



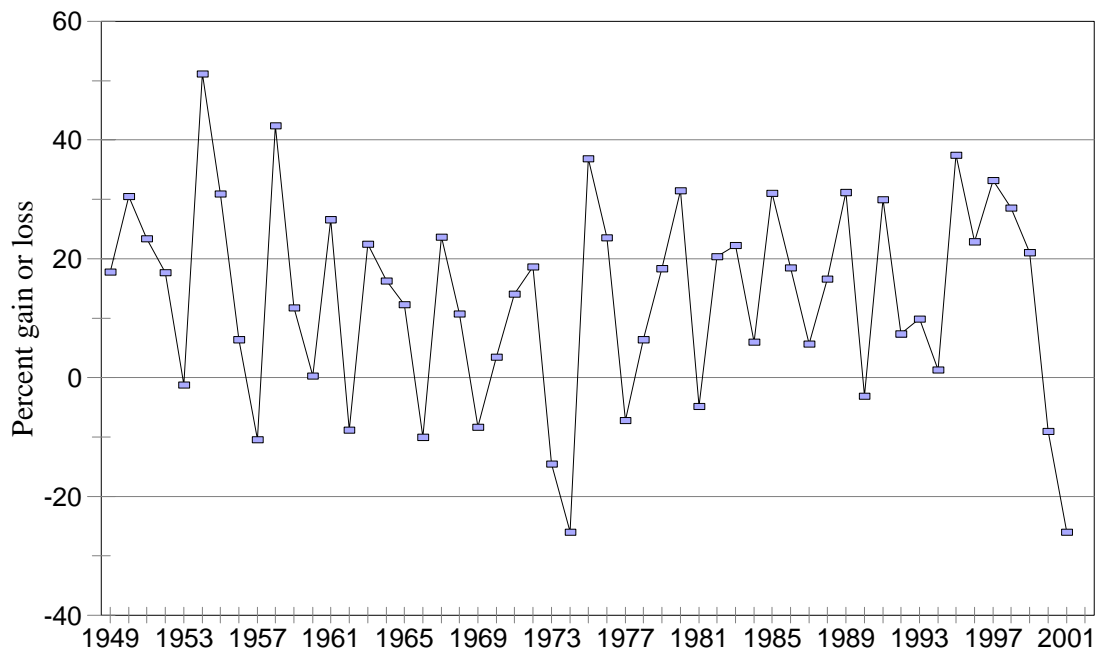
Recession, Terrorism, the S&P 500 and the Yield Curve*

David L. Debertin

September 25, 2001--As of this writing, the S&P 500 index of the stock prices for 500 of the largest US headquartered companies is off just over 26 percent so far in 2001. This decline follows a 9 percent drop for this index in 2000. While we do not know how the index will perform for the remainder of the year, the outlook is very guarded, given recent national and international events. The only comparable declines in the S&P 500 in recent history occurred in 1973, when the S&P lost 14 percent, followed by 1974 when there was a further decline of 26 percent.

However, the S&P 500 has been notoriously volatile over the past 50 years and longer as shown in this chart of returns for each year from 1949 to now.

Returns to the S&P 500, 1949-2001



There have been many years of negative returns, and many more years in which returns failed to equal what could have been earned on a safe bank certificate of deposit. However, the average compound growth rate for the S&P 500 since 1949 has been about 12.3 percent per year even accounting for the recent downturn, considerably higher than bank certificates of deposit or other types of securities such as government bonds would have paid.

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As investors sell stocks and take money out of the stock market in response to fears over terrorism, declining corporate profits, higher unemployment and reduced consumer spending, the cash that is obtained from the sale of stocks must be parked somewhere. The so-called “yield curve” illustrates the interest rates paid on “safe” government securities (treasury notes, bills and bonds) with various maturity dates. Under normal conditions, the yield curve is positive. That is, government securities with longer maturities pay the highest interest rates. In the last few weeks, the yield curve has become even more positive than normal. As of today, a thirteen-week treasury bill is paying only 2.3 percent. But the 5 year note is paying 3.8 percent, the 10 year note is at 4.7 percent, and the 30 year bond is at 5.6 percent. These widely varying interest rates reveal that money coming out of the stock market is largely getting parked in treasuries of the shortest maturities driving interest rates down very low on these securities. There is much less interest by investors in treasuries with longer maturities that pay considerably higher interest rates.

Why is this happening? One explanation is that investors are unwilling to commit dollars coming out of the stock market to longer-term government securities because they see the stock market downturn as very temporary. While a 2.3 percent yield on a 13 week treasury is a not very attractive return, it certainly beats more losses in stocks for right now. But, investors may not want to commit to treasuries with longer maturities because they believe that once the stock market settles down, they may want to get right back in again. So the 13 week treasury represents a very temporary investment decision. At the end of the 13 weeks these investors can either decide to go back into the stock market if the market calms a bit, or they can buy another 13 week treasury and wait the market out some more.

If investors were more nearly convinced that the stock market were not the place to be over the longer term, they would be taking advantage of the higher interest rates available further out on the yield curve by buying government bonds with longer maturities. The 5.6 percent interest rate on a 30-year government bond is a great deal more attractive than the 2.3 % on the 13 week bill. Investors aren’t doing this to any great degree because they have not collectively decided that they want to be out of stocks over the longer term. This suggests that the current stock market downturn—however severe—could be short-lived once investors holding cash now parked in short term government bonds, money market funds and similar investments start to return. Investors are not short of cash now parked in short-term securities and money market funds that could readily come back into the market.

Holding government bonds with long maturities far out on the yield curve poses its own set of risks right now. While both principle and interest are guaranteed at maturity, the value of these bonds could decline dramatically prior to maturity if interest rates again begin to increase. For example, if the interest rate on a 30-year bond went up to 8 %, then the decline in value of 30-year bond paying the current rate of 5.6 percent would be comparable to the recent decline an investment in the S&P 500.

And higher interest rates in government bonds are not out of the realm of possibility even in the near future. It is generally believed that the Fed has done about what it can to stimulate the economy by lowering interest rates, and eventually interest rates will again start to move upward. Furthermore, it is clear that the costs of dealing with terrorism, the potential for war, and the rebuilding and new security costs could be high, even as tax revenues suffer due to economic decline. The combination of these events could easily lead the US back into a budget deficit, and with it, still higher interest rates on medium and long term treasuries. All these considerations make longer term government bonds unattractive to a lot of investors right now even though interest rates on short term investments are extremely low and the stock market’s volatility reflects uncertain current times.

University of Kentucky
Department of Agricultural Economics
400 Charles E. Barnhart Bldg.
Lexington, KY 40546-0276
Phone: 859-257-5762
Fax: 859-323-1913
URL: <http://www.uky.edu/Ag/AgEcon>

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