Discussant comments on session IPM65:
Statistical tools used in financial risk management

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The crux of financial stability issues is the liquidity/profitability nexus: banks must manage liquidity stocks and flows as profitably as possible without jeopardising financial stability.

The authors propose new asset-based measures of bank liquidity. They employ a flow approach, incorporating an intertemporal dimension based on individual bank data, and distinguishing between nominal and idiosyncratic liquidity flows. The focus is on the dynamics of purchases and sales, rather than solely on changes in net positions.

The authors’ flow approach incorporates an intertemporal dimension based on individual non-consolidated supervisory data at the micro level. In recent times, banks have been increasing their exposure to off-balance sheet liquidity risk; one wonders whether an improved data set is needed for individual institutions to specifically capture such off-balance sheet risks.

M&A are also taken into account, and it is possible to identify liquidity flows across entities in the same banking group. The Basel Committee on Banking Supervision’s Joint Forum on the management of liquidity risk in financial groups studied the degree to which the liquidity risk management function was centralised in groups, and differences attributable to the type of firm dominating a particular group. It would be interesting to assess these differences based on the proposed methodology.

As to the distinction between nominal and idiosyncratic flows, nominal flows measure the liquidity growth in absolute terms (weighted average) and reflect nominal liquidity expansion or contraction within the banking system on aggregate, thus showing macroeconomic change, while idiosyncratic flows measure liquidity growth in relation to aggregate growth, reflecting purely bank-specific factors.

Most financial firms use a variety of metrics to monitor the level of liquidity risk to which they are exposed. These can be grouped into the liquid assets approach, the cash flow matching approach and a combination of the two. It would be interesting to examine whether the idiosyncratic measure can be compared with a firm’s liquidity risk policy statement, and whether this proposed quantitative approach can be validated by the internal models used by banks in their liquidity risk management.

A further finding of the paper is that there is a substantial idiosyncratic build-up of liquidity, which suggests that a large number of banks expand in excess of the general growth trend. In the sample, the build-up is related to size of firm, but the finding could raise concerns for the management of liquidity by other firms in the sample.

Other issues that could be considered are cross-border issues in liquidity management – at the country level, the currency level and the affiliate or sector level.

Finally, we should note the possibility of extending stress testing, which could be done at both the macro level (eg output, stock prices and short-run nominal interest rate shocks) and the micro level (ie firm-specific shocks such as downgrading of a bank’s rating).

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