

Systemic risk and Bank Characteristics Relationship in India : Post-GFC scenario

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Abstract

By adopting the change in the conditional value at risk (CoVaR) measurement technique, this paper identifies the institution specific drivers of systemic risk of Indian banking during the post-global financial crisis (GFC) period. The analysis is based on the data of 37 listed Indian banks in the Bombay Stock Exchange over a period of 10 years. Over the years Indian public sector banks were found to be top systemic risk emitters. In line with the international literature, bank size has emerged as a factor explaining the risk along with the share of short-term deposits, equity return, and return on assets. Share of the non-performing loan has surfaced as a new variable. While contributing to the Indian literature, the findings are expected to support the banking regulator to focus more on managing the current massive scale of poor-quality loan assets.

JEL Code : E05, D81, G21, G32

Keywords : Systemic risk, CoVaR, bank size, non-performing loans, India

I. Introduction

MANAGING SYSTEMIC RISK (SR) arising out of financial institutions' interconnectedness is a global concern that accentuated further after the global financial crisis (GFC). Since banking dominates the institutional network of almost all developed and emerging economies, risks emanating from them has a more significant ramification. Recently, "with the concern of system-wide distress in mind, the macroprudential objective of prudential regulation – that is, limiting systemic risk – gained traction on the regulatory agenda" (Oordt and Zhou, 2019) and made banking the most favorite domain among the researchers. Since banking is the most fragile (Kaufman, 1996), also considered as institutions of systemic nature,

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immediately. The banking business during the first five years of GFC less impacted. Since 2015, with the identification of more stressed assets in the system, the picture completely changed.

In line with global literature, the asset size of banks, and the share of short-term debt to total deposit have emerged along with the size of non-performing loans as the contributory variables to the SR. The implication of these findings has immense significance. By April 2020, the number of public sector banks has reduced to only 12. This consolidation brought bank size into the forefront, along with their contribution to SR. With the increase in size, their contribution to risk is also likely to increase, which requires strict regulatory oversight. As revealed from the second regression, the quality of the loan is also one of the drivers. This finding is a pointer to the regulator for stricter NPL management. The negative impact of large scale non-performing loans is still looming large on the banking performance. Particularly the current phase of severe global economic disruption due to the impact of a significant externality, i.e., COVID-19 pandemic is likely to add fuel to the fragile health, which is very much visible in the current meltdown of the Indian stock market (more than 30 percent decline in the BANKEX). It is very much likely that due to this disruption, the NPL expected to rise further and require more capital infusion soon. The central banker needs to be more vigilant in coming years to adequately negotiate any challenges emanating from the disruption, like slippage in the quality of assets and deterioration in the financial health, which expected to enhance the SR.

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