Capital Adequacy Requirements and the Behaviour of Commercial Banks in India : an Analytical and Empirical Study

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The Development Research Group (DRG) in the Reserve Bank of India has brought out a study entitled "Capital Adequacy Requirements and the Behaviour of Commercial Banks in India : An Analytical and Empirical Study", the twenty-second in the DRG Study Series. The study is authored by Prof. D.M.Nachane, Shri Aditya Narain, Shri Saibal Ghosh and Shri Satyananda Sahoo.

In the wake of the introduction of prudential regulation as an integral part of financial sector reforms in India, there has been a growing debate as to whether capital adequacy requirements are the best means to regulate the banking system. From cross country experiences, there is some evidence of a positive association between capitalisation and risk assumption by banks due to the possibility that the one-size-fits-all capital adequacy ratio (CAR) causes bank leverage and asset risk to become substitutes. At policy levels, this has driven research into alternative regulatory methods.

Against this background, the study investigates the relationship between changes in risk and capital in the Indian banking sector, with reference to public sector banks (PSBs). The study seeks to identify key variables impinging upon the capital adequacy of banks and to examine evidence for a shift in bank portfolios towards greater riskiness after the introduction of capital adequacy norms. The study also attempts to draw implications of the new capital adequacy framework proposed by the Basel Committee on Banking Supervision (BCBS) for the Indian financial system and evaluates alternative regulatory arrangements as complements to the CAR.

The major findings of the study are :

* Given the wide heterogeneity in terms of products and customer preferences among PSBs as well as the adjustment response of PSBs, the regulatory framework should be designed to encourage individual banks to maintain higher CAR, over and above the stipulated minimum, so as to reflect differential risk profiles.

* While capital remains a useful regulatory tool for influencing bank behaviour, there is no conclusive evidence that the introduction of CAR has led to risk aversion among banks.

* Prompt Corrective Action (PCA) based on capital might prove to be an effective strategy for arresting bank portfolio deterioration.

* Capital ratios of banks are a crucial determinant of banks ratings, in the short-term; this has implications for India in terms of the new BCBS proposal which are built on ratings.

* Alternative approaches such as value at risk (VaR) and Pre-commitment Approach (PA) are no substitutes for the wider risk management process of analysing stress scenarios and monitoring operational and legal risk; they also suffer from limited applicability *i.e.* for entities with material trading activities. The PA needs to be further examined and refined before it can be considered for application in Indian banks.

The DRG Studies series have an accent on policy-oriented research. They are released for wide circulation with a view to generating constructive discussion among professional economists and policy makers on subjects of current interest. The views expressed in these studies are those of the authors and do not reflect the views of the Reserve Bank. The study is available on RBI website http://www.rbi.org.in.

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