



## Is Pakistani Stock Market Expensive?

The Fed model is a simple theory of equity valuation which compares the stock market's earnings yield (EPS / Price per Share) to long-term government bonds yields. The model is used to measure attractiveness of equity investments vis-à-vis a close alternative asset class i.e. long-term bonds, thereby helps investors to allocate funds between equities and bonds.

The Fed model says that bond and stock market are in equilibrium and fairly valued when the 1-year forward earnings yield on equities equals the 10-year bond yield. However, when stocks yield more than bonds, investors should switch from bonds to stocks. Likewise, when earnings yield on equities is below the long-term bond yield, investors should sell stocks and buy bonds.

We have applied the Fed model in the local context to: (i) assess past relationship between equity and bond returns; and (ii) see if the Pakistan Stock Market is undervalued or overvalued from a 1-year forward perspective, based on expected earnings yield and the 10-year PIB yield. In our study, we have used historical returns of the Pakistan Stock Market and the 10-year PIB from June 2008 to date. For 1-year forward earnings projections, we have used our internal forecasts. We expect 10-year secondary market PIB yield to rise to 14% by June 2014 (presently 12.9%) due to rising inflation and interest rates. We expect listed companies' earnings to grow by 13% next year.

As shown in the chart below, bond and stock market yields have moved in the same direction during the last 5 years in conformity with the Fed Model. These two parameters have depicted a fairly strong (53%) positive correlation over 2008-2013. After the 2008 stock market meltdown, stock market earnings yield initially went significantly above 10-year PIB yield as risk-averse investors sold off their equity positions. Over time, these two yields have converged as earnings yield fell faster than the decline in bond yields probably due to flow of funds from bonds to stocks due to relative attractiveness of equity investments.

The 10-year secondary market PIB yield has recently crossed over stock market earnings yield due to strong rally in equities and an uptick in the interest rates. We expect PIB yield to rise by at least another 100bp by June 2014 due to expected increase in inflation and mop-up of liquidity by State Bank of Pakistan. Consequently, the yield gap between the two asset classes is likely to widen further during the next few months. Thus, as per the Fed Model, the stock market performance is likely to remain subdued over the next few months. However, we are bullish on the stock market over the medium term (1-5 years), as the energy sector reforms and other steps carried out by the present government are expected to yield positive results.

