Analysis of the Government Bond Market and Monetary Policy

Abstract

The study explores the evolution between the yield curve and the Pakistan's economy, with a special focus on examining the effects of the monetary policy and slope of the US term structure on the emerging market yield curve and the possible feed-back effect on the real sector by applying a yields-macro model. The yield curve model of this study explicitly incorporates both the yields factors (level, slope, and curvature) and the macroeconomic variables (overall economic activity, exchange rate, money supply and inflation rate). Empirical results from the yields-macro factors model show that there is a statistically significant bidirectional linkage between the macroeconomic and the yield curve factors; however, by contrast with conventional wisdom, macro variables play a less prominent role in explaining the yield factors as compared to the strength of effect from the latter to the former. Furthermore, the volatility in bond markets is found to be asymmetrically affected by positive and negative shocks and more sensitive to recent innovations rather than the lag volatility. The structural decomposition indicates that it is the entire term structure of interest rate that transmits the policy shocks to the real economy. The monetary policy signals pass through the yield curve level and the slope factors to stimulate the economic activity. Besides the slope factor, the curvature factor also reflect the cyclical fluctuations of the economy. One can infer from the overall results that the slope and the curvature factors serve as leading counter-cyclical and pro-cyclical indicators respectively. In addition, the study finds that the domestic yield curve in emerging economies has in-sample information content. The US yield curves also have in- and out-of-sample information content for future yield curve shape, inflation and growth in emerging economies. This may be due to exchange rate pegging to the US dollar in the emerging economies.