MORE THAN METRICS

BASEL III WILL CHANGE THE WAY BANKS MANAGE LIQUIDITY. MOORAD CHOUDHRY EXAMINES THE RISKS THEY FACE

The art of banking is that of managing liquidity. While capital is rightly viewed as being of utmost importance to a bank's risk manager, the bankers' common saying that "capital kills you slowly, while liquidity kills you quickly" is indeed an accurate one. What exactly do we mean by it? As good a definition as any is to be found on Wikipedia, which states: "In banking, liquidity is the ability to meet obligations when they become due."

But what is meant by "when they become due"? Essentially, this means in perpetuity, or at least as long as we wish the bank to remain a going concern. In other words, maintenance of liquidity *at all times* is the paramount order of banking.

This is also the paradox of banking. Banking creates maturity mismatches between assets and liabilities, because assets are invariably long-dated and liabilities are short-dated, and this creates liquidity risk. In fact, to undertake banking is to assume a continuous ability to roll over funding, otherwise banks would never originate long-dated illiquid assets such as residential mortgages or project finance loans. As it is never safe to assume anything, prudent liquidity risk management in banks dictates that all leveraged financial institutions need to set in place an infrastructure and governance ability to ensure that liquidity is always available, to cover for when market conditions deteriorate.

Because banks are so important to the economy's health, central banks operate as 'lenders of last resort' to assist any bank that finds itself in liquidity difficulties. But a bank that has to resort to the central bank has failed, and this is a failure of its management.

In this article we review the current challenges in liquidity risk posed by the requirements of the new Basel III regime.

The scope of liquidity risk

The crash of 2007/8 was as much a crisis of liquidity as it was of capital. Many banks ran a funding regime that was heavily overweight in short-term liabilities, and volatile liabilities such as wholesale funds. That this is accepted as a prime causal factor of the crash is apparent from the way banks are adjusting to the new requirements of Basel III. Basel I and Basel II did not concern themselves with liquidity, only capital. The new regime, which will be fully implemented by 2019, makes material demands on banks with respect to the way they manage liquidity.

Liquidity risk management is not simply a matter of liquidity metrics and ratios, however. There are important governance and policy issues that also need to be built into the infrastructure and workings of a bank's treasury and risk departments. Liquidity risk management needs to be addressed at the highest level of a bank's management – the board of directors. The board will delegate this responsibility to a management operating committee, such as the asset and liability committee, but it is the board that must own liquidity policy. If it does not own it, then it is not following business best practice. Given this, it is important that the board understands every aspect of liquidity risk management.

We might wish to classify liquidity risk management as encompassing the following specific areas:

- Liquidity strategy, policy and processes;
- Regulatory requirements and reporting obligations;
- Bank funding strategy and policies;
- Liquidity risk appetite;
- Institution-specific and market-wide stress scenarios, and stress testing;
- The liquid asset buffer; and
- Liquidity contingency funding plan.

Liquidity management is devised and dictated from the highest level, and influences every aspect of the bank's business strategy and operating model.

New structural metrics

Basel III enshrines the new risk approach in formal regulatory principles with two new structural risk metrics – one for short-term and one for long-term funding. On the face of it, these represent a step-change in liquidity management culture, but that is only because principles accepted as commonplace in the 1860s or 1960s had been discarded by 2008. Nevertheless, many banks will find them challenging to work towards.

The critical short-term metric is the liquidity coverage ratio (LCR). The objective of this is to promote short-term resilience to liquidity shocks. Setting a limit for it, and requiring banks to hold a stock of sufficient high-quality, genuinely liquid

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LIQUIDITY COVERAGE RATIO

LCR FOR A BANK IS GIVEN BY	STOCK OF HIGH-QUALITY LIQUID ASSETS / STRESSED NET CASH OUTFLOWS OVER A 30-DAY TIME PERIOD	>100%

High-quality assets are specified by the Basel Committee and include sovereign bonds and multilateral agency bonds. The LCR identifies the amount of unencumbered, high-quality liquid assets required to offset the net cash outflows arising in a short-term liquidity stress scenario. A regulatory limit for the LCR ensures that banks meet this requirement continuously.

NET STABLE FUNDING RATIO

NSFR IS GIVEN BY	AVAILABLE STABLE FUNDING / REQUIRED STABLE FUNDING	>C.100%

The metric measures the amount of stable funding as a proportion of the total requirement for such stable funding. The Basel Committee provides definitions on what constitutes 'stable'. The NSFR is typically used to monitor and control the level of dependency on volatile, short-term wholesale markets, as a key structural balance sheet ratio. A low ratio indicates a concentration of funding in shorter maturities (under one-year tenor), which can give rise to funding rollover and mismatch risks.

assets, results in a more stable funding regime that will be less susceptible to a freeze in interbank markets, of the kind observed in October 2008.

In other words, the LCR requirement results in banks having to maintain a liquidity buffer that matches expected cash outflows in a stressed environment. The amount of funds that might be observed in a market stress situation is given by the stress tests that banks run every month, under specified assumptions. The time period covered in the stress test is 30 days. Note that this implies that a stressed environment would last for only a month, which is unrealistically short. For this reason, some regulators, including the UK's Financial Services Authority, impose a 90-day time period over which the stress would be assumed to take place.

Are the stress tests themselves reliable? Any analysis undertaken under assumed conditions is always at risk of inaccuracy, which is why continuous review and back testing are also part of a bank's risk management regime. For this reason, suggestions have also been made that the size of the liquidity buffer should be a function of other metrics, such as the following:

- Set at twice, or 2.5 times, the size of the aggregate of a bank's liabilities that are of less than one-year maturity; or
- Set at 110% of the stressed outflow number.

What is the implication of the LCR for the world's banks? In essence, it is that they will all be holding, in differing amounts, a stock of genuinely liquid assets. The challenge comes from the impact this will have on the bottom line, as a cash or risk-free asset portfolio generates less income (if it is run at a profit at all), and so, all else being equal, a bank's profits will reduce.

The critical long-term metric is the net stable funding ratio (NSFR). This promotes resilience over the longer term; setting a limit for it ensures sufficient long-term funding for a bank's balance sheet. In other words, maintaining an adequate NSFR should help in ensuring a stable funding structure because more of a bank's liabilities will be comprised of longer-dated funding. In treasury terms, we might define 'long-dated' as being over 12 or 24 months in tenor.

Setting a minimum level for term funding would reduce dependency on short-term funding, while increasing the cost of business as more liabilities are moved into longer-term funding. Again, the challenge for banks is one of cost, and impact on profits. Longer-dated liabilities cost more than short-dated liabilities and are difficult to raise in a stressed environment. At the height of the banking crisis in October 2008, for example, a bank might have been able to borrow one-day money, but it would have struggled to borrow three-year money.

Conclusions

Liquidity management is a discipline that is as old as banking itself, but one lesson we must learn is that its principles need to be refreshed and maintained throughout the business cycle. Under the new regime being implemented under Basel III, adherence to old-fashioned beliefs on sound liquidity practice is something that will be enshrined in regulatory fiat. But as the two new funding metrics reflect common sense and good banking practice in any case, one would expect bankers to follow the principles on which they are based, irrespective of whether regulators tell them to do it.

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