

# PREDICTABLE INVESTING

## HISTORY LESSON – March 2007.

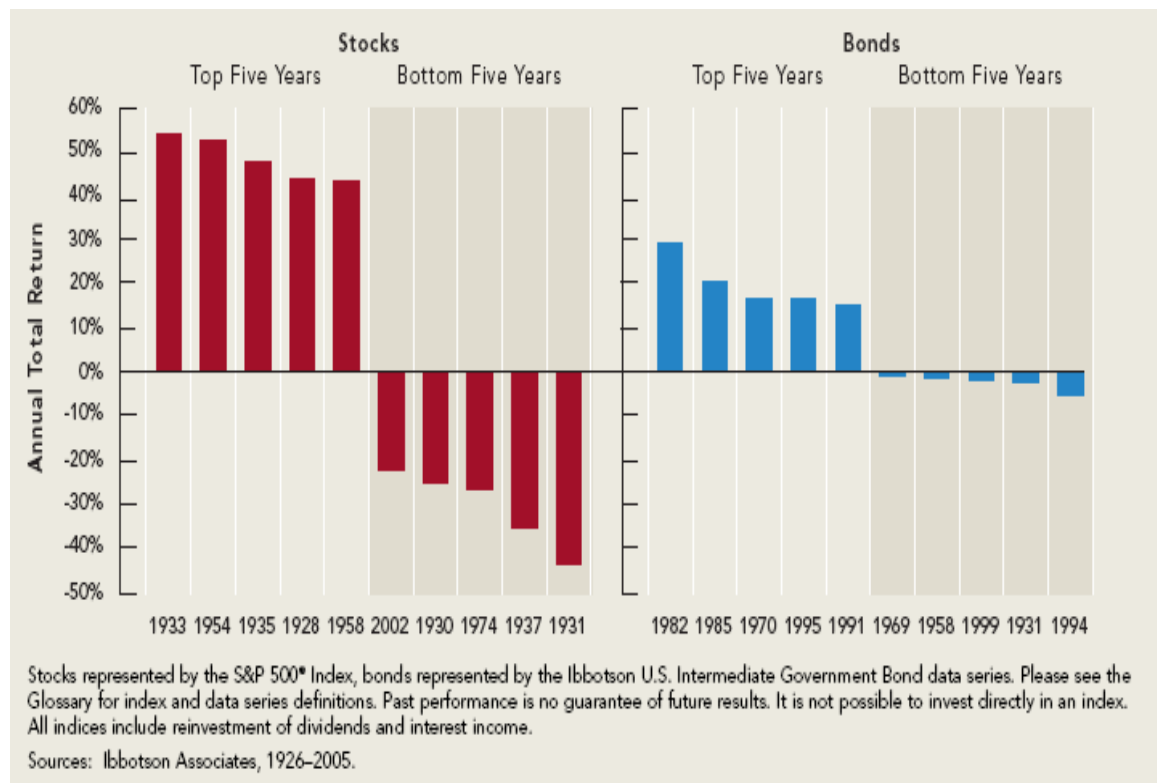
### WHY INVEST IN BONDS?

**1.0 INTRODUCTION:** "Everybody" knows that stocks have higher returns than bonds, so why bother investing in bonds at all? Aren't bonds only for conservative, income seeking older folks?

Why not just have an all-stock portfolio and forget about bonds? Probably not a bad idea if you are younger than 25, immortal and invulnerable. But the rest of us had better examine this whole question very carefully.

This history lesson discusses the role of bonds, and explains why they are an essential part of a well-balanced portfolio. Please also remember that by "stock" we mean a "stock index fund", and by "bond" we mean "bond index fund", not individual stocks and bonds.

**2.0 OVERALL STOCK-BOND PERFORMANCE DATA:** The figure below (data from reference 12 on the links page) compares the Total Annual Return of the S&P500 stock Index, with an Intermediate term bond index, over the last 80 years. The bond index in question is the Ibbotson US Intermediate Government bond index. The chart compares the top 5 years with the highest annual return with the bottom 5 years, for both the stock and bond indexes.



The top five annual returns with the largest gains for the S&P500 stock index (red bars) were very large, ranging between 44% and 55%, and all of these occurred quite

some time ago, on or before 1958. Conversely, the bottom 5 years with the largest losses in the S&P500 ranged from -20% to -45%, which includes the most recent loss of -22% in 2002.

The top five annual returns with the largest gains for the bond index (blue bars) were also quite large, ranging between 12% and 30%. These bond returns are larger than the 10.3% long term return of the S&P500. However, the bottoms 5 years with the largest losses are only between -1% and -5%. This shows that bonds can provide quite decent returns, while shielding the investor from significant losses that were experienced by worst years for stocks. This is due to the fact that bonds generate a steady and predictable income, which tends to offset any loss in price.

**3.0 CONCURRENT STOCK and BOND DATA:** The previous data in Figure 1 showed the five best and worst years for stocks and bonds, irrespective of the years when these extreme values occurred. The figure below shows the stock and bond annual returns for each year that the stock market fell by more than 5%. The data covers the last 80 years, from 1929 to 2002.

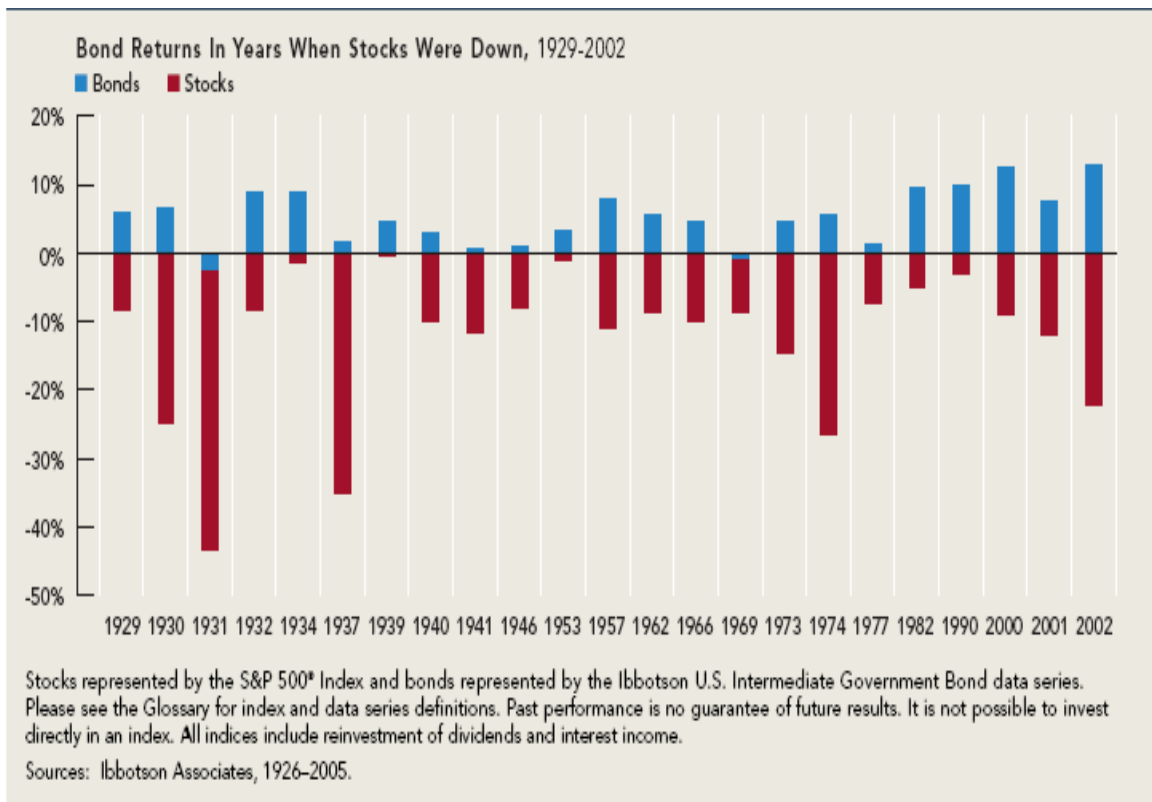


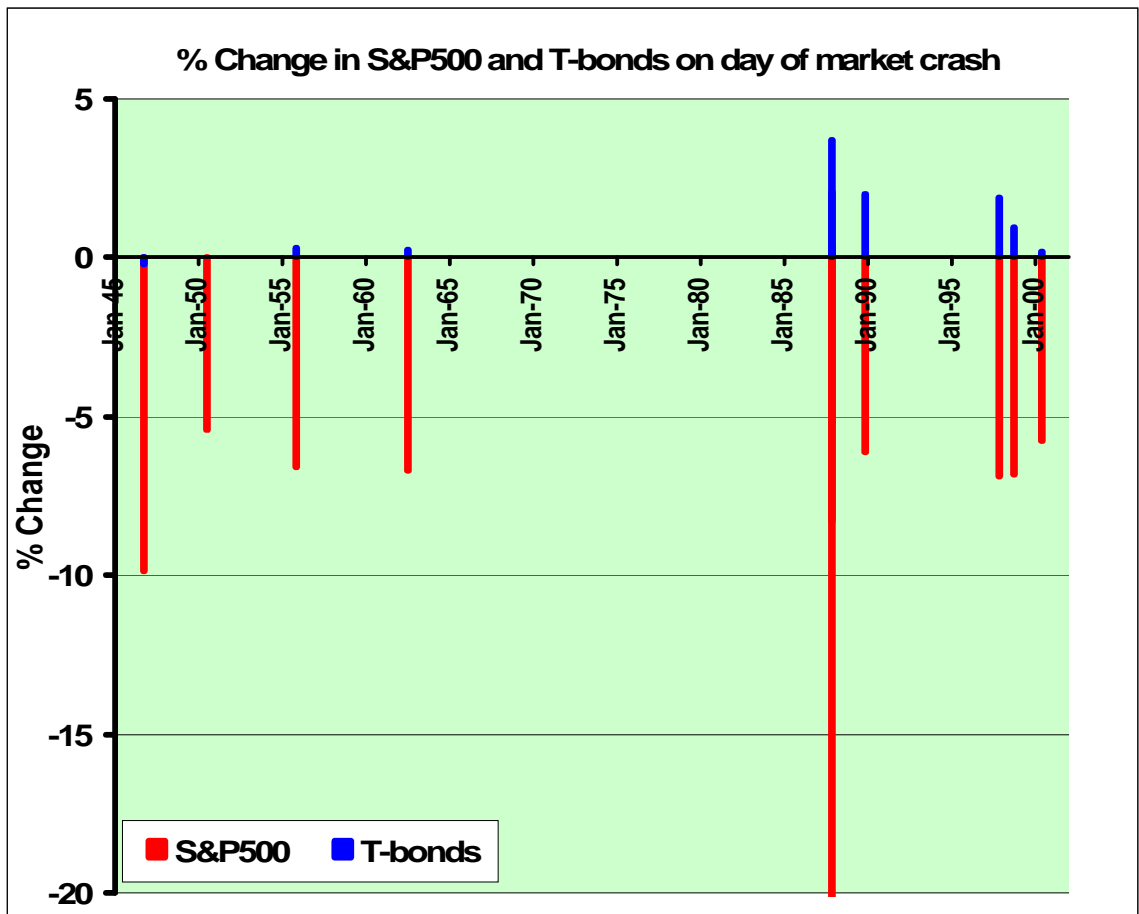
Figure 2 above shows that there were 23 years out of the last 80 during which the stock market declined, i.e. 28.8% of the time. For 21 of these 23 years of falling stock prices, bonds had a positive return (i.e., 91.3% of the time). Therefore, investors with some bonds would have experienced higher returns than those that had an all-stock portfolio.

This chart also shows graphically that there is very low correlation between stocks and bonds, meaning that these two asset classes rise and fall quite independent of each other. Usually when stocks fall, as happens during a recession, bonds are rising and vice-versa.

But we should be aware that stocks and bonds don't *always* move in opposite directions. There is one scenario during which *neither* stocks nor bonds do well. This is during periods when the Fed is increasing interest rates rapidly in an attempt to cool off an overheated economy or to choke off inflation. In this case both stocks and bonds do poorly, and the only asset that does well is Real Estate.

**3.0 SINGLE DAY MARKET CRASH:** The last two sections showed that in years where the stock market dropped, bonds almost always went up. In other words, over the course of the entire year, the increase in bonds would have significantly reduced the excessive losses that an all-stock portfolio would have experienced. But how do bonds perform on the very day that the stock market crashes?

We define "market crash" as any *day* that the S&P500 drops more than 5%. Figure 3 below shows the behavior of T-bonds on all such market crash days over the last 62 years. The blue bars represent the percent change in T-bonds, while the red bars show the percent drop experienced by the S&P500 on that day. (The data are from reference 13 on the Links Page).



During these 1 day crashes, the S&P500 has *lost* an average of -8.02%, while T-bonds have *gained* an average of +1.06%. Even during the day of October 19, 1987 (largest red bar) where the S&P500 experienced a catastrophic decline of -20.5%, its second worst in history, T-bonds actually rose by +3.7%. A 50:50 stock to bond portfolio would have "only" lost -8.4% on that day!

**4.0 THE REAL REASON TO OWN BONDS:** The real reason to own bonds should now be apparent. Its main purpose is to shield us from short-term drops in the stock market, which the long-term Predictable Investing model is not designed to do and will not catch. At the same time, a portfolio with a mix of stocks and bonds will only give up a small amount of the gain of an all-stock portfolio, when the market is moving higher. Recall that in a previous history lesson (see Archives Page, June 2006 "Asset Allocation") we showed that a portfolio with a 50:50 stock to bond ratio would capture 84% of the gains with only 51% of the risk.

The Predictable Investing model is deliberately set up to *only capture long term-trends* in the stock market. *It will not catch short term events* in the market, leaving us vulnerable to one-day events such as on October 19, 1987 and September 11, 2001. *The role of the bond portion of the portfolio is to act as a cushion against such short-term and unpredictable stock market drops.*