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But has TAA worked better than bonds?

Is TAA versus bonds the right comparison?

Probably not. But to answer this question, we must first identify the all-important investment timeframe. I'm assuming here that the investor is targeting needs arriving between 5 and 20 years in the future. Therefore, their investment holding period or time horizon is 5 to 20 years.

For such an investor, a pure 100% bond portfolio won't work. It won't be able to generate the needed returns. Similarly, a pure 100% stock portfolio won't work. It'll be too volatile, exposing the investor to an undue likelihood of having to liquidate at an unfortunate point in time (when their account value is down).

The common-place solution has been the balanced portfolio. A portfolio that maintains an allocation to both stocks and bonds. Within such a portfolio, the role that bonds play is **NOT** to generate current income. Such suggestions are misleading and counter-productive. They're just plain wrong.

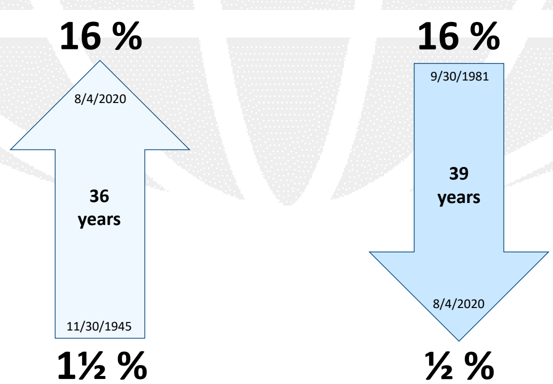
Instead, the role that bonds must play within a balanced portfolio is to adequately tame the unruly behavior of stocks . . . during the periodic and inevitable stock bear markets that come along. When bonds play their role successfully, it allows the balanced portfolio investor to feel relatively confident that their needs will be well met.

Thus, the relevant comparison is TAA versus a balanced portfolio containing both stocks and bonds. Moreover, the comparison needs to focus on what happens during stock bear markets - who did better, TAA or the balance portfolio alternative. The following analysis assumes a relatively short investment time horizon of just 5 to 10 years.

Does it matter whether interest rates are rising or falling - Yep, it sure does!

Recall the inverse relationship between interest rates and bond prices. When interest rates are rising, bond prices are falling. For this reason, it becomes much more difficult for bonds to play their necessary role within a balanced portfolio during a rising interest rate environment. In fact, much harder!

Fortunately, since 1981 interest rates have been falling. Since 1981 bond prices have been rising. This has made it much easier for bonds to successfully play their necessary role. Unfortunately, after approaching zero, interest rates are now rising, and bond prices are falling. Historically, interest rates have either risen or fallen over long multi-decade episodic periods. The following graphic depicts recent history for the current yield on a simple vanilla 10-year U.S. Treasury bond.



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Three bear markets when interest rates fell from 16% down to ½%

To evaluate the performance of TAA versus a balanced stock/bond portfolio, we must assume a specific TAA portfolio. We call our hypothetical TAA portfolio the though-experiment portfolio. It allocates 21.8% to U.S. stocks, 26.0% to international stocks,12.9% to U.S. Treasury bonds, 34.4% to liquid investment grade U.S. corporate bonds, 0.6% to high-yield bonds, 1.1% to international bonds, 1.3% to gold, and 1.9% to other commodities. But since it's a TAA portfolio, it overweights recent relative winners and underweights recent relative losers - this is the inherent essence of all TAA portfolios. The disclosure language at the end of this discussion provides greater detail on the TAA thought-experiment portfolio's construction.

Interest rates have been falling since 1981. During this period, we experienced three stock bear markets. The following table identifies these three bears and provides the relevant performance for the TAA thought-experiment portfolio along with several comparative balanced stock/bond portfolios.

When interest rates fell for 39 years (ending in late-2020)

Bear market started	Lasted (months)	U.S. stocks fell (%)	TAA thought-experiment portfolio (%)	Narrow U.S. benchmark 25% S&P 500 Index, 75% 10-year US Treasury bonds	Broad U.S. benchmark 25%/75% mix, broadly diversified across all US stocks and bonds	Broad global benchmark 25%/75% mix, broadly diversified across all US and Int'l stocks and bonds
8/31/1987	3	-30	-11.2	-6	-6.2	-2.7
8/31/2000	25	-47	6.7	5.3	1.4	1.5
10/31/2007	16	-52	-1.6	-4.1	-10.3	-14.1
Average			**-2%**	**-4%**		

Note that the average performance for the TAA thought-experiment portfolio was **-2%** during these three bear markets. In contrast, the average performance for the various balanced stock/bond portfolios was a less attractive, less helpful **-4%**.

This demonstrates a **+2%** advantage favoring TAA over balanced stock/bond portfolios.

The previous three bear markets when interest rates rose from 1½% up to 16%

Prior to 1981, interest rates rose for 36 years. They rose with shocking consistency and vigor. And as a result, bond prices fell with similar uniformity. During this period, the U.S. stock market also experienced three bear markets. How did TAA perform during these three stock bear markets? And how did the balanced portfolio alternatives perform, better or worse?

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When interest rates rose for 36 years (ending in late-1981)

Bear market started	Lasted (months)	U.S. stocks fell (%)	TAA thought-experiment portfolio (%)	Narrow U.S. benchmark 25% S&P 500 Index, 75% 10-year US Treasury bonds	Broad U.S. benchmark 25%/75% mix, broadly diversified across all US stocks and bonds	Broad global benchmark 25%/75% mix, broadly diversified across all US and Int'l stocks and bonds
5/31/1946	21	-37	-2.1	-5.7	-3.4	-2.5
11/30/1968	19	-35	1.9	-10	-10.2	-3.2
12/31/1972	21	-52	23.5	-11.4	-10.7	-6.3
Average			**+8%**	**-7%**		

Note that the average performance for the TAA thought-experiment portfolio was **+8%** during these three bear markets. In contrast, the average performance for the various balanced stock/bond portfolios was a less attractive, less helpful **-7%**.

This demonstrates a **+15%** advantage favoring TAA over balanced stock/bond portfolios. This large advantage favoring TAA over traditional balanced stock/bond portfolios shouldn't surprise anyone. When interest rates are rising, bond prices are falling. Falling bond prices make it very difficult for bonds to play their necessary role within a balanced portfolio - they often hurt instead of help!

Conclusions

Being well-protected during the next stock bear market - Most of us weren't around or have forgotten what it's like to be an investor when interest rates are rising from 1½% to 16%. During such environments, bonds are useful investment instruments, but they behave very differently from what we've experienced over the last 40 years. Failure to taken this profound difference into account will likely end in failure.

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 portfolio construction rules and the underlying data that define the thought-experiment portfolio are fully transparent and readily available. It is a simple and straightforward exercise to confirm the validity of the numbers presented above. 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.

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Important disclosures

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

The data underlying the results, 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 2/24/2021. Global Financial Data, Inc. can be reached at www.globalfinancialdata.com.

Narrow U.S. benchmark - is 25% the S&P 500 Index and 75% 10-year U.S. Treasury bonds. This benchmark uses monthly rebalancing at month-end values.

Broad U.S. benchmark - is 25% U.S. stocks and 75% U.S. bonds. U.S. stocks are defined as an equal-weighted mixture of the seven indices that are listed below under U.S. Stock Indices. U.S. bonds are defined as an equal-weighted mixture of the ten indices that are listed below under U.S. Bond Indices. This benchmark uses monthly rebalancing at month-end values.

Broad global benchmark - is 25% global stocks and 75% global bonds. Global stocks are defined as an equal-weighted mixture of the sixteen indices that are listed below under U.S. Stock Indices and International Stock Indices. Global bonds are defined as an equal-weighted mixture of the eleven indices that are listed below under U.S. Bond Indices and International Bond Indices. This benchmark uses monthly rebalancing at month-end values.

The 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 29.3% allocation to liquid investment grade U.S. corporate bonds (using the Dow Jones Corporate Bond Return Index)).

PERSPECTIVES ON TACTICAL ASSET ALLOCATION (AKA SECTOR ROTATION)

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- 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 29.3% allocation to liquid investment grade U.S. corporate bonds).
- The seven best performing asset classes are selected from the 32 passive indices listed below under the sections titled: U.S. Stock Indices, U.S. Bond Indices, International Stock Indices, International Bond Indices, and Commodities.

7 U.S. stock sectors	9 International stock sectors	1 Industrial & agricultural commodities	1 Inflation protection	5 U.S. Treasury bond sectors	5 Specialized bond sectors	4 Precious metal sectors

- The term "seven best performing" is defined as which seven asset classes (drawn from the 32 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 portfolio generating at least 4.0% compound annual return over a randomly selected 7½-year rolling time window. For example, liquid investment grade U.S. corporate bonds are weighted more heavily than are international stocks. Similarly, commodities other than gold are weighted more lightly than are international stocks.
- You may request to receive the:
  - Historical monthly asset class weightings for the portfolio from your advisor. This data shows the exact composition of the portfolio, month-by-month, throughout its entire history.
  - Average weightings to the eight major asset categories comprising the portfolio 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.
  - Assumed one-way transactions costs for each of the 32 asset categories. These range from a low of 0 basis points for the GFD Indices USA Total Return T-Bill Index to a high of 36.84 basis points for Palladium. Therefore, the round-trip transactions costs would be double these numbers.

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) 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) Palladium (USD per Troy Ounce).

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