10 LESSONS YOU SHOULD LEARN FROM RECENT MARKET HISTORY

By William Reichenstein

A review of returns from 1987 through 2002, encompassing both strong bull and fierce bear markets, shows that a fixed-weight portfolio that includes both bonds and stocks and is rebalanced annually is One Good Strategy.

The S&P 500 muddled along reasonably well from 1987 through 1994, soared 20% or more each year from 1995 through 1999, and then recorded three straight losing years. Bonds also experienced good times and bad times over these years.

What are the painful lessons that we should learn from recent financial market history?

In this article, I try to answer this question by providing my own Top 10 list of investment lessons. These lessons have a common theme, which is the major theme of this article: There is much to be said for the strategy of maintaining a fixed-weight portfolio of stocks and bonds with annual rebalancing.

Let us review returns from 1987 through 2002 on S&P 500 stocks, high-grade corporate bonds, and portfolios of these two asset classes. This is a period familiar to readers of this journal—it stretches from two severe bear markets, while encompassing one long bull market. The investment lessons from these 16 years are the same lessons to be gleaned from other longer-term periods.

HISTORICAL RETURNS

Table 1 presents the returns for each year, from 1987 through 2002, for five portfolios:

- All stocks;
- All bonds;
- Predominately stocks, with a 75%–25% stock/bond combination;
- An equally balanced, 50%–50% stock/bond combination; and
- Predominately bonds, with a 25%–75% stock/bond combination.

All of the portfolios were rebalanced annually.

Table 1 shows the compound average annual return, as well as the standard deviation of returns for each portfolio. Standard deviation is a measure of year-to-year volatility—the higher the standard deviation, the higher the volatility and thus the greater the risk.

Over this time period, the all-stocks portfolio earned average annual returns of 11.08%, while the all-bonds portfolio earned 9.32%. Not surprisingly, the three balanced portfolios with stock exposures of 75%, 50%, and 25% earned returns between these extremes.

In terms of risk, the all-stocks portfolio had a standard deviation of 18.1%, while the all-bonds portfolio had a standard deviation of about half this level, at 9.1%. The standard deviations of the three balanced portfolios fell between 9.0% and 14.3%.

Let's take a closer look at these results.

Average returns rise as stocks are added to a portfolio. However, the additional return for each 25% increment in stocks is not linear. For this period, stocks earned 1.76% higher returns than bonds. The 25% stock

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TABLE 1. RETURNS AND RISK FOR FIVE PORTFOLIOS: 1987-2002

(All portfolios rebalanced annually)

	Annual Returns (%)				
Year	All Stocks	75% Stocks/ 25% Bonds	50% Stocks/ 50% Bonds	25% Stocks/ 75% Bonds	All Bonds
1987	5.23	3.86	2.48	1.11	–0.27
1988	16.81	15.28	13.76	12.23	10.70
1989	31.49	27.68	23.86	20.05	16.23
1990	–3.17	–0.68	1.81	4.29	6.78
1991	30.55	27.89	25.22	22.56	19.89
1992	7.67	8.10	8.53	8.96	9.39
1993	9.99	10.79	11.59	12.39	13.19
1994	1.31	–0.46	–2.23	–3.99	–5.76
1995	37.43	34.87	32.32	29.76	27.20
1996	23.07	17.65	12.24	6.82	1.40
1997	33.36	28.26	23.16	18.05	12.95
1998	28.58	24.13	19.67	15.22	10.76
1999	21.04	13.92	6.80	–0.33	–7.45
2000	–9.11	–3.62	1.88	7.38	12.87
2001	–11.88	–6.25	–0.62	5.02	10.65
2002	–22.10	–12.49	–2.89	6.72	16.33

	Measures of Risk		Measures of Returns	
Portfolio	Standard Deviation (%)	Maximum Loss (%)	Average Annual Return (%)	End Wealth of $1 Initial Investment ($)
All Stocks	18.1	–22.10	11.08	5.37
75% Stocks/25% Bonds	14.3	–12.49	10.94	5.27
50% Stocks/50% Bonds	11.0	–2.89	10.60	5.01
25% Stocks/75% Bonds	9.0	–3.99	10.05	4.63
All Bonds	9.1	–7.45	9.32	4.16

Source: Ibbotson Associates.

portfolio earned 0.73% more than bonds, or about 40% of the 1.76% additional returns. The 50% stock portfolio earned 1.28% more than bonds, or about 73% of the additional returns. The 75% stock portfolio earned 1.62% more than bonds, or 92% of the additional returns.

The pattern for standard deviation is also favorable. Stocks had twice the level of volatility as bonds, 18.1% compared to 9.1%. However, once again, the additional risk for each 25% increment in stocks is not linear. The 25% stock portfolio had a similar risk to the all-bonds portfolio—9.0% versus 9.1%. The 50% stock portfolio had about 20% of the additional risk of an all-stocks portfolio. The 75% stock portfolio had about 60% of the additional risk of an all-stocks portfolio.

Although these precise results were specific to the 1987–2002 period, the non-linear patterns for risk and returns were not.

Lesson: As stocks are added to an all-bonds portfolio, the risk rises disproportionately slowly, while the average returns rise disproportionately quickly.

As noted, for long investment horizons, stocks usually earn higher returns and exhibit more volatility than bonds. But this pattern may not always hold, even for periods of as long as a decade.

For the next decade, stocks could produce the higher returns and lower risk. Or bonds could produce the higher returns and lower risk.

The good news is that the balanced portfolios will benefit disproportionately under either scenario. For example, the 50%–50% stock/bond portfolio will have returns closer to the returns of the higher-returning asset and a risk closer to that of the lower-risk asset.

Figure 1 illustrates this point by showing the growth of a $1 investment in the all bonds, all stocks and 50%–50% stock/bond portfolios. The ending wealth for the 50%–50% stock/bond portfolio is closer to that of the all stocks portfolio, yet its path there was much smoother.

Diversification assures someone that they will capture most of the additional returns on the higher returning asset, while experiencing risk closer to that of the less-risky asset. This is a win-win situation. In my opinion, it would be foolish to throw it away.

LESSONS FROM 1987–2002

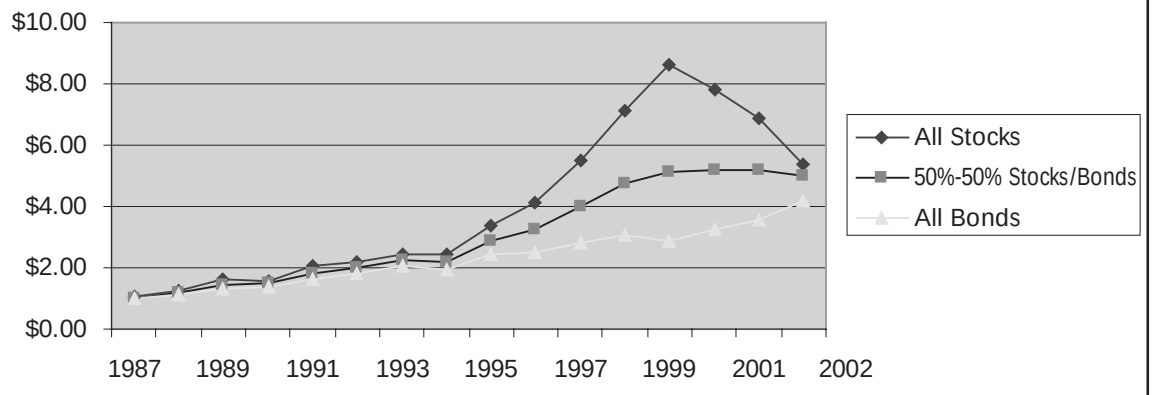
There are many investment lessons to be learned from the most recent 16 years. Here's my Top 10 list:

Lesson One: Mixing bonds and stocks moderates portfolio risk.

High-grade bonds and stocks are fundamentally different assets. Bad years for bonds are sometimes good years for stocks. Bad years for stocks are sometimes good years for bonds. For 1987–2002, bonds lost money in three of those years, and in those three years that bonds lost, stocks earned money. Conversely, during the 16-year time period, stocks lost money in four of those years, and in those years that stocks lost money, bonds earned money. It is also important to note, though, that 1987 and 1994 were below-average years for both asset classes—that serves as a reminder that both asset classes can have poor years at the same time.

Lesson Two: Portfolio risk rises disproportionately slowly as

FIGURE 1. GROWTH OF $1: A SMOOTHER RIDE FOR BALANCED PORTFOLIOS



stocks are added to the portfolio.

For 1987–2002, the risk (as measured by standard deviation) of a 25% stock portfolio was essentially the same as the risk of an all-bonds portfolio. The additional risk of a 50% stock portfolio compared to an all-bonds portfolio is one-fourth the additional risk of an all-stocks portfolio.

Lesson Three: An all-bonds portfolio is not the lowest-risk portfolio.

Even risk-averse investors should own some stocks. For 1987–2002, a 15% stock and 85% bond portfolio had a lower standard deviation than a 100% bond portfolio—8.8% versus 9.1% (this portfolio is not reported in the table). Another measure of risk is the maximum annual loss. By this measure, the 25% stock portfolio (with a maximum annual loss of –3.99%) was less risky than the all-bonds portfolio (with a maximum annual loss of –7.45%). That's because, when interest rates rise, all bond prices move south.

Lesson Four: Portfolio returns rise disproportionately quickly as stocks are added to the portfolio.

For 1987–2002, the 25% stock portfolio earned about 40% of the additional return on the all-stocks portfolio compared to the all-bonds portfolio. The 50% stock portfolio earned about 75% of the additional return.

Lesson Five: An often-overlooked risk for the long-run investor is the risk of having a too-conservative portfolio.

By focusing too much on volatility of individual assets instead of the volatility of the entire portfolio, investors often maintain a too-small stock exposure for their long-run horizon. Remember that for 1987–2002, the 25% stock portfolio had a volatility similar to the all-bonds portfolio, but its returns were appreciably higher. For many investors, the risk-return trade-off favors an even higher exposure to stocks.

Lesson Six: By rebalancing once a year, you maintain a stable risk exposure.

The objective of rebalancing is to return the portfolio's risk to its original risk level. If stock returns are unpredictable (i.e., future returns will be like random draws from historical returns) and you have a long investment horizon, then your optimal stocks-bonds mix should not depend upon recent years' returns. After good times (for example, 1995–1999) and bad times (for instance, 2000–2002), your target asset mix should be essentially the same.

What does the empirical evidence suggest about the predictability of stock returns?

Although the evidence is mixed, some evidence suggests that long-run returns are mean reverting, meaning that bad times tend to follow good times and good times tend to follow bad times. In this case, the target stock exposure should have been low after the 1990s and higher today.

Unfortunately, this appears to be the opposite of what most investors actually do. It appears most investors increased their target stock exposures through the 1990s and are decreasing it through the bear market. The fixed-weight strategy prevents investors from their tendency to increase the target stock weight after good times and to decrease it after bad times.

Lesson Seven: A balanced portfolio avoids market timing.

You never have all of your assets in the worse-performing asset class. This is important because losses are more costly than gains in two senses: First, for most of us, the pain from, say, a 10% loss exceeds the glee from a 10% gain; second, if an asset class loses 33.3% of its value, it takes a 50% gain just to break even.

Lesson Eight: Due to rebalancing, if an asset class becomes overvalued, you will be selling it as it rises; and, if an asset class becomes undervalued, you will be buying it as it falls.

In contrast, someone who invests, say, 50% in stocks and 50% in bonds—but never rebalances—is guaranteed to have the highest percent of his portfolio in the overvalued asset class at its market peak, and the lowest percent of his portfolio in the undervalued asset class at its market trough. For example, if someone began 1987 with a 50%–50% stock/bond portfolio but never rebalanced, he

would have had a 73% stock exposure at the peak of the stock market in March 2000.

Lesson Nine: Rebalancing provides a discipline that helps investors overcome inertia.

Without this discipline, many investors do nothing because they are not sure what to do. From my experience, both in managing my portfolio and in helping others, this discipline is important. I have never known that stocks would beat bonds or vice versa. Without this discipline, the uncertainty might prevent me from making changes.

Lesson 10: A fixed-weight strategy takes little time and it can save time at tax time.

Once a year (twice in some violent years), I calculate my current portfolio weights and adjust the mix to my target portfolio by moving funds from one or more mutual funds to others. All told, it takes perhaps two hours a year to calculate my current portfolio and make the desired adjustments. Since I generally move funds in retirement accounts, the rebalancing has no tax consequences, which saves time when figuring taxes.

CONCLUSION & CONFESSION

It is all well and good to give out advice on what one "should" do. But in the real world, most individuals don't follow precise strategies down to crossing the last T.

So, do I really practice as I preach, with a fixed-weight strategy?

Well, I have to make a confession: Not precisely. But I do follow the spirit of a fixed-weight strategy. This means, first of all, that I have a normal stock weight for my portfolio. As I have aged, it has decreased from 100% through most of my thirties to its current level of 60% at age 50. I have allowed my actual stock weight to vary within about 10% of its target figure based on stocks' perceived long-run prospects.

In addition, I sometimes tilt the stock portfolio toward various portions of the stock market. For example, in 2001, I tilted the U.S. portion of the stock portfolio toward value and small-cap stocks—a good decision. On the other hand, in 2001 I also overweighted international stocks, especially Japanese stocks, compared to my usual 25% weight for the international stock portion of my stock portfolio—a bad decision.

In short, I have practiced a modified fixed-weight strategy by allowing the actual weights to vary slightly from the fixed weights.

Through the years, have these small tilts away from the fixed weights paid off? I am not sure. However, it is fair to say my current wealth would be essentially the same if I had followed a strict fixed-weight strategy.

Most people probably assume that I, as an endowed professor of investments, frequently adjust my portfolio to keep it fine-tuned to the current market environment. However, that is not the case. In fact, I adjust my portfolio once a year, not because I am lazy, but because my study of financial markets suggests that this is the best strategy.

In practice, it is tough to beat a fixed-weight strategy with annual rebalancing. ✦

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