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Systemic Liquidity Index for India

The Reserve Bank of India today placed on its website a Working Paper titled “Systemic Liquidity Index for India”. The Working Paper has been written by Dr. Rabi N. Mishra, Shri G. Jagan Mohan and Shri Sanjay Singh.

Liquidity stress is at the heart of any banking crisis. Liquidity risk, when not managed properly at individual institutions, could lead to a more serious problem – of solvency. The paper seeks to define the various elements of what is loosely referred to as liquidity. It describes the various types of liquidity that the term denotes, among other things, funding and market liquidity.

Systemic risk is influenced by systemic liquidity, a broader term that encompasses the liquidity scenario in the banking sector, non-banking financial sector, the corporate sector and prevailing foreign currency liquidity conditions. The paper introduces a Systemic Liquidity Index (SLI) for India which captures funding liquidity conditions in all major financial markets. Based on four indicators, whose coverage extends to funding markets of banks, non-banks and the corporate sector, the SLI has been constructed using four different methodologies based on relative distance method, standard normal or variance-equal method, principal component analysis method and rank percentile method. Of these four, the paper adopts the most appropriate one, namely, variance-equal method, which is widely used internationally.

A single indicator based on call rate can also be used as an index of liquidity strains. However, such an index provides signals relating to the liquidity conditions in respect of banks alone. The SLI developed, using multiple indicators, is more comprehensive representing funding liquidity conditions in the entire system as against a single one. It is easy to compute as it uses standard statistical techniques and daily market data and could prove useful to monitor trends in systemic liquidity conditions. The SLI, so developed, is appropriately validated for its function as a metric for measuring systemic liquidity and its implications on the banks’ performance.

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