

Short-sighted view of the long haul

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World View column, Financial Times
May 13, 2002

Financial planners have traditionally advised their younger clients that they can afford to take more stock market risk because they have time to “ride out the ups and downs of the market”.

What does financial economics have to say about this piece of advice? The answer depends critically on how stock markets behave.

If market returns are draws from the same random distribution every year – if playing the market is like playing roulette, with each spin of the wheel independent of the previous one – then financial planners’ advice makes no sense.

In this case the annualized risk of stock market investing is independent of the investment horizon. Although the probability of losing money falls with the horizon, this is offset by the increasing size of possible losses over long periods. Long-term investors should be just as cautious about stocks as short-term investors.

Some financial economists have been frustrated by the reluctance of investment professionals to accept this point. The problem may be not the stubbornness of financial planners but the assumptions of the economists’ analysis. Historical evidence suggests that stock returns are related to past returns. A new year in the stock market is not like a new spin of a roulette wheel. Instead, there is a long-term tendency for bear markets to follow bull markets and vice versa.

Decades of strong earnings growth drive up stock prices relative to earnings, as if investors expect earnings growth to continue. Such optimistic expectations are often disappointed because earnings growth does not persist across decades. Thus the roaring 1920’s were followed by the Great Depression of the 1930’s, and the robust 1960’s were followed by the turbulent 1970’s. These disappointments drive stock prices down, setting the stage for another bull market. Economists call this process “mean reversion”.

Mean reversion implies that stock market investing is comparatively safer at long horizons. In the short term, a stock market investor is exposed to the risk of a bear market; in the long term, the loss caused by a bear market will likely be compensated, at least in part, by a subsequent bull market. Since World War II, the annualized risk of a US stock market position held for a year has been about 16%, but this falls below 10% over 20 years. Over a longer period since 1890, the one-year risk has been about 18%, falling below 14% over 20 years. Thus long-term investors can hold stocks with greater comfort than short-term investors.

Long-term investors in short-term Treasury bills do not benefit from any comparable reduction of risk. They must roll over their bills at uncertain future interest rates, so these investments are actually riskier at long horizons. Since World War II, the annualized risk of US Treasury bills held for a year has been about 1.5%, but this doubles to 3% over 20 years. The effect is even more dramatic if one looks at the early 20th Century, when real interest rates were highly volatile. Over the period since 1890, the 20-year risk of Treasury bills is almost the same as the 20-year risk of stocks.

Results for long-term bonds are mixed. Inflation-indexed bonds are safe long-term assets, but nominal bonds are exposed to inflation risk which becomes increasingly severe at long horizons.

These findings partially vindicate the conventional wisdom of financial planners. Before calling their brokers, however, long-term investors should consider three caveats.

First, the evidence for stock market mean reversion comes from a single historical record. It is always possible that bull and bear markets alternated by chance in the 20th Century, and that mean reversion will disappear in the 21st Century.

Second, reduced risk at long horizons does not make stocks a “sure thing”. A book by James Glassman and Kevin Hassett, *Dow 36,000*, argues that stocks are actually riskless for long-term investors and should be priced to return no more than Treasury bills. When long-term investors absorb this point, Glassman and Hassett predict, the Dow Jones Industrial Average will rise three-fold.

This is a dangerous overstatement, fortunately one that seems less credible today than it did a couple of years ago. Inflation-indexed government bonds, not stocks, are the riskless assets for long-term investors.

Third, investors must think through *all* the implications of mean reversion. If the stock market is mean reverting, then stocks are relatively less attractive in the aftermath of a 20-year bull market. At such a time, there is an increased probability of a prolonged bear market and one should have modest expectations for stock returns.

Investors who hope for extraordinary returns like those of the last two decades, while counting on reduced risk in the long term, are accepting only the palatable implications of mean reversion while ignoring the unpalatable ones. They are trying to have their cake and eat it too.

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