative to the market's. Annuities may also offer the opportunity to enhance portfolios in such a way. The fixed index annuity, for example, has a structure that, substituted for part of a traditional core bond allocation, may improve retirement accumulation outcomes.

And with the addition of an optional guaranteed lifetime income benefit, the 60/40 portfolio with the integrated fixed index annuity (FIA) may also improve retirement income. It beat the traditional 60/40 over 98% of the time, with an average outperformance of 9.9% in winning periods (see page 7 for details). That's almost 10% more spending in terms of dollars supporting retirement living.

Based on our research, substituting a fixed index annuity for part of the core fixed-income allocation could help consumers build more assets during their working years. What's more, for people who prioritize retirement income, attaching a lifetime income option to the fixed index annuity may improve spending rates in retirement.

THE CLASSIC PORTFOLIO HAD DECADES OF SUCCESS...

"Buy low, sell high." "The trend is your friend." "Don't stay on the sidelines."

Those axioms seem as old as the markets themselves, and so does the classic balanced portfolio formula of US stocks and bonds. The 60/40 has probably been the most popular mix: 60% stocks and 40% bonds. Historically, stocks have delivered capital growth, while bonds have provided income and diversification—that's a critical feature when equity markets tumble.

The 60/40 portfolio has been a staple of basic asset allocations for decades, providing solid-to-strong total returns with moderate risk. Sure, there have been down markets along the way, but since the beginning of the Reagan administration, in January 1981, a simple mix of 60% S&P 500 and 40% Bloomberg Barclays US Aggregate Bond Index (Display 1) would have delivered a total return of 10.5% annualized, with 9.8% annualized risk.

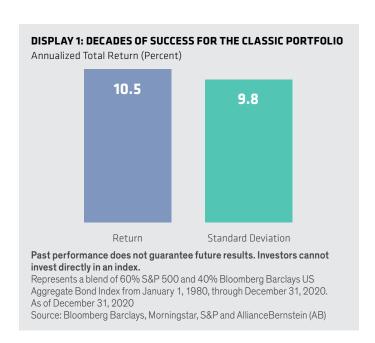
...BUT FACES TOUGHER SLEDDING AHEAD

Of course, another well-known axiom is that past performance does not guarantee future results, and that often-repeated warning may never have been timelier than it is today.

In AB's view, equity markets face tougher sledding ahead, with economic growth likely to be below normal. Lower growth will likely translate into lower corporate profits and stock returns. With the uncertainty of the COVID-19 pandemic and a host of populistinspired macro risks—including Brexit, trade wars and a decline in globalization-potential missteps abound.

In the fixed-income world, interest rates are at or near record lows and are likely to stay that way for a long while, given accommodative monetary policy and the growing weight of government debt. We believe that this landscape erodes the return potential and diversification of traditional core high-quality bonds.

Considering all these factors together, it's no surprise that most financial professionals see capital markets heading for a period of lower returns and higher risk (Display 2, page 2).



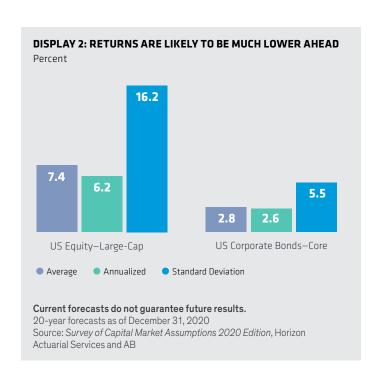
THE SEQUENCE OF PORTFOLIO RETURNS MATTERS

The challenges ahead would be hard for anyone to navigate, but the risks are magnified for retirees, who are regularly withdrawing money from their accounts to support income in their next phase.

A big part of the problem? Return patterns. For pre-retirees who are building assets and don't need major cash withdrawals, the chronological order of periodic returns doesn't matter. If markets decline for a lengthy period, the playbook says to hang on, put incoming paychecks to work in cheaper assets and ride out the downturn until the market rebounds.

But the math is different for retirees, and the sequence of portfolio returns is incredibly important.

Not only do retirees no longer have incoming paychecks, but they're also actually starting to pull money out of their accounts to fund income needs in their post-working years. If equity markets decline early in retirement, portfolio withdrawals remove some of the assets that can help a retirement account rebuild as markets recover. This scenario could increase the odds of running out of money in retirement.



THE RETIREMENT INCOME CHALLENGE...MAGNIFIED

Based on a common rule of thumb, retirees with 60/40 portfolios should be able to withdraw 4% from their accounts annually over a 30-year retirement period and have fairly good chances of making it all the way through retirement without running out of money.

That rule may have made sense over the past four decades, when a classic 60/40 portfolio was pumping out returns in excess of 10% annually. These strong returns enabled retirees to make 4% withdrawals, while still leaving a significant cushion against the risk of an unfavorable return sequence. Today, however, with savers facing lower returns and higher risks ahead, that cushion will likely be a lot smaller. This possibility leaves tough decisions—including working longer or paring down spending in retirement.

Given the high stakes in retirement saving today, it's more important than ever for savers to use every tool at their disposal to build up their retirement accounts and—ultimately—improve potential retirement outcomes.

BUILDING A BETTER PATH THROUGH PORTFOLIO DESIGN

Those tools include building a better return path: if unfavorable return sequences can hurt retirement savings, it may make sense to design a portfolio that can improve that sequence.

Building a better path really comes down to building an asset allocation that improves a portfolio's up/down capture—in other words, the balance between how much a portfolio participates in rising markets and how much it loses in down markets. Even a modest improvement in a portfolio's up/down capture may make a big difference in the return path.

For example, a portfolio that captures 90% of rising equity markets (aka a 90% up capture) and 80% of falling markets (an 80% down capture) doesn't seem radically different from the returns of the broad markets. But it has the potential to largely keep pace with the S&P 500 in strong markets and may actually outperform it over the long run—helped by its design to lose less than the market.

When it comes to portfolio construction, people have many choices as they seek better betas. Among them are diversifying bond exposure with additional income-generating securities and substituting high-yield bonds for some part of a portfolio's equity exposure. Another example of better beta may be focusing on quality stocks rather than tracking a broad equity index.

ANNUITIES AS BETTER BETAS

In addition to the previously mentioned better betas, retirement savers may have another tool at their disposal: accessing better betas through products such as annuities, whose diverse designs and structures may also allow them to improve on broad market exposures.

Among the annuity choices for savers is the fixed index annuity, which offers return potential above that of high-quality core bond strategies without any downside risk. What is a fixed index annuity? It's a retirement savings vehicle that combines tax-deferred growth potential, principal protection and the opportunity for lifetime income, backed by the claims-paying ability of the issuing insurance company. The interest earned is the performance of an underlying index, such as the S&P 500 or MSCI EAFE Index. Insurance companies may use price return indices, which exclude dividend earnings.

Depending on the account chosen, interest may be capped at a maximum rate or adjusted by a certain percentage set by the annuity issuer. Since assets aren't invested directly in an index, the value of the fixed index annuity isn't affected by market downturns, and consumers will never lose principal or the interest they earn. For savers concerned about outliving their retirement income, there's also the option in many fixed index annuities to elect a guaranteed lifetime income rider that ensures payments for life—even if the account value is depleted. Guarantees are backed by the claims-paying ability of the issuing insurance company.

The fixed index annuity's structure provides steady income payments and the ability to diversify a portfolio, which may help reduce the impact of equity market downturns. It gives savers another avenue to improve their portfolio's up/down capture, with principal protection and the opportunity for tax-deferred growth.

Fixed index annuities are becoming more popular among those seeking to build assets for retirement and enhance their retirement income. Annuities should be considered a long-term proposition: while savers are building wealth, they should be prepared to rely on current income sources and other portfolio assets to fund potential near-term liquidity needs. This will also avoid charges on premature withdrawals, or tax penalties for annuity withdrawals before age 591/2.

Given the ability of annuities to deliver better betas, we think there's a strong case to be made for broadly integrating annuities as a separate asset class alongside others, such as stocks and bonds. These solutions include using the fixed index annuity to augment a traditional core fixed-income allocation.

ROAD TESTING A NEW CORE ALLOCATION

Let's take a closer look at whether the fixed index annuity, substituted for some part of a core fixed-income portfolio allocation, can improve outcomes during the retirement accumulation phase. We'll also assess whether a fixed index annuity with an optional guaranteed lifetime income rider can improve retirement income results.

Let's start by comparing two portfolios. The first is the highly popular 60/40 mix—in this case, 60% S&P 500 and 40% Bloomberg Barclays US Aggregate Bond Index. The second portfolio enhances that mix by shifting half the bond allocation into a fixed index annuity. The resulting allocation for the Fixed Index Annuity (FIA) Enhanced Portfolio is 60% S&P 500, 20% Bloomberg Barclays US Aggregate Bond Index and 20% fixed index annuity.

DISPLAY 3: ASSET-CLASS RETURN ASSUMPTIONS

Percent

	S&P 500	Bloomberg Barclays US Aggregate Bond Index
Arithmetic Mean	7.4	2.8
Standard Deviation	16.2	5.5

Current forecasts do not guarantee future results.

Based on return distributions from 5,000 simulations of future returns from JourneyGuide retirement-planning software over a 10-year period starting December 31, 2020 Source: JourneyGuide

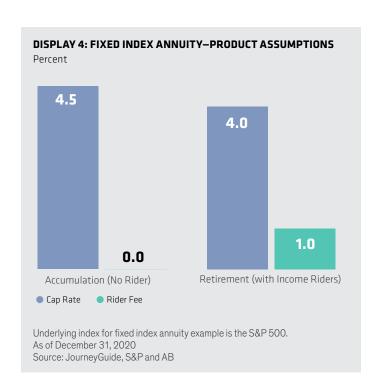
Based on 10-year return forecasts as of December 31, 2020, the mean annual return for stocks will be 7.4% and for bonds 2.8% (Display 3). The fixed index annuity we'll integrate is based on the price return of the S&P 500, with associated fees and cap rates (Display 4, page 4). Fixed index annuity providers also offer custom multi-asset indices, created by leading banks and asset managers, with unique features that often produce attractive rates. For this analysis, we'll use the S&P 500 because it's broadly popular and more straightforward to model.

ACCUMULATION: THE FIXED INDEX ANNUITY DRIVES BETTER SAVINGS

The first evaluation we'll make is in the accumulation phase, testing to better understand whether the fixed index annuity allocation can do a better job of building wealth. Specifically, we're looking to answer four questions about the FIA Enhanced Portfolio:

- 1. Is it more likely to accumulate more assets than the 60/40?
- 2. When it wins, is the margin bigger than the losing margin when it falls short of the 60/40?
- 3. Does it fare better in the extremes (the 90th and 10th outcome percentiles)?
- **4.** Does it look more or less attractive versus the 60/40 if rates stay ultralow for a long time?

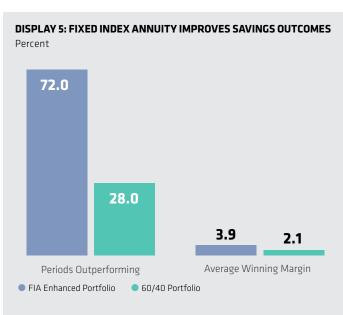
To answer these questions, we deployed a retirement-planning software tool, JourneyGuide. JourneyGuide can run thousands of simulations to assess the effectiveness of underlying indices for various annuity products. For our analysis, JourneyGuide ran 5,000



simulations of future returns over a 10-year period starting December 31, 2020, and evaluated the resulting return distributions.

Over a 10-year accumulation period (*Display 5*), the FIA Enhanced Portfolio built more wealth than did the 60/40 in 72% of the simulations. What's more, the FIA Enhanced strategy won by a bigger margin on average. When the FIA Enhanced won, it averaged a 3.9% winning margin; when the 60/40 won, it was by a much lower 2.1%. That's called a favorable return skew—the FIA Enhanced Portfolio won bigger than it lost. For a \$1 million portfolio evaluated across 5,000 simulations, the average advantage worked out to equal \$64,798 over 10 years.

Since averages can be deceiving, it's important to dig a little deeper into the magnitude of the differences among the outcomes. For example, when the differences in total 10-year wealth accumulations were the biggest, how much better or worse were the outcomes from each portfolio (*Display 6*)? Based on the simulations, when the FIA Enhanced Portfolio accumulated more in the extreme (represented by the 10th percentile of winning margins), it won by more than 7% over the 60/40.



Current forecasts do not guarantee future results.

The 60/40 Portfolio represents a blend of the total returns of 60% S&P 500 Index and 40% Bloomberg Barclays US Aggregate Bond Index. Price returns would be lower. The FIA Enhanced Portfolio represents 60% S&P 500 total return, 20% Bloomberg Barclays US Aggregate Bond Index total return and 20% fixed index annuity return based on the S&P 500 Index price return. Taxes are omitted, as assets are assumed to be held within qualified retirement vehicles. Based on distributions from 5,000 simulations of future returns provided by JourneyGuide retirement-planning software over a 10-year period starting December 31, 2020. Source: Bloomberg Barclays, JourneyGuide, S&P and AB

DISPLAY 6: PERFORMANCE MARGIN OF FIA ENHANCED PORTFOLIO VS. 60/40 PORTFOLIO

FIA Enhanced Portfolio Performance Margin by Percentile

90%	75%	50%	25%	10%
-2.35%	-0.34%	2.02%	4.65%	7.04%

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STRESS-TESTING BETA IN AN **ULTRALOW-RATE ENVIRONMENT**

These aren't normal times, given the long-term downward trend in interest rates, accommodative Federal Reserve monetary policy and massive fiscal spending that's swelling the government debt overhang.

In this environment, today's ultralow interest rates may last for a while. As of December 31, 2020, the 10-year US Treasury yield was near 0.9% and the Bloomberg Barclays US Aggregate Bond Index yield was about 1.1%. The JourneyGuide simulation assumptions suggest that yields will eventually rise over the next 10 years, resulting in the overall average fixed-income return of 2.75%.

But what if yields don't get much better? We evaluated what might happen if core fixed-income returns—as defined by the Bloomberg Barclays US Aggregate Bond Index-fall short of 2.75% over the 10-year accumulation period (Display 7), averaging 2.25%, 1.75% and 1.25%.

It's not really a surprise that with lower bond returns, the FIA Enhanced Portfolio, which has allocated half its 40% core bond exposure to a fixed index annuity, outperforms the 60/40 more often and with a better skew of winning margins versus losing margins.

DISPLAY 7: FIA ENHANCED PORTFOLIO: OUTCOME AT VARYING BOND RATES

FIA Enhanced Portfolio Performance Margin by Percentile

BOND YIELD	90%	75%	50%	25%	10%	Frequency of FIA Enhanced Outperformance vs. 60/40	Average Losing Margin	Average Winning Margin
2.75%	-2.35%	-0.34%	2.02%	4.65%	7.04%	72.00%	-2.11%	3.89%
2.25%	-1.42%	0.61%	2.99%	5.65%	8.01%	80.60%	-1.89%	4.41%
1.75%	-0.48%	1.59%	3.98%	6.66%	8.98%	87.50%	-1.73%	5.02%
1.25%	0.47%	2.57%	5.00%	7.68%	10.03%	92.40%	-1.59%	5.74%

Current forecasts do not quarantee future results.

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Conversely, when the FIA Enhanced lost to the 60/40 portfolio by a large margin (represented by the 90th percentile), it lost by smaller margins: less than 1.5%, for example, in the 2.25% yield scenario.

The combination of traditional core bonds and the fixed index annuity in the FIA Enhanced Portfolio might also help retirement savers keep pace with inflation if it rises in the years ahead. Core bonds can be reinvested at higher rates as yields rise, and the fixed index annuity offers the opportunity for account growth as the underlying index increases in value.

So, based on the evidence, the FIA Enhanced Portfolio provides a better experience in the extremes during the accumulation phase, too. Of course, because these are not normal times, it's fair to ask how the FIA Enhanced would fare in an ultralow-rate environment. Based on these simulations, it fared quite well (see "Stress-Testing Beta in an Ultralow-Rate Environment," page 5).

THE INCOME PHASE: MORE RETIREMENT SPENDING WITH GUARANTEED INCOME

At some point, every saver moves out of the wealth-building phase and into the income phase, starting to tap into his or her accumulated wealth to fund life beyond the working years. In this chapter of life, income is the desired outcome.

To understand how the FIA Enhanced Portfolio performs during this period, we used the JourneyGuide simulation but extended the time horizon to 40 years: the 10 years of accumulation already modeled, followed by another 30 years withdrawing income in retirement. We used the same two portfolios: the 60/40 and FIA Enhanced. But this time, the FIA Enhanced Portfolio carried an optional guaranteed lifetime income rider, with the associated fee as well as a reduced cap rate.

To gauge whether the FIA Enhanced Portfolio with a lifetime income benefit improves retirement income, we zeroed in on three questions:

- **1.** How does the cost of the income benefit affect the FIA Enhanced Portfolio over the first 10 years, before income withdrawals start?
- 2. Which portfolio provides better chances of spending more in retirement?
- **3.** Which portfolio delivers more income at what we'll call a "safe-spending 90th percentile"?

DISPLAY 8: HOW THE FIA ENHANCED PORTFOLIO WITH INCOME RIDER FARED VS. THE 60/40 PORTFOLIO

FIA Enhanced Portfolio Performance Margin by Percentile

BOND YIELD	90%	75%	50%	25%	10%	Frequency of FIA Enhanced Portfolio with Rider Outperformance	Average Losing Margin	Average Winning Margin
2.75%	-5.04%	-3.00%	-0.57%	2.06%	4.53%	44.10%	-3.05%	3.01%
2.25%	-4.13%	-2.09%	0.35%	2.98%	5.49%	53.70%	-2.67%	3.33%
1.75%	-3.22%	-1.14%	1.29%	3.93%	6.47%	64.30%	-2.40%	3.65%
1.25%	-2.29%	-0.21%	2.23%	4.91%	7.40%	73.10%	-2.11%	4.10%

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The 60/40 Portfolio represents a blend of the total returns of 60% S&P 500 Index and 40% Bloomberg Barclays US Aggregate Bond Index. Price returns would be lower. The FIA Enhanced Portfolio represents 60% S&P 500 total return, 20% Bloomberg Barclays US Aggregate Bond Index total return and 20% fixed index annuity return based on the S&P 500 Index price return. Annuity includes optional guaranteed lifetime income rider, including the associated fee and reduced cap rate. Taxes are omitted from the accumulation phase, as assets are assumed to be held within qualified retirement vehicles. Annuity and portfolio withdrawals (accounting for required minimum distributions) are taxed at ordinary income tax rates for individuals, increase with inflation and incorporate the sunsetting of the Tax Cuts and Jobs Act in 2026. Standard deductions are assumed, as are state income taxes (using Indiana as an example). Based on return distributions from 5,000 simulations of future returns from JourneyGuide retirement-planning software over a 10-year period starting December 31, 2020, followed by an additional 30 years of retirement income withdrawals.

Source: Bloomberg Barclays, JourneyGuide, S&P and AB

DISPLAY 9: FIA ENHANCED PORTFOLIO WITH INCOME RIDER ENHANCES RETIREMENT SPENDING VS. 60/40 PORTFOLIO

FIA Enhanced Portfolio Performance Margin by Percentile

90%	75%	50%	25%	10%	Frequency of FIA Enhanced Portfolio with Rider Outperformance	Average Losing Margin	Average Winning Margin
3.69%	6.23%	9.22%	12.51%	16.17%	98.6%	-1.30%	9.86%

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The 60/40 Portfolio represents a blend of the total returns of 60% S&P 500 Index and 40% Bloomberg Barclays US Aggregate Bond Index. Price returns would be lower. The FIA Enhanced Portfolio represents 60% S&P 500 total return, 20% Bloomberg Barclays US Aggregate Bond Index total return and 20% fixed index annuity return based on the S&P 500 Index price return. Annuity includes optional guaranteed lifetime income rider, including the associated fee and reduced cap rate. Taxes are omitted from the accumulation phase, as assets are assumed to be held within qualified retirement vehicles. Annuity and portfolio withdrawals (accounting for required minimum distributions) are taxed at ordinary income tax rates for individuals, increase with inflation and incorporate the sunsetting of the Tax Cuts and Jobs Act in 2026. Standard deductions are assumed, as are state income taxes (using Indiana as an example). Based on return distributions from 5,000 simulations of future returns from JourneyGuide retirement-planning software over a 10-year period starting December 31, 2020, followed by an additional 30 years of retirement income withdrawals. Source: Bloomberg Barclays, JourneyGuide, S&P and AB

Not surprisingly, the adage "no such thing as a free lunch" applies to our stress-testing, too. If core bond returns averaged 2.75% over the 10 preretirement years, the income benefit was a drag on wealth accumulation: the FIA Enhanced Portfolio beat the 60/40 only 44.1% of the time (*Display 8*, page 6).

But the income rider's primary goal isn't to aid in accumulation: it's to enhance retirement spending (*Display 9*). And the FIA Enhanced Portfolio with lifetime income delivered on that score—beating the 60/40 a whopping 98.6% of the time, with an average winning income margin of 9.86% when it topped the 60/40.

That's almost 10% more spending in terms of dollars supporting retirement living.

Averages are important, of course, but markets don't deliver their average returns every single year. To gain more confidence in how a comfortable retirement is achieved, we needed to understand the distribution of potential retirement-spending outcomes. That's where the concept of a safe-spending rate comes in—specifically, a safe-spending 90th percentile.

In other words, how much could a retiree spend from his or her portfolio while maintaining a 90% probability of not running out of

money? For the 60/40, this spending value was \$28,185; for the FIA Enhanced Portfolio with rider, it was \$31,656. That's an extra 12.3% annual retirement spending by choosing the FIA Enhanced Portfolio with lifetime income rider—a big difference. To maximize the impact of the income rider, retirees should avoid excess withdrawals that could decrease income payments.

SUMMING IT ALL UP: A NEW CORE ALLOCATION

For four decades, a traditional 60/40 stock/bond strategy delivered strong results and helped retirement savers achieve their wealth-building and retirement-spending goals. Today, the landscape is different: market conditions pose real challenges for a 60/40, which makes it highly unlikely that this style portfolio will repeat its previous performance in the years ahead.

Based on our research, substituting a fixed index annuity for part of the core fixed-income allocation may help consumers accumulate more assets during their working years. What's more, for those people who prioritize retirement income, attaching a lifetime income option to that annuity may improve spending rates in retirement, both on average and at the 90% confidence level.

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