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An Empirical Analysis of Relationship between Bank Capital and Bank liquidity Creation in Indian Banking Sector[1]

SALONI GUPTA *
LAXMI DEVI **

Abstract

The study examines the impact of change in Capital on liquidity creation by scheduled commercial banks in India. We have employed a dataset on Indian commercial banks from 2005 to 2020 and investigated the "financial fragility- crowding out" and "risk absorption" hypotheses for Indian banks using Berger and Bouwman's (2009) measure of liquidity creation. We found a positive relationship between bank liquidity creation and bank capital. It indicates that the Indian banks follow the "risk absorption hypothesis," irrespective of ownership structure. It proves that Capital absorbs the transformation risk because of the liquidity creation process, thereby strengthening banks' risk-bearing capacity. Hence, higher Capital is likely to increase liquidity creation. The importance of the risk-absorbing capacity of bank capital, reinforcing the importance of maintaining prescribed capital levels and liquidity buffers. Lastly, funding liquidity supports liquidity creation irrespective of the outcome of higher funding liquidity risk during the transition.

JEL Code : G21, G28
Keywords : Bank; Liquidity; Capital, Off-Balance Sheet Exposure; SCB; PCSE; India

I. Introduction

THE MODERN FINANCIAL intermediation theory suggests that banks play two central economic roles: liquidity creation and risk transformation. Bank liquidity creation is transforming illiquid assets into liquid liabilities. The Oxford Handbook of Banking explains that bank liquidity creation is a form of "Qualitative asset transformation", which involves funding the loan commitments using a combination of demand deposits, term deposits and bank capital. Therefore, a bank creates liquidity on its balance sheet by financing illiquid assets with liquid liabilities (Bryant, 1980; Diamond and Dybvig, 1983) as well as by agreeing to loan commitments and bank

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* Principal and Professor, University of Delhi, Bharati College, C-4, Janakpuri, Delhi 110058 INDIA.
** Doctoral (Ph.D.) Research Scholar, Delhi School of Economics, University of Delhi, J-1/53B, Chanakya Palace, Uttam Nagar, Delhi,110059, INDIA

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V. Conclusions

Banks play a crucial role in creating liquidity by using their liquid liabilities to fund illiquid long-term assets. However, this liquidity transformation can result in significant transformational risk, as evidenced by global crises caused by liquidity creation. The trade-off between maintaining higher capital levels for bank stability and liquidity creation has always been an interesting topic to explore. Two opposing theories on the relationship between bank capital and liquidity creation have been proposed, the "financial fragility crowding out" hypothesis and the "risk transformation" hypothesis. We conducted a study on the Indian banking sector from 2005 to 2020 and found that higher capital levels lead to greater liquidity creation, supporting the risk absorption hypothesis. Our study on the Indian banking sector found a significant positive correlation between bank capital and liquidity creation, regardless of ownership structure. Our findings have important policy implications, highlighting the importance of maintaining prescribed capital levels and liquidity buffers and the government's policy to recapitalize banks to increase liquidity creation. Overall, our study contributes to the literature on liquidity creation behaviour in emerging markets like India. Our results suggest that maintaining prescribed capital levels and liquidity buffers is crucial to banks' risk-bearing capacity. These findings are significant for emerging markets like India, which tend to be risk-averse while also maintaining higher capital levels than required by the Basel committee.

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