Upper-Left Quadrant

The best portfolios lie in this part of the risk/reward spectrum. By Craig L. Israelsen

During 2008, losses were dramatic in nearly every investment class. Domestic large-cap stocks (as measured by the S&P 500) lost 37%. Domestic small-cap stocks lost nearly 34% (using the Russell 2000 Index). Non-U.S. stocks (measured by the Morgan Stanley EAFE Index) lost 43.4%. Real estate (using the Dow Jones Real Estate Index) lost 39.2%. Commodities (S&P Goldman Sachs Commodity Index) lost 46.5%. Amid the chaos, however, U.S. intermediate government bonds returned 10.4%, and three-month Treasury bills produced 1.5%.

Turbulence in financial markets is not new. Nevertheless, enduring it can rattle even the most seasoned investors. Having a historical perspective of the behavior of various investment assets is the best defense against the panic and the rash decisions that often result from market gyrations. Moreover, understanding the historical behavior of various asset classes empowers individuals as they confidently utilize multiple assets when building investment portfolios.

You may want to share this asset-allocation review with your clients so they can understand the long-term effects of diversification. It really does work.

ONE ASSET

In "Stocks vs. Bonds," on page 114, yellow bars show the annual performance of domestic large-cap stocks (as measured by the S&P 500) from 1970 to 2008. The average annual return over the 39-year period was 9.5%. In 30 of the 39 years, or 77% of the time, the S&P 500 had a positive return. A \$10,000 investment in the S&P 500 on Jan. 1, 1970, grew to \$341,485 by Dec.



31, 2008. (Raw data for this study was obtained from Morningstar Principia.)

Blue bars show the annual performance of domestic bonds over the same 39 years. The year-to-year bond returns demonstrate a very different pattern. The Lehman Brothers Intermediate Government Bond Index had a negative return in only one year. Its average annual return was 8.1%, which grew a \$10,000 investment into \$210,633. As the graph demonstrates, stocks provide more growth potential than do bonds, but with significantly more volatility. As you know and your clients have learned, higher returns come with higher risks.

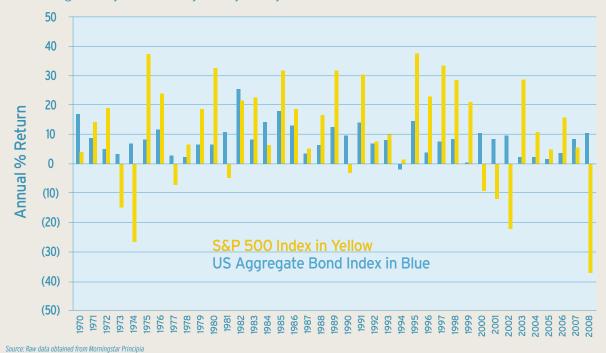
What investors want is obvious: the long-term performance of stocks with the downside protection of bonds. Investing solely in stocks or bonds provides the best (and worst) of one asset. By investing only in stocks, clients may reap higher gains, but they are exposed to the possibility of large losses. Conversely, investing in bonds is less risky, but clients often find themselves with a smaller account over the long haul—and may even find that their returns lag inflation.

SEVERAL ASSETS

One obvious solution is to combine stocks and bonds into a single portfo-

STOCKS VS. BONDS





lio. The result provides a risk/reward combination that is more desirable than either asset individually—a central tenet in modern portfolio theory. Indeed, prudent investing requires the construction of multi-asset portfolios.

"Asset Lineup," on page 116, shows the risk and return attributes of seven individual investment assets. For example, the worst three-year return for bonds was a positive 6.4%. Conversely, large U.S. stocks had a worstcase three-year loss of more than 37% (which occurred from 2006 to 2008).

There are also three portfolios in the table. The first is a simple two-asset portfolio consisting of U.S. stocks and U.S. bonds. The stock portion is given a 60% allocation and the bond portion has a 40% allocation, the mix commonly referred to as a balanced portfolio. At the end of each year the portfolio is rebalanced back to a 60/40 allocation.

The 60/40 portfolio had a 39-year average annual return of 9.4%, which

was very close to the return of the S&P 500 (which is a 100% stock portfolio). However, as a result of the stock/bond mix, the worst three-year loss was reduced to 13.9%. Thus, blending stocks and bonds almost completely maintained the performance of stocks, while cutting the risk in half. The portfolio effect (that is, the synergistic result of combining investment assets with different performance attributes) is evident.

The second portfolio is an age-based 60/40 portfolio, where the investor's age determines the percent allocation to bonds and the remainder is invested in a 60/40 portfolio. The impact of an age-based approach on risk and return was surprisingly subtle. The average annualized return was slightly higher at 9.4%, and the worst three-year loss was marginally reduced to 13.3%.

The third portfolio is an age-based multi-asset portfolio that combines all seven assets in equal portions. The investor allocates his or her age to bonds and the balance to the multiasset portfolio.

So, for example, a 40-year-old would invest 40% of his portfolio in bonds and the remaining balance of 60% into the multi-asset portfolio, which uses all seven individual assets in equal portions. A 65-year-old would invest 65% of her assets into bonds and 35% into the multi-asset portfolio.

This 39-year performance analysis assumes a 25-year-old investor in 1970. Each year the allocation to the bond index increases by one percentage point and the allocation to the 60/40 or the multi-asset portfolio decreases by one percentage point as the investor gets older.

AND THE WINNER IS . . .

The historical performance of an agebased multi-asset portfolio is impressive. Performance over the 39-year period was superior to either 60/40

ASSET LINEUP

1970-2008	Large U.S. Stock	Small U.S. Stock	Non-U.S. Stock	U.S. Bond Index	Cash	Real Estate	Commodities	60% Stock/ 40% Bond Portfolio	Age-Based 60/40 Portfolio	Age-Based Multi-Assed Portfolio
39-Year Average Annualized % Return	9.48	10.25	8.97	8.13	6.17	10.62	9.92	9.35	9.40	9.65
39-Year Standard Deviation of Annual Returns	18.20	22.72	23.08	5.36	3.13	20.09	25.56	11.47	10.70	6.12
Worst One-Year % Return	(37.00)	(33.79)	(43.38)	(1.75)	1.05	(39.20)	(46.49)	(18.03)	(16.76)	(3.36)
Worst Three-Year % Loss	(37.61)	(42.24)	(43.32)	6.43	4.22	(31.85)	(39.72)	(13.92)	(13.29)	11.66

UPPER-LEFT QUADRANT

Graphing the risk and return of the age-based multi-asset portfolio places it inside the desirable northwest corner (as shown by the purple hexagon).



portfolio, while at the same time exposing the investor to less risk than a 100% bond portfolio. Graphing the risk and return of the age-based multiasset portfolio places it inside the desirable northwest corner (as shown by the purple hexagon in "Upper-Left Quadrant," above).

Based on historical performance since 1970, building a portfolio that has upside potential as well as downside protection requires two vital elements. First, the portfolio must have adequate asset diversification. It needs to include more than two asset classes. The traditional 60% stock and 40% bond portfolio provides insufficient diversification. Utilizing seven different assets (in this case equally weighted) provides the needed level of diversification.

Second, the portfolio must have an age-appropriate asset allocation model through time. As the investor ages, the portion of the portfolio allocated to bonds (or some other low-risk asset) must increase. Combining a multi-asset portfolio with an age-based allocation to bonds achieves this second objective.

Finally, how did the age-based multi-asset portfolio perform in 2008? Assuming that the investor was 63 years old that year, the portfolio lost 3.4% (only its second annual loss in the 39year period). Assuming the investor was 45 years old, the portfolio lost 10%. By comparison, a traditional two-asset 60/40 portfolio lost 18% in 2008, while the S&P 500 lost 37%.

Investors and advisors want portfolios that can reside in the upper-left quadrant. Building an age-based multiasset approach can deliver that.

Craig L. Israelsen, PhD, is an associate professor at Brigham Young University. He is a principal at Target Date Analytics (www.TDBench.com) and designer of the 7Twelve Portfolio (www.7TwelvePortfolio.com).

TO TAKE THE CE QUIZ ONLINE, GO TO WWW.FINANCIAL-PLANNING.COM

