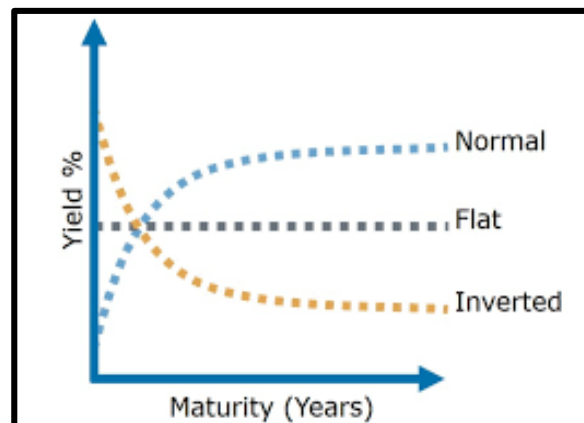


Implications of the Flattening Yield Curve



Interest rates are possibly the single most important factor impacting stocks and bonds. Rates at every duration are constantly changing, impacted by the latest economic developments. Interest rates dictate the price a borrower pays a lender for loans, such as mortgages, government bonds, corporate bonds, etc.

Rates also affect stock prices directly because shareholders own a piece of a company's future profits. The value of these profits is determined by how it compares to a safe, U.S. government-backed investment. If an investor can earn 5% with a safe investment, then a 7% stock return is unattractive as the investor would be taking significant risk to earn a slight bump in return.

With the short-term rate increases by the Fed this year, rates now exhibit an interesting characteristic worth investigating – a “flattening yield curve.” A flattening yield curve refers to the instance when the Federal Reserve raises short-term interest rates, yet long-term rates, which are defined by bond market trading, remain stubbornly low. We will explain what is meant by yield curve flattening and discuss why it is important.

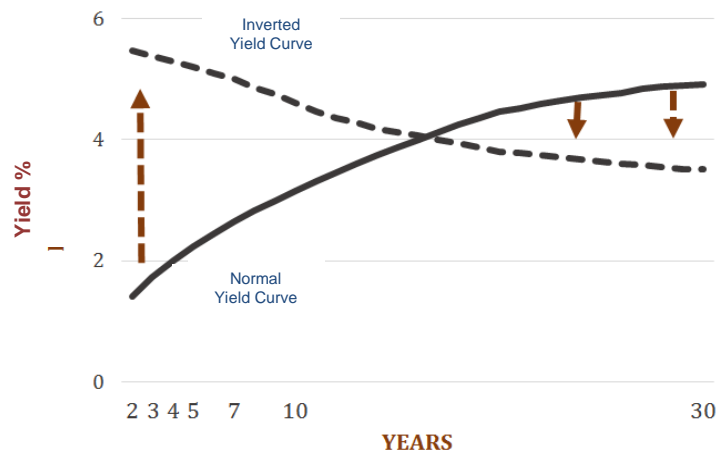
Yields on short-term bonds are usually lower than yields on long-term bonds because long-term bonds hold more interest rate risk. Thus, a higher yield is required to compensate long-term bond holders for this additional risk. For example, if you buy a \$10,000 bond with a ten-year maturity that pays 5%, then you live with some risk that interest rates may increase during this time frame. If rates do rise, a similar bond will offer perhaps 6% a year from now. If you wanted to sell your \$10,000 bond at that point, investors would be less inclined to buy it because they would rather buy the new 6% yielding version. Thus, your 5% bond would sell for less than \$10,000 (this is called a “discount”).

The gradual difference in bond yields at different durations traces an arc that is called the yield curve (see chart below). A "steep yield curve" is one with relatively low short-term rates and high long-term rates and is said to have a large rate spread. Conventional wisdom says that steep yield curves are good for the economy because they encourage investors to borrow short-term and invest in long-term projects. This helps corporations grow through development of new products and markets. Also, banks become more willing to lend, as they earn a healthy return on the rate spread, and thus fresh cash investments flow into the economy.

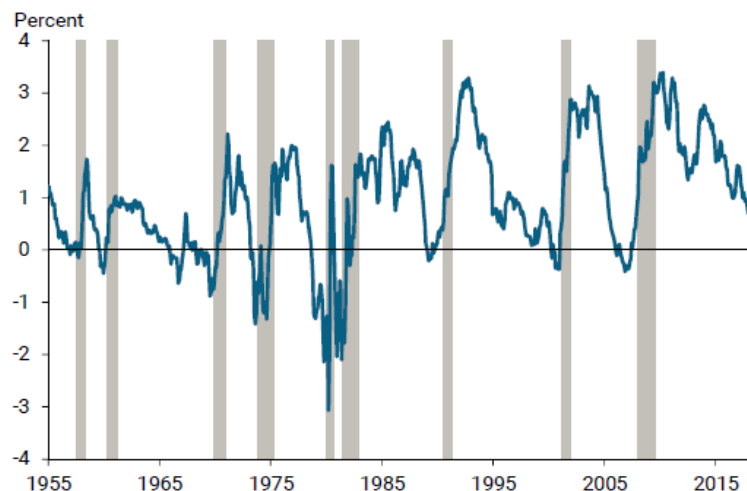
When short-term rates rise and long-term rates hold steady, the yield curve flattens and may even invert. An inverted curve means that short-term bonds could have higher rates than long-term bonds and the market is betting on slower growth.

Why does this matter? Research conducted by the Federal Reserve Board of San Francisco (FRBSF) shows that every US recession in the last 60 years was preceded by an inverted yield curve.¹ In fact the FRBSF posits a simple rule of thumb that "predicts a recession within two years when the term spread is negative" (short-term rates higher than long-term rates) has correctly signaled all nine recessions since 1955 and had only one false positive, in the mid-1960s when an inversion was followed by an economic slowdown but not an official recession. The delay between the term spread turning negative and the beginning of a recession has ranged between 6- and 24-months" (see chart below).¹

Normal and Inverted Yield Curves



The Term Spread and Recessions



Note: Gray bars indicate NBER recession dates.

As short-term rates rise while long-term rates remain stubbornly low, one might ask whether a recession is on the horizon? While we are watching this development closely, we note that all flattening curves do not eventually become inverted.

In fact, many economists believe that growth will gain momentum in coming months. Consumer spending has rebounded (increasing 6.6% as of August), commodity prices are relatively low, and equity is fairly valued (S&P 500 Index P/E is near the 25-year average), all of which indicate a healthy economic state.

Finally, predicting interest rates is not easy. Mountains of evidence show that experts' interest rate projections are poor trading guidance.² Market views of interest rate projections are already built into stock and bond prices. As with picking individual stocks, predicting interest rates is a dangerous game with potentially severe consequences.

Few opportunities exist in the investment world that increase returns without increasing risk. Sharper Granite believes the best path to superior risk-adjusted returns is through applying basic principles such as diversifying stocks, laddering bonds, minimizing costs and keeping taxes efficient, rather than using stock or interest rate guesswork. Our methodology constructs efficient portfolios around exactly those principles.

At some point the bull will become a bear. It is the nature of economic cycles. However, this knowledge is built into every intelligently-balanced portfolio, allowing investors to weather these potential dips until the yield curve steepens again and the economy recovers.

Notes and Acknowledgements:

1. FRBSF Economic Letter 2018-07, March 5, 2018

2. As an example, in February 2018, the 10-year Treasury was 2.90% and 100% of the *Wall Street Journal* economists predicted it would be higher in July, 2018. The 10-year Treasury rate in July, 2018 averaged 2.85%.

All forms of securities investing involve risk of loss for which clients should be prepared. There are no guarantees or insurances of principal preservation and market fluctuations of any level may occur and impact portfolio value. Past performance is not a good predictor of future performance. [Summer 2018]