



&



Equity Risk Premium and Inflation – A Generational Study

Tim Nyland, CFA
Managing Director
Zacks Investment Research

11/9/2012

Equity Risk Premium and Inflation – A Generational Study

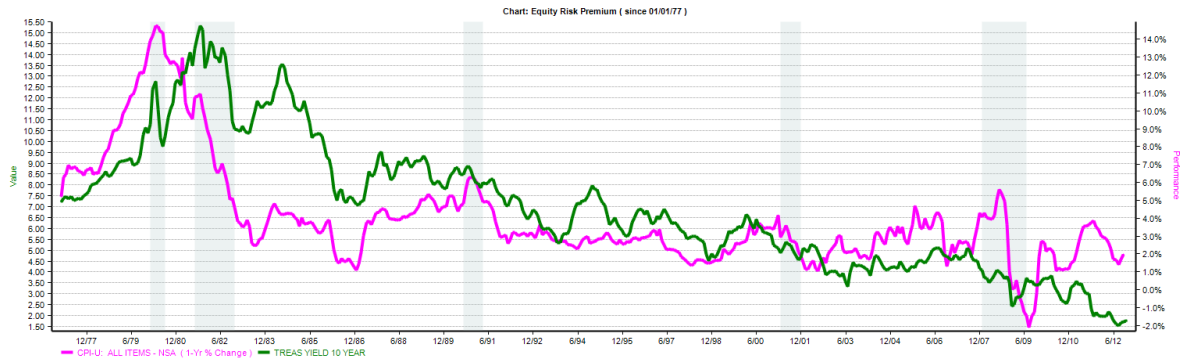
Equity Risk Premium and Inflationary/Deflationary Expectations

Over the past 40 years, the equity class of securities, as measured by broad market averages, has yielded returns to investors in excess of returns obtainable from owning risk free securities. The excess equity return (Equity Risk Premium), over that same time frame has been highly variable from year to year and sometimes negative. Empirical evidence suggests that stable and more moderate inflation leads to minimize the variance of return on capital resulting in lower warranted levels of equity risk premium while higher and more troublesome inflation leads to increase the variance of return on capital resulting in higher warranted levels of equity risk premium.

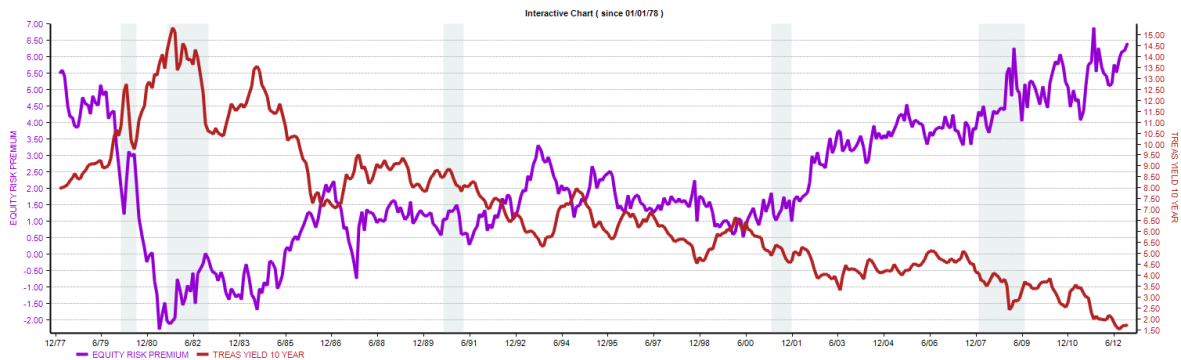
Equity Risk Premium throughout the Decades

1970's

Rising federal debt levels, which began escalating in the 1960's, were largely monetized by the Federal Reserve Board, causing ever-increasing inflation. Interest rates began to rise to compensate savers and investors. The end of the Gold Standard and inflation-generated depreciation of the U.S. dollar, compounded by Middle East war and an OPEC embargo of the U.S., led to a quintupling of the price of oil in 1973, precipitating a severe recession. Manufacturing and other industries that were dependent on low energy costs suffered, real discretionary income plunged, and unemployment soared, becoming a structural problem throughout the decade.



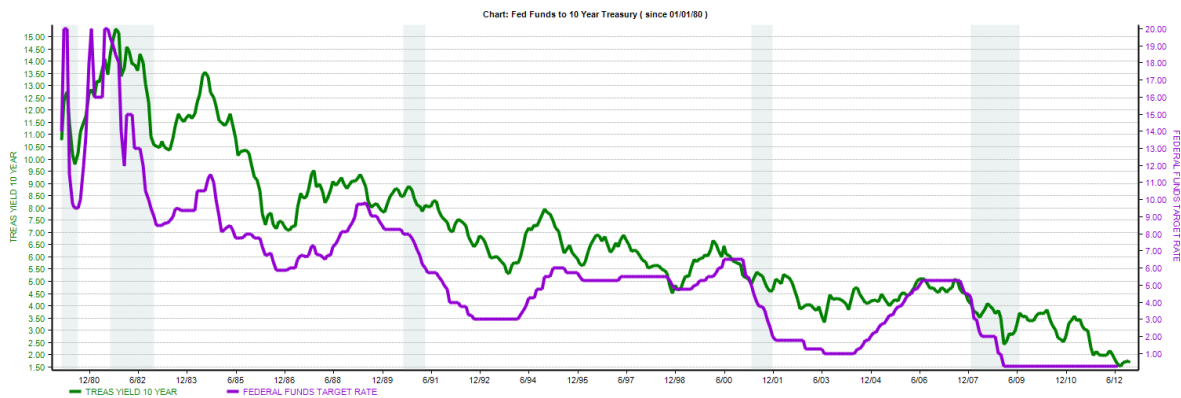
The result was stagflation; high price inflation, and sustained high unemployment. By 1977, Equity Risk Premium levels peaked above 5%. From 1979 to 1981, policy makers went on the offensive to contain still stubbornly high inflation rates. The Fed raised interest rates, and as a result of both the high cost-push price inflation and high real interest rates, 10-year treasury yields elevated from 8% to 15% over this later time period.



1980's

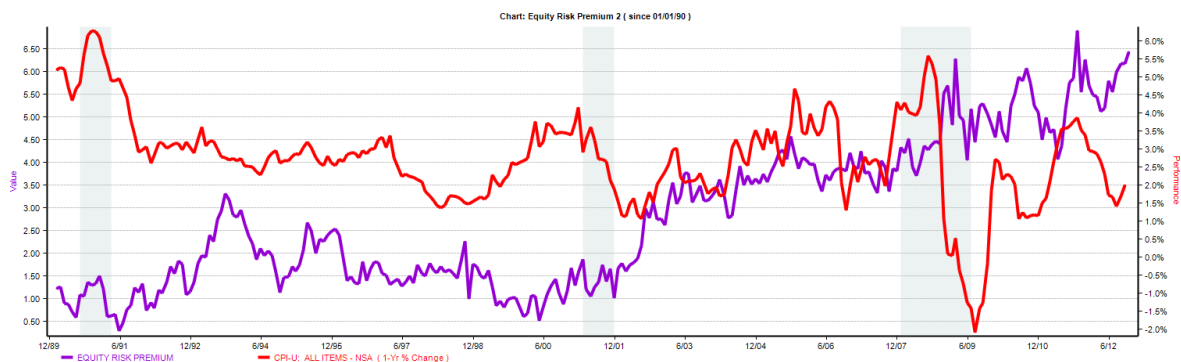
In response to the high inflation coming out the 1970's, a new Fed policy maker (Paul Volcker) adopted a severely restrictive monetary policy. By 1981, the U.S. economy slipped into recession as a result. During this same time period, Equity Risk Premium levels fell from a record high 5.5% to a record low negative -2.5%. What would cause a negative Equity Risk Premium, and why would investors hold onto equities with a negative implied return relative to the risk free asset class? *The answer lies in 1980's investor's perception of inflationary/deflationary expectations.*

During this period investors held equities at negative forecast implied return in *anticipation* of future interest rate reductions and resulting equity asset class appreciation. Investors were correct. Bond yields and interest rates peaked in September of 1981. As a result of a disinflationary period starting in November of 1980, investors correctly perceived that the policy maker response to the induced recession would be a series of significant interest rate reductions. In fact, the longer term trend of 10-year treasury yields has been on the decline ever since.



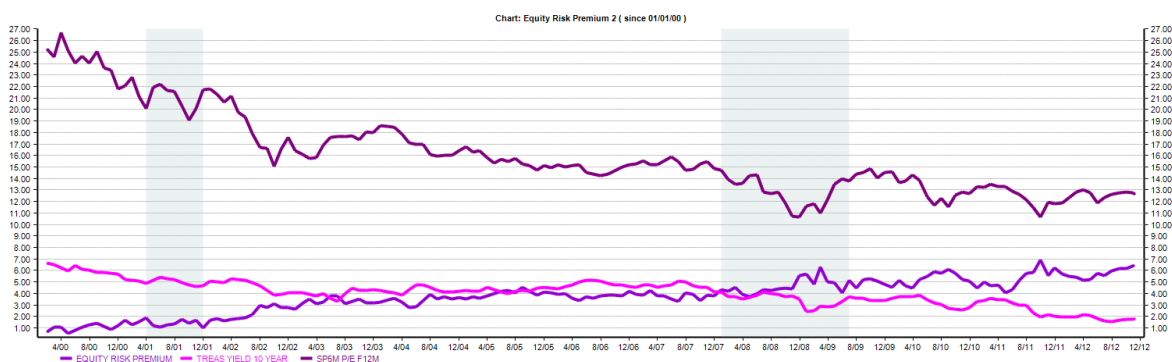
1990's

Having learned from the mistakes of inflation and unemployment in the 1970s, followed by the high cost of disinflation in the 1980s, a new Fed policy maker (Allen Greenspan) determined that the Fed's primary goal in the 1990s should be price stability. Throughout the 1990's, Fed policy makers responded quickly to troublesome inflationary/deflationary threats. The result was stable and more moderate inflation, which in turn produced stable and more normalized levels of equity risk premiums. Falling interest rates, coupled with a stable equity risk premium environment, reduced the overall total equity discount rate (total equity discount rate = risk free rate + equity risk premium), which in turn fueled forward earnings multiple expansions that lasted to the end of the 1990's.



2000 – 2012

Starting with the 'dot com' bust, amplified by the geo-political risks associated with events of 9/11, then whipsawing through the great housing/financial leverage collapse to today, the Equity Risk Premium has risen from 0.50% on 4/30/2000, to current peak levels just shy of 7.0%. Sustained interest rate declines since 2000 have never been validated by the broad equity market in terms of an increase in price relative to earnings. Higher P/E ratios that would otherwise be warranted in a declining interest rate environment have yet to materialize. In turn, this has produced a steep rise in the Equity Risk Premium. Investors appear to be betting on the triple risk of geo-political and geo-economic and geo-financial instability lasting for some time.



Post 2012 Inflationary Expectations, Impact on Equity Risk Premium and P/E Ratios

If there is a silver lining in the current sustained broad earnings multiple compression, it may be the fact that investors are betting on bond yields returning to a more 'normalized' state. Inflationary expectations combined with some form of market stability could ultimately drive investors out of bonds into equities as a hedge. As a result, 10-year treasury yields could rise, equity risk premium could fall, and broad equity market prices could expand relative to earnings. History has taught us that if one assumes 10-year treasury yields are capable of returning to a range of 4%-5%, then one would also expect the equity risk premium can decline in lockstep. *So what are the implications of future inflation expectations and broad market equity returns?*

The theoretical POSITIVE to this condition is that a hypothetical 3% increase in long-term interest rates can be absorbed by an equivalent decline in Equity Risk Premium, all while having a positive effect on stock prices.

Applying 40 years of Equity Risk Premium Observations to the Post 2000 Era

Over the past 40 years, the Equity Risk Premium on average stands at 2.5%. Looking at the time period from 2000 to current, the Equity Risk Premium has averaged 3.5%. Since 2000, Equity Risk Premium levels above/below 3.5% represent the portion of equity pricing that cannot be explained by current interest rates and underlying growth in corporate earnings.

When the Equity Risk Premium is GREATER than 3.5%, equities are either undervalued relative to bonds or investors are betting on sustained geo-political risk and market instability. When the Equity Risk Premium is LESS than 3.5%, equities are either overvalued relative to bonds or investors are betting on greater market stability.

Advantages of Zacks Equity Risk Premium

One of the larger distinguishing features of the Zacks Equity Risk Premium when compared to alternative methodologies is that the Zacks Equity Risk Premium is forward looking and market-implied. Rather than attempt to naively forecast what risk premium the market should command of equity returns relative to a 'risk free' investment, we calculate and deliver each week the Equity Risk Premium implied by current risk free interest rates in addition to market price, forecast growth and forecast earnings levels for a proxy market basket of equity securities. Using this method the market as a whole is assumed to be efficiently priced and individual equities will have expected return and valuation forecasts subject to a market implied equity risk premium assumption.