3.14. The Link between Bonds and Stocks.

This chapter covers the important link between the bond and stock markets. It shows how the positive link between bond yields and stocks has existed over the last decade, and how falling bond yields have usually led to lower stock values. Falling bond yields, and lower stock prices, favor dividend-paying stocks, many of which are considered to be defensive in nature. That includes consumer staples and utilities, both of which do better in a climate of rising stock market volatility. Not all bond categories are the same. High-yield corporate bonds act more like stocks than bonds. It is possible to lose money in bonds. The effects on Quantitative Easing and Operation Twist on markets and the yield curve will be studied. TIPS and gold often trend together. Stocks and bond yields diverge at start of 2012. The asset allocation pendulum favors stocks over bonds entering 2012.

- The two markets compete for investor funds.
  These two markets continually compete for investor funds. When investors are optimistic about economic trends, they favor stocks. When they are pessimistic, they favor bonds. A standard portfolio usually allocates 60 percent to stocks and 40 percent to bonds. As one grows older, it is advisable to reduce the stock portion and increase the bond allocation. Older investors have less time to recover from a major stock market selloff. While younger investors may be more interested in growth (through stocks), older investors are usually interested in income (through bonds).
  When talking about bonds we must consider that we face a great variety of securities into this asset class. For example, Treasury bonds are usually stronger when the stock market is falling and investors are worried about the economy. High-yield corporate bonds do better when the stock market is rising and the economy looks stronger. Prior to 1998 bond yields and stock prices had a negative correlation. After 1998 (new normal) bond yields and stock prices move together (positive correlation), as we can see in figure 3-66.

![Figure 3-66](https://StockCharts.com/)

Source: StockCharts.com

Figure 3-66
- Bond yield leads stocks lower during 2010 and 2011.

Figure 3-67 gives a closer look at the two markets between 2009 and 2011. Again, a positive correlation can be seen between the S&P 500 and the 10-year Treasury Note Yield. It must be noted that bond yields lead stock prices. In the two reversion examples (circles), bond yield precedes the reversion.
Falling bond yields boosts dividend-paying stocks.
Whenever bond yields drop, the money flows to dividend-paying stocks. Figure 3-68 compares the yield on the 10-year Treasury Note to the ratio of Dow Jones Dividend Shares (DVY) divided by the S&P 500 during years 2009 and 2012. Both lines trended in opposite directions in this chart. Dividend-paying stocks start to outperform the S&P 500 each time bond yields starts to drops during those three years. The most dramatic example of that rotation was visible during 2011, when the February peak in the bond yield turned the DVY/SPX ratio sharply higher. Dividend-paying stocks were the biggest winners during that unusually volatile year for stocks. That was because dividend-paying stocks also thrive on rising volatility.

![Figure 3-68](source: StockCharts.com)
Consumer staples and utilities thrive on rising volatility. Rising volatility usually has a negative effect on most stocks. Some stock sectors as utilities or consumer staples, however, benefit from rising volatility. In this bullet we will examine consumer staples, and there are two reasons for this behaviour: (1) Consumer staples are defensive in nature, and (2) they pay dividends. Dividends cushion the blow from a falling stock market resulting from rising volatility. Figure 3-69 shows a ratio of the Consumer Staples SPDR divided by the S&P 500 (solid thick line) and the CBOE Volatility Index (shaded area). The VIX measures implied volatility for options on the S&P 500. The VIX is often referred as the fear gauge. This index usually trends in the opposite direction of the S&P 500. Therefore, a rising VIX usually coincides with a weaker stock market. The chart shows a positive correlation between the ratio and the VIX. That was especially true during the bear market years from 2000 through 2002, and again during 2008, when a spiking VIX pushed money into defensive stocks (resulting in a rising ratio). It was also true during 2011, when consumer staples were one of that year’s strongest sectors. So were utilities.
Not all bonds are the same.
When discussing bonds, it is important to note that not all bonds are alike. In fact, there are at least a half-dozen bond categories:

- Treasuries.
- Investment-grade corporate bonds.
- High-yield corporate bonds.
- Municipal bonds.
- TIPS (Treasury Inflation Protected Securities).
- Foreign bonds.

and they do not always trend in the same direction. High-yield bonds, for example, act more like stocks than bonds. Figure 3-70 shows a remarkably close correlation between High Yield Corporate Bond iShares (HYG) and the S&P 500 between 2008 and 2011. The correlation coefficient line shows strong positive correlation throughout the period. The reason for their close correlation is based on the fact that high-yield corporate bonds are highly dependent on the fortunes of corporations that issue those riskier bonds.

Source: StockCharts.com

Figure 3-70
Investment-grade corporate bonds.

While high-yield (junk) bonds are more closely correlated to stocks, investment-grade corporate bonds act more like hybrids between stocks and bonds. They have some characteristics of both investments. Figure 3-71 compares a ratio of High Yield Bond iShares (HYG) divided by Investment Grade Corporate Bond iShares (LQD) to the S&P 500 from 2007 through the start of 2012. It seems clear that the two lines trend in the same direction. In other words, riskier high-yield bonds fall further than investment-grade corporate when the market is weak, but rise faster than investment-grade bonds when stocks are rising. Bond investors are willing to assume more high-yield corporate bond risk when a rising stock market implies higher corporate earnings. By contrast, they favor the more conservative investment-grade portion when the stock market is weak.

Source: StockCharts.com

Figure 3-71
- **Quantitative Easing.**
  The Federal Reserve (Fed) has embarked on three rounds of quantitative easing since the end of 2008. Quantitative easing is an unconventional monetary policy used by central banks to stimulate the economy when conventional monetary policy has not worked. Normally, the Fed’s main tool for battling deflation is to lower short-term rates. When short-term rates fall to zero, however, the Fed cannot lower them any further. In that instance, it can try to stimulate the economy by buying assets of longer maturities in an attempt to lower rates further out on the yield curve. In late November 2008, the Fed launched its first round of quantitative easing by starting to buy $600 billion in mortgage-backed securities. By June 2010, when purchases were halted, the Fed held $2.1 trillion of bank debt, mortgage-backed securities, and Treasury Notes. In November 2010, The Fed announced a second round of quantitative easing (called QE2), which involved buying $600 billion of Treasury securities by June 2011. A third round (QE3) was announced on September 2012.

- **The impact of Quantitative Easing on bonds and stocks.**
  Figure 3-72 shows the impact the first two rounds of quantitative easing had on bonds and stocks. The first vertical bar marks the start of QE1 during the fourth quarter of 2008. Bond yields started rising almost immediately, and were followed by an upturn in stocks a few months later. The second vertical bar marks the start of QE2 in November 2010. In that instance, bond yields and stocks rose as well. When bond yields rise, bond prices fall. That helps drive money out of bonds and into stocks. Commodity prices rose as well. Immediately after QE1 and QE2 were launched, the U.S. dollar fell sharply and commodities rallied, based on the fear that the injection of too much money into the system would ignite inflation pressures. By the middle of 2011, bond yields started falling sharply again and took stocks with them. That reignited fears of a slowing economy and more deflationary pressures. The Fed then acted a third time, but with a slightly different approach. In September 2011, the Federal Reserve responded by announcing the start of Quantitative Twist.

![Figure 3-72](https://www.stockcharts.com)
- Operation Twist.
  During the two rounds of quantitative easing, The Fed acquired $1.65 trillion of federal bonds. Most of those bonds matured in two years or less. In other words, the Fed’s growing portfolio of bonds had the effect of lowering short-term rates, but had less impact on long-term bond yields. Operation Twist involved the Fed’s selling some of its shorter dated holdings and buying more long-term bonds. That would have the effect of driving bond yields lower. The goal was to lower longer-maturity bond yields, which would lead to lower lending rates for businesses and individuals, including lower rates for car loans and mortgages. The third vertical line in figure 3-72 marks the start of Operation Twist in September 2011. As had happened earlier with QE1 and QE2, stocks rallied right after it was announced. Bond yields, however, entered 2012 relatively flat. That also contributed to flattening of the yield curve.

- The impact of QE in the Yield Curve.
  The yield curve measures the difference between the short- and long-term interest rates. The most common way to measure the yield curve is to plot the difference between the 10-year and 2-year Treasury rates. When the yield curve is normal, long-term rates are higher than short-term rates. The slope of the yield curve is usually caused mainly by movement in short-term rates, which is controlled by the Federal Reserve. Long-term rates are more influenced by inflationary or deflationary expectations. An inverted yield curve occurs when short-term rates exceed long-term rates, and is a danger sing for the stock market and the economy. Figure 3-73 plots the yield spread between the 10-year and 10-year Treasury Notes rates, which is the most common way to measure the yield curve, as stated by John Murphy. The chart shows that the yield curve steepened after QE1 and QE2. That was the result of a rise in the 10-year yield. The yield curve dropped sharply during the third quarter of 2011, however. That was the result of a sharp drop in Treasury bond yields as money poured into Treasury bonds to offset a weakening stock market.

Source: StockCharts.com

Figure 3-73
Figure 3-73 shows that the spread between short and long-term rates stayed relatively flat into the start of 2012 (oval). That suggested that Operation Twist had some success in achieving the Fed’s goal of lowering the long end of the yield in an attempt to stimulate the economy. It also appeared to have had the effect of driving investor funds into higher-yield (and riskier) assets like common stocks and high-yield bonds at the start of 2012.

- **TIPS and Gold rise together.**
  
  One of the goals of quantitative easing was to help ensure that inflation did not fall below target. In other words, it was intended to keep deflation at bay. One of the risks was that the Fed’s battle against deflation might go too far (or last too long), and eventually lead to a higher inflation. That may explain why two of the strongest performing assets since the start of QE1 have been gold and Treasury Inflation Protected Securities (TIPS). TIPS offer bondholders added protection by adjusting principal payments for inflation.
  
  Figure 3-74 shows a close correlation between TIPS iShares (solid thick line) and the price of gold (dashed thin line) from the start of 2010 to the start of 2012. Shortly after the Fed announced the extension of its zero-interest-rate policy for the next three years in January 2012, TIPS iShares rose to the highest level in a decade. At the same time, gold experienced its strongest January in 32 years.
The Pendulum swings back to stocks at the start of 2012.

In a previous chapter we saw how to use ratio analysis to help determine whether bonds or stocks were the stronger asset class. It showed the pendulum swinging back to stocks at the start of 2009. After favoring stocks for the following two years, the pendulum swung back to bonds during 2011.

Figure 3-75 plots a ratio of the 10-year Treasury note price divided by the S&P 500. The ratio peaked at the start of 2009 (oval) and fell during those two years. The ratio turned up sharply in the middle of 2011 and broke a two-year trendline (up arrow) in the process. That year was better for bonds (especially Treasuries) than stocks. That was not the case at the start of 2012.
**Major technical principles.**

- High-yield corporate bonds and Treasury bonds can even trade in opposite directions.
- VIX (Volatility Index) is often referred as the fear gauge.
- Since rising volatility usually results in a weaker stock market, money usually rotates into defensive market sectors.
- A rising stock market increases investor’s appetite for riskier bond categories like high-yield (junk) bonds.
- Bond ETFs are based on bond prices. Bond prices trend inversely to yields. When bond yields rise, bond prices fall.
- Quantitative Easing is an unconventional monetary policy used by central banks to stimulate the economy when conventional monetary policy hasn’t worked.
- In times of financial crisis anywhere in the world, Treasury bonds are still considered to be the world’s safest asset.
- TIPS offer bondholders added protection by adjusting principal payments for inflation.
- Rising bond yields and falling bond prices encourage investors to rotate out of bonds and into stocks.