

Time - Can be your best friend

Matching a need - with an investment portfolio

I've determined how much I plan to spend (and gift) during years 10 through 15 (in the future). To support this plan, my portfolio will be invested for 12 ½ years (on average), the midpoint of this interval.

Many would suggest that an appropriate and common-sense asset mix would be 50% stocks and 50% bonds given this investment time horizon. No, not necessarily today, given current market valuations, but certainly as a normal average asset mix when one's investing for 12 ½ years.

Financial planning - My all-critical assumption

I've deposited sufficient funds into my new 50/50 portfolio, so that my needs/wants will be met during years 10 through 15. But, to accomplish this end, I had to assume a specific rate of return, a guess about the future. I assumed that my 50/50 portfolio would earn at least 6 ¾%. This seemed like a reasonable assumption to me.

But was it reasonable? To answer this question, I turned to history, examining what stocks and bonds returned during every possible 12 ½ year time period since 1919 (the last 102 years). Essentially, I'm asking the question: *"If I were to draw a random 12 ½ year period out of history, what's the chance that I would have earned at least 6 ¾%?"*

Historical results

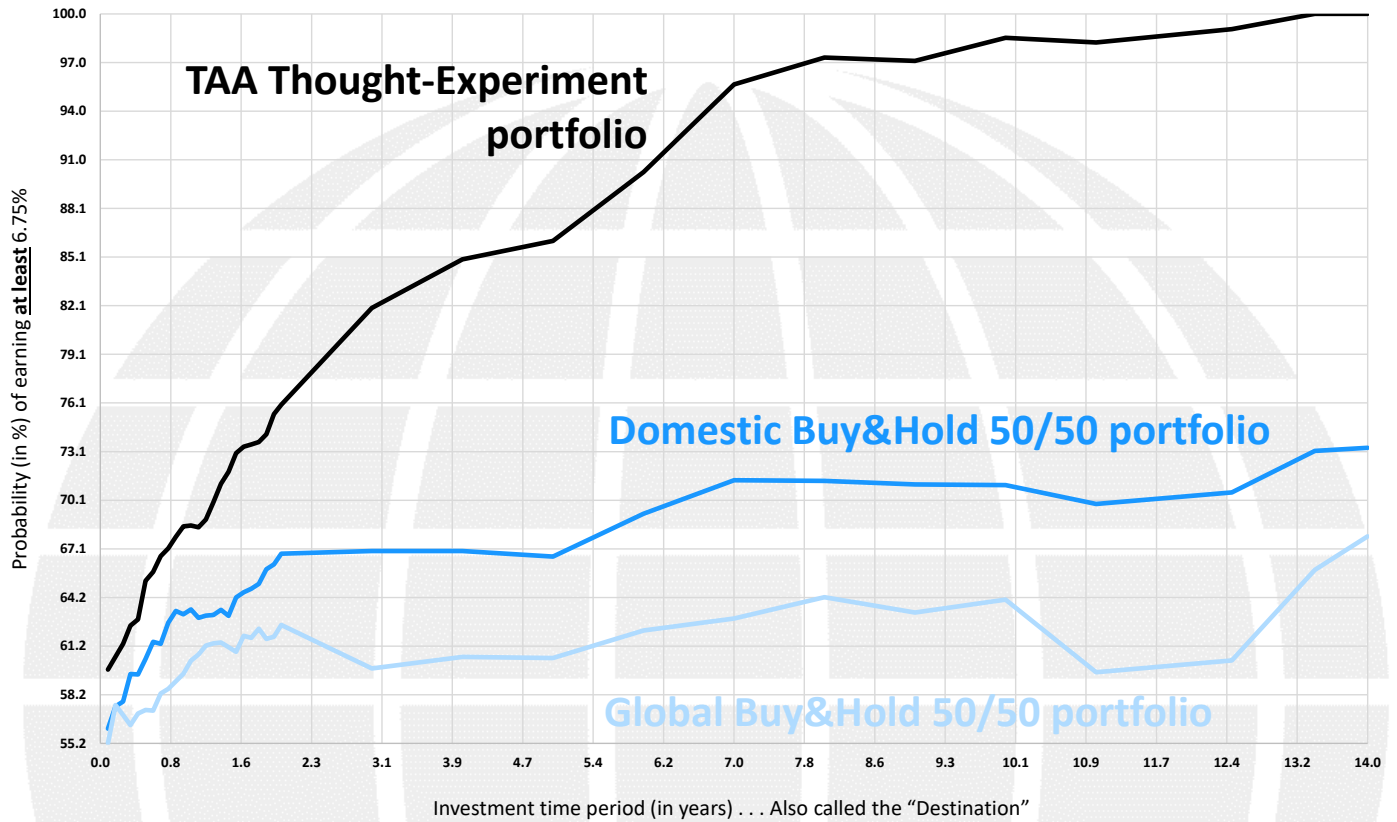
Let's consider three cases, each utilizing a different portfolio.

First Case - The first case is a passive portfolio allocated 50% to stocks and 50% to bonds, and is ultra-diversified across both domestic and international markets. It is a global portfolio.

Second Case - The second case is a passive portfolio allocated 50% to stocks and 50% to bonds, and is ultra-diversified across U.S. markets, it excludes all international investments. It is a domestic portfolio.

Third Case - The third case is our Thought-Experiment Tactical Asset Allocation portfolio. It starts with a passive stock/bond portfolio ultra-diversified across both domestic and international markets, but since it is a TAA portfolio, it adjusts its weightings once each month so as to over-weight recent winning asset categories and under-weight recent losing asset categories. The exact specifications for our Thought-Experiment TAA portfolio can be found in the Disclosure language at the end of this article. Over the entire time period, the portfolio delivered an average asset allocation of 24.2% U.S. stocks, 28.8% international stocks, 14.0% U.S. Treasury bonds, 27.2% investment grade highly liquid U.S. corporate bonds, 0.7% international bonds, 1.4% gold, and 3.7% other commodities.

The following graph provides the answer to our question.



The horizontal axis measures the number of years you give the portfolio to earn at least an annualized return of 6 ¾%. The vertical axis measures the probability (likelihood) of achieving this goal.

First Case - The light-blue line shows the results for the passive global portfolio, allocated 50% to stocks and 50% to bonds. Giving this portfolio only a single month to achieve its goal, delivers a 55.2% probability of success. In contrast, if you provide this portfolio 14 years, its likelihood of success increases to 67.9%.

Second Case - The dark blue line shows the results for the domestic portfolio, also allocated 50/50. Giving this portfolio a single month, delivers a 56.1% probability of earning at least 6 ¾% annualized. However, if you can remain patient for 14 years, the likelihood of success increases to 73.4%.

Third Case - The black line represents our Thought-Experiment Tactical Asset Allocation portfolio. A single month provides 59.7% probability of earning at least 6 ¾% annualized. But in marked contrast with the Buy&Hold portfolios, remaining patient for 13.4 years provides the TAA portfolio with a 100.0% likelihood of success.

The lesson, time can be your best friend . . . provided you're making use of the right portfolio.

Conclusions

Meeting your needs - For needs located a sufficient number of years in the future, tactical asset allocation portfolios may offer significantly higher probabilities of success than traditional passive Buy&Hold portfolios that attempt to just ride out the inevitable market downturns.

Behavioral impediments - TAA portfolios march to a different drummer, they don't track the general market. For this reason, investors utilizing TAA portfolios must psychological behaviors sometimes labeled "*greed*" and "*regret*". These become relevant when markets temporarily outperform the TAA solution.

Question from a financial planner - Do TAA portfolios work in the short-run? No, as shown in the graph above, the likelihood or probability of success for a TAA portfolio is not meaningfully better than that of a conventional passive Buy&Hold portfolio. For this reason, TAA portfolio should probably be avoided for short-term needs. However, for needs located eight, nine, or more years in the future, TAA portfolios offer significantly greater probabilities of success due to their adaptive properties.

Trust but verify - One of our nation's past presidents often used the phrase "*trust but verify*". This is a prudent approach when dealing with all investment strategies. Thankfully, the market outcomes described above are fully transparent and readily confirmed. And we will help anyone who would like to give it a try.

Next steps

Your financial advisor has a menu of possible investment solutions. The solution that is most appropriate to your unique needs and circumstances can only grow out of a meaningful discussion with your advisor. Reach out to them, talk with your advisor.

Rob Brown, CFA, PhD

Julex Capital Advisory Board Member

Website www.robrownonline.com

Important disclosures

It is not possible to invest, directly, in an index.

It is not possible to invest, directly, in any index referred to in this document.

Past performance is not an indicator of future results.

All performance appearing in this document is hypothetical and back-tested. Any hypothetical back-tested information provided herein is illustrative only and derived from a proprietary model designed with the benefit of hindsight based on certain data (which may or may not correspond with the data that someone else would use to back-test the portfolio) and assumptions and estimates (not all of which may be specified herein and which are subject to change without notice). The results obtained from different models, assumptions, estimates and/or data may be materially different from the results presented herein and such hypothetical back-tested information should not be considered indicative of the actual results that might be obtained from an investment or participation in a financial instrument or transaction referencing the portfolio.

Fees, internal embedded expense ratios, and sales charges have not been subtracted from any of the performance results appearing in this document.

The information in this document is for the purpose of information exchange.

This is not a solicitation or offer to buy or sell any security.

You must do your own due diligence and consult a professional investment advisor before making any investment decisions.

The use of a proprietary technique, model, or algorithm does not guarantee any specific or profitable results.

The risk of loss in trading securities can be substantial. You should therefore carefully consider whether such trading is suitable for you in light of your financial condition. No strategy, including asset allocation and diversification, can assure success or protect against loss. Stock investing involves risk, including loss of principal. Bonds are subject to market and interest rate risk if sold prior to maturity. Bond values will decline as interest rates rise and bonds are subject to availability and change in price. International debt securities involve special additional risks. These risks include, but are not limited to, currency risk, geopolitical and regulatory risk, and risk associated with varying settlement standards. These risks are often heightened for investments in emerging markets. International debt securities involve special additional risks. These risks include, but are not limited to, currency risk, geopolitical and regulatory risk, and risk associated with varying settlement standards. These risks are often heightened for investments in emerging markets. The fast price swings in commodities and currencies will result in significant volatility in an investor's holdings.

All information contained in this document is believed to come from reliable sources. We do not warrant the accuracy or completeness of information made available and therefore will not be liable for any losses incurred.

The composition of a benchmark, index, or portfolio may not reflect the manner in which an Integrated Financial Partners portfolio is constructed in relation to expected or achieved returns, investment holdings, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility, or tracking error targets, all of which are subject to change over time.

No representation or warranty is made as to the reasonableness of the assumptions made herein.

The data underlying the graphs and tables, is monthly total return index data. This index data starts on 01/31/1919 and ends on 2/1/2021 and was provided by Global Financial Data, Inc., San Juan Capistrano, CA on 2/23/2021. Global Financial Data, Inc. can be reached at www.globalfinancialdata.com.

The "Domestic Buy&Hold 50/50 portfolio" was constructed as follows. It is allocated 50% to stocks and 50% to bonds. Stocks are equally weighted across the seven stock indices listed below under "U.S. Stock Indices". Bonds are equally weighted across the ten bond indices listed below under "U.S. Bond Indices". Rebalancing is completed monthly at month-end.

The "Global Buy&Hold 50/50 portfolio" was constructed as follows. It is allocated 50% to stocks and 50% to bonds. Stocks are equally weighted across the seven stock indices listed below under "U.S. Stock Indices" plus the nine stock indices listed below under "International Stock Indices". Bonds are equally weighted across the ten bond indices listed below under "U.S. Bond Indices" plus the two bond indices listed below under "International Bond Indices". Rebalancing is completed monthly at month-end.

The TAA Thought-Experiment portfolio was constructed as follows:

- The portfolio consists of the seven best performing asset classes, as measured over the prior eleven months, just completed (plus a fixed/permanent 0.7% allocation to cash equivalents (using the GFD Indices USA Total Return T-Bill Index) and a fixed/permanent 19.3% allocation to liquid investment grade U.S. corporate bonds (using the Dow Jones Corporate Bond Return Index)).

Julex Capital

40 Grove Street, Suite 140 • Wellesley, MA 02482

Phone 781-489-5398 • Website www.julexcapital.com

- The seven best performing asset classes are revised once each month at month-end closing values.
- The portfolio is rebalanced monthly, and uses scaled weights (as opposed to equal-weights) at all times (in addition to the constant 0.7% allocation to cash equivalents and the 19.3% allocation to liquid investment grade U.S. corporate bonds).
- The seven best performing asset classes are selected from the 35 passive indices listed below under the sections titled: U.S. Stock Indices, U.S. Bond Indices, International Stock Indices, International Bond Indices, and Commodities.
- The term “seven best performing” is defined as which seven asset classes (drawn from the 35 passive indices) had current month-end index values that were the furthest above (in proportionate percentage terms) their respective average levels over the just completed eleven months (using month-end total return index levels).
- The seven best performing asset categories are not equal-weighted, instead, they use scaled weights. Scaled weights are used because this increases the probability (or likelihood) of the Index generating at least 5.0% compound annual return over a randomly selected 12½-year rolling time window. For example, liquid investment grade U.S. corporate bonds are weighted more heavily than are international stocks.
- You may request to receive the historical monthly asset class weightings for the Index from your advisor. This data shows the exact composition of the Index, month-by-month, throughout its entire history.
- You may also request to receive the average weightings to the eight major asset categories comprising the Index since inception. These major asset categories are defined as: U.S. stocks, International stocks, U.S. Treasury bonds, Liquid investment grade U.S. corporate bonds, U.S. high yield bonds, International fixed income, Gold, and Other commodities.

U.S. Stock Indices - (1) S&P 500 Total Return Index (w/GFD extension), (2) S&P 500 Utilities Total Return Index 55, (3) Dow Jones Industrials Total Return Index, (4) Dow Jones Transportation Average Return Index, (5) S&P 500 Industrials Total Return Index 20, (6) Energy (Fama French, Market value-weighted portfolio, Total returns, Market broken into 10 industry portfolios), and (7) HiTech (Fama French, Market value-weighted portfolio, Total returns, Market broken into 10 industry portfolios).

U.S. Bond Indices - (1) GFD Indices USA Total Return T-Bill Index, (2) USA 30-year Government Bond Return Index, (3) USA 5-year Government Note Total Return Index, (4) USA 3-year Government Note Return Index, (5) GFD Indices USA 10-year Government Bond Total Return Index, (6) BofA Merrill Lynch US Inflation-Linked Treasury Total Return Index, (7) Dow Jones Corporate Bond Return Index, (8) GFD Indices USA Total Return AAA Corporate Bond Index, (9) Bloomberg Barclays US Aggregate Bond Index, and (10) Bank of America Merrill Lynch US High Yield Master II Total Return Index Value.

International Stock Indices - (1) UK FTSE All-Share Return Index (w/GFD extension), (2) Japan Topix Total Return Index, (3) Germany CDAX Total Return Index (w/GFD extension), (4) Australia ASX Accumulation Index-All Ordinaries, (5) OMX Helsinki All-Share Gross Index - Finland, (6) OMX Stockholm Benchmark Gross Index (GFD extension - Sweden), (7) OMX Copenhagen All-Share Gross Index - Denmark, (8) France CAC All-Tradable Total Return Index, and (9) Brussels All-Share Return Index (w/GFD extension) - Belgium.

International Bond Indices - (1) Equal-weighted mix of the currencies: Euro, Swiss Franc, and Japanese Yen and (2) GFD Indices World x/USA Countries Government Bond GDP-weighted Return Index.

Commodities - (1) Gold Bullion Price-New York (US\$/Ounce), (2) A basket of precious metals consisting of gold (0.030oz), silver (1.100oz), platinum (0.004oz), and palladium (0.006oz), (3) Reuters CRB Total Return Index (w/GFD extension), (4) Silver Cash Price (US\$/Ounce), (5) Platinum Cash Price (US\$/Ounce), and (6) Palladium (USD per Troy Ounce).

Julex Capital

40 Grove Street, Suite 140 • Wellesley, MA 02482

Phone 781-489-5398 • Website www.julexcapital.com