

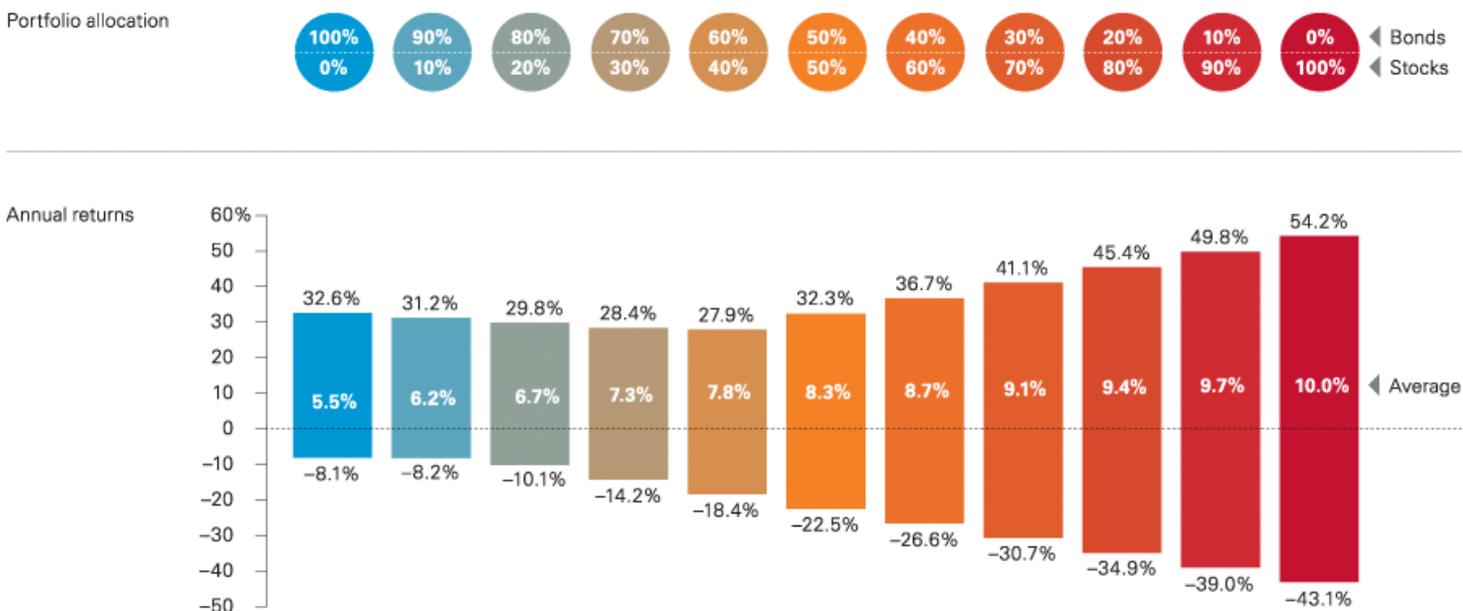
## Stocks are risky—and so is avoiding them

Stocks are inherently more volatile than investments such as bonds or cash instruments. This is because equity owners are the first to realize losses stemming from business risk, while bond owners are the last. In addition, whereas bond holders are contractually promised a stated payment, equity holders own a claim on future earnings. But the level of those earnings, and how the company will use them, are beyond the investor's control. Investors thus must be enticed to participate in a company's uncertain future, and the "carrot" that entices them is higher expected or potential return over time.

The chart below also demonstrates the short-term risk of owning stocks: Even a portfolio with only half its assets in stocks would have lost more than 20% of its overall value in at least one year. Why not simply minimize the possibility of loss and finance all goals using low-risk investments? Because the attempt to escape market volatility associated with stock investments by investing in more stable, but lower-returning, assets such as Treasury bills can expose a portfolio to other, longer-term risks.

### The mixture of assets defines the spectrum of returns:

#### Best, worst, and average returns for various stock/bond allocations, 1926–2012



Note: Stocks are represented by the Standard & Poor's 90 Index from 1926 to March 3, 1957; the S&P 500 Index from March 4, 1957, through 1974; the Wilshire 5000 Index from 1975 through April 22, 2005; and the MSCI US Broad Market Index thereafter. Bonds are represented by the S&P High Grade Corporate Index from 1926 to 1968; the Citigroup High Grade Index from 1969 to 1972; the Barclays U.S. Long Credit AA Index from 1973 to 1975; and the Barclays U.S. Aggregate Bond Index thereafter. Data are through December 31, 2012.

One such risk is "opportunity cost," more commonly known as shortfall risk: Because the portfolio lacks investments that carry higher potential return, it may not achieve growth sufficient to finance ambitious goals over the long term. Or it may require a level of saving that is unrealistic, given more immediate demands on the investor's income or cash flow (in the case of an endowment or pension fund, for example). Another risk is inflation: The portfolio may not grow as fast as prices rise, so that the investor loses purchasing power over time. For longer-term goals, inflation can be particularly damaging, as its effects compound over long time horizons. For example, Bennyhoff (2009) showed that over a 30-year horizon, an average inflation rate of 3% would reduce a portfolio's purchasing power by more than 50%.

For investors with longer time horizons, inflation risks may actually outweigh market risks, often necessitating a sizable allocation to investments such as stocks.