



Financial Fables

Inflation and Volatility

Investors face two basic problems: inflation and volatility. A too conservative portfolio will be eroded by inflation over time. A too aggressive portfolio, on the other hand, could be suddenly decimated by the destructive forces of volatility. It would be nice to know in advance the right thing to do but, as Harry Markowitz (the father of Modern Portfolio Theory) points out, that is impossible because we live in a world of uncertainty. Since there is no guaranteed right answer, the only reasonable response to uncertainty is probability. By consistently applying prudent practices the odds of success should increase.

By duplicating and expanding on the work of others, I have discovered that a portfolio that is 50% stocks and 50% fixed income is safer (when inflation is considered) than an all fixed income portfolio. To determine this, the historical returns of different stock and bond portfolios, going back to 1927, were used to construct running 30-year periods: 1927-1956, 1928-1957, and so on. There were 50 such periods up through 2006. The results of this research are consistent with what has become known as the “4% withdrawal rule.” That is, if 4% of a portfolio, is withdrawn in the first year and that amount is indexed for inflation in subsequent years, the portfolio would not run out of money in any of those 30 year periods. If instead, the portfolio were invested only in fixed income securities (5 year government bonds in this case) it would have run out of money 82% of the time.

The results seem to indicate that inflation is a bigger problem than volatility because a 100% equity portfolio would run out of money only 4% of the time. However, the model assumes no investment costs and rational behavior by the investor. If you factor in costs and behavior, you could arrive at a completely different conclusion. According to a 2007 report by Dalbar, Inc., a research and rating service for mutual funds and financial institutions, the “...average investor has earned only a fraction of the results” of the market. By incorporating the Dalbar data into our study, it was determined that the average investor would run out of money 82% of the time with a 100% stock portfolio, the same as an all bond portfolio. The failure rate of the 50/50 portfolio (50% stocks and 50% fixed income) would rise from 0% to 88%.

This research has convinced me that the two biggest problems (and costs is a close third) are not inflation and volatility but rather inflation and the *emotional response of investors* to volatility in markets. As the Dalbar study points out, “Close examination of investor behavior reveals that as markets rise, investors pour cash into mutual funds, and a selling frenzy begins after a decline. Tracking the dollars going into and out of mutual funds over a given month compared to market performance proves the correlation: as markets rise, cash flows swell; as markets decline, cash flows deflate.” This behavior is understandable but it is also dangerous.

A well diversified, low cost portfolio that is at least 50% in equities, with withdrawal rates consistent with the 4% rule, will increase the probability of your investment assets lasting over your retirement years. While we can't eliminate chance from an uncertain world, the ultimate success of your retirement plan will depend mostly on your ability to maintain this portfolio structure during times of turbulent markets.