The Probabilistic Structure of Indian Stock Returns

Dilbagh Singh Broca

In this paper the distributional characteristics of Indian stock returns have been analyzed over a ten year period: 1st July 1997 to 31st March 2008. Empirically the data series of 2260 observations exhibits severe leptokurtosis and slight negative skewness. Four heavy-tailed laws – Student t, Bernoulli jump process, hyperbolic and mixture-of-normals – were compared to the stationary normal (Gaussian) case as regards their overall fit to the return series. Parameters of the densities were estimated through the method of maximum likelihood. The hyperbolic distribution provides the best fit to Indian data (relative to the normal) on the basis of the Schwarz criterion. It not only allows a process representation of investor behaviour, but also captures the negative skewness whereas other models are either symmetrical or fail to incorporate data characteristics more finely.

The Optimal Level of International Reserves: The Case of India

Suvojit Lahiri Chakravarty

The study analyzes the optimal reserve holding for India during an era of flexible exchange rate and high capital mobility using the buffer stock model of Frenkel and Jovanovic (1981). The evidence derived from the ARDL approach of Pesaran, Shin and Smith (1996) support the fact that the scale variable, opportunity cost variable, volatility variable and exchange rate flexibility variable all have significant effects on the reserve demand.

Brief Articles, Notes and Comments

Trade Openness and Economic Growth: Evidence from Trivariate Causality

Rudra Prakash Pradhan

The study seeks to examine, if the degree of openness can be determined to Granger cause the economic growth, or economic growth can be determined to Granger cause the trade openness. For this purpose, we first use a bivariate error correction model within a Granger cause framework, as well as adding foreign direct investment as explanatory variables, creating simple trivariate analysis, for each of these two variables. The combined
results of both bivariate and trivariate modeling suggest that openness and economic growth are cointegrated and they have bidirectional causality between them.

**Relative Efficiency of Scheduled Commercial Banks in India (2001-08) : A DEA Approach**

*A R Jayaraman
M R Srinivasan*

The banking industry in India has undergone a metamorphic change over the past three decades and their performance has a significant role in building up the economy of the country. In this study, an attempt has been made to measure the scale efficiency of scheduled commercial banks in India using 'Data Envelopment Analysis' and identify those 'best-practice' banks for each year, which forms the basis for comparison. Further, the study lists out the number of efficient bank for all study years and discusses in detail the relative performances of these banks using efficiency scores. For critical comparison and evaluation, the study is restricted to the banks which have significant retail presence in India.

**Book Reviews**

**Telegraphic Reviews**