Tips of the trade

A panel of experts was convened by *Operational Risk & Regulation* for this virtual roundtable, sponsored by Sybase, in which they discuss the main challenges facing financial institutions in meeting new liquidity regulations, including the extra data requirements placed on firms, and share some tips for best practice in stress-testing a liquidity risk framework.

Recent regulations introduced by Basel, the UK Financial Services Authority (FSA) and US regulators have all focused on the importance for banks to establish a robust liquidity risk management framework. Firms are now required to set liquidity risk tolerance levels, maintain adequate levels of liquidity through a cushion of liquid assets, identify and measure a range of liquidity risks, as well as stress-testing scenarios and the framework itself. The challenges facing firms to comply with the new regime, which remains uncertain due to the delays by the Basel Committee, are many. Complying with the new regulations will be tough enough, but finding some business benefit from the process will be very difficult.

What are the new liquidity risk requirements that financial institutions need to comply with?

Simon Hills, British Bankers' Association: There are a range of different requirements. The UK Financial Services Authority (FSA) has some quantitative and some qualitative requirements that it started consulting on back at the end of 2007. It has already implemented the qualitative requirements, which focus on more reporting, specifically incorporating liquidity stress testing in the Individual Liquidity Adequacy Assessment, for instance.

The formal quantitative requirements have not yet been implemented because, very helpfully, the FSA has said that it will not introduce them until the economic recovery is assured. Around Easter time , it said that recovery wasn't yet certain enough to be able to set the flight path for full compliance with the quantitative requirements. It has also confirmed that it expects the quantitative requirements – that is the amount of liquid assets banks have to hold – to be built up over a period of years. There will be a starting point of a yet-to-be-determined proportion of the liquidity buffer that will gradually increase until the full buffer requirement is met. A review of the starting point for the rules to be implemented is expected at the beginning of the fourth quarter. My sense is that the FSA won't feel that it is yet time to announce the flight path to full compliance with the quantitative requirements. This could be because the FSA feels that the economic situation is not yet stable enough for this to occur, but also perhaps that it doesn't want to pre-empt the work that is being done at the Basel Committee, which it has said in the past it will not seek to do. My hunch is that this position also pragmatically recognises that UK banks will have to start refinancing the special liquidity scheme in 2011.

The Panel

Damian Harland, Manager, Liquidity policy, UK Financial Services Authority
Simon Hills, Executive director, Prudential capital and risk, British Bankers' Association
Neil McGovern, Director of financial services marketing, Sybase

Neil McGovern, Sybase: In March 2010, US federal banking agencies – in conjunction with the Conference of State Bank Supervisors – issued a policy statement outlining their expectations for sound funding and liquidity risk management practices at all Federal Deposit Insurance Corporation-backed banks. The *Interagency Policy Statement on Funding and Liquidity Risk Management* dictates guidelines for principles of sound liquidity risk management and is based on the European policy for *Principles for Sound Liquidity Risk Management and Supervision*, issued in September 2008 by the Basel Committee on Banking Supervision.

The *Interagency Policy Statement* states that liquidity risk management at many financial institutions is in need of an overhaul as illustrated by recent market turmoil. Deficiencies include insufficient holdings of liquid assets, funding risky or illiquid asset portfolios with potentially volatile short-term liabilities, and a lack of meaningful cash-flow projections and liquidity contingency plans, according to the *Interagency Policy Statement*. It defines the process that the agencies recommend that institutions adhere to appropriately identify, measure, monitor and control their funding and liquidity risk. In particular, the guidance emphasises the importance of cash-flow projections, diversified funding sources, stress testing, a cushion of liquid assets and a formal, well-developed contingency funding plan as primary tools for measuring and managing liquidity.

Damian Harland, UK Financial Services Authority: The crisis started as a liquidity crisis, so introducing tough new liquidity risk management standards for banks was an important area to focus on. The Basel Committee published a set of principles in September 2008, which we introduced for FSA-regulated firms following our normal consultation process. Since then many other regulators have followed suit.

What are the main challenges facing financial institutions in meeting these regulations?

Harland: We have seen three areas that required fundamental changes from many firms.

Firstly, the introduction of a robust transfer pricing framework. Too often, areas of the business were not charged appropriately for the liquidity risk they took. Secondly, the ability for those firms that managed their liquidity on a group-wide business to understand what that meant for managing liquidity flows across borders and across legal entities, without considering the impact of a stress, their framework was built on sand. And, finally, articulating their liquidity risk tolerance at the level of the governing body. Too often that was a statement like "meeting liabilities as they fall due", but a tolerance set in that fashion, as opposed to a more defined stress survival period, does nothing to constrain the business.

Hills: In terms of meeting the FSA's requirements, those have been well flagged by the regulators and there has been a decent enough implementation period to get ready. The original issues revolved around difficulties in getting all of the liquidity data that needed to be aggregated from different bits of the bank. That has largely been resolved by now.

There is an issue for branches of non-UK banks, which also fall within the scope of the liquidity requirements. For the first time the FSA is saying that even branches of non-UK banks are required to have liquidity available in the UK as a stand-alone branch. It has also said that, if non-UK banks want to apply for a waiver to this for their UK branches, they can do so but the entire bank would be required to share its entire liquidity management practices and position with the FSA. This rather cuts across the home state regulator approach and you can understand that, for instance, a bank from the Far East, in an emerging market, might be a little concerned about sharing its entire liquidity data with the FSA. The difficulty for managers of such branches of non-European Economic Area banks is to decide whether they should go for a waiver or whether they should set themselves up to be mini-banks with their own liquidity pools.

The challenges we face in the future are around the implications of the Basel proposals on liquidity: so the liquidity coverage ratio – which is very like the FSA's liquidity buffer; and the net stable funding ratio – which is not something that the FSA has included in its proposals. We think that is quite proper as the net stable funding ratio has the propensity to alter a bank's business model and profitability very significantly as banks will have to finance more of their long-term assets with long-term funding. The big challenge for banks will be accessing the extra long-term funding, and it is not immediately clear where all that is going to come from. We are very hopeful that the work that the Basel Committee will be doing on the net stable funding ratio between now and the year end will result in a recalibration of the net stable funding ratio and a proper phasing in of the requirements so banks have enough time to adapt. The Basel Committee has indicated that it thinks the net stable funding ratio will be fully in place by 2018, but I think that might be a bit tight – a slightly longer transition period, perhaps to the end of the decade might be necessary to ensure across the international landscape that all banks can comply with the new rules. Because of the internationality of the debt capital markets from the industry standpoint, it is essential that the liquidity (and capital) reforms are introduced in a consistent manner and to a consistent timeframe around the world.

Damian Harland, Manager, Liquidity policy, UK Financial Services Authority

Damian Harland is the manager of the liquidity policy team at the Financial Services Authority (FSA). He joined the FSA's prudential risk division in 2009, which is responsible for conducting liquidity risk assessments of all regulated firms. Before becoming a regulator, he worked for 10 years at Bank of Montreal in London, New York and Toronto. Until 2006 Harland was treasurer of their off-balance-sheet vehicles in London, before working on liquidity risk issues surrounding credit derivatives and the domestic Canadian ABCP market. He started his career at Abbey National on its money-market funding desk. Harland has a degree in chemistry from Oxford University.

Simon Hills, Executive director, Prudential capital and risk, British Bankers' Association

Simon Hills is the executive director of the prudential capital and risk team at the British Bankers' Association (BBA). He leads the BBA team working on reforms to international regulatory architecture and Basel II, resulting from the recent financial turmoil and their implementation in Europe via the Capital Requirements Directive and the UK Financial Service Authority's prudential sourcebook. Hills is chair of the International Banking Federation's Basel working party. He was previously a director in the debt capital markets origination team at BZW and has experience of energy and aerospace project finance, gained at First Chicago. Hills studied at London Business School (MBA) and Imperial College (BSc in biochemistry) and more recently completed a Masters' in financial services regulation at Guildhall University.

Neil McGovern, Director of financial services marketing, Sybase

Neil McGovern has over 20 years' experience in the software industry as a senior executive at several successful companies. He focuses on high-performance analytics for risk, trading and compliance for Sybase's financial services team, and has presented at conferences around the world on the latest trends and technologies required for cutting-edge performance in capital markets. Prior to Sybase, McGovern was Vice President Engineering at New Era of Networks, and chief technical officer of Convoy Corporation, where he was a pioneer in the enterprise application integration market. He has a degree in computer science and an MBA.

What new data do firms need to capture?

McGovern: For improved liquidity risk management, the cost of funding information from different markets and external funding sources should be continuously available to the same internal applications that manage and monitor operational funding needs, as this is where liquidity gaps are identified. For market liquidity risk, the focus is on fluctuations in cost of capital over varying tenors and the impact on profitability. For asset liquidity, the focus is on the asset price fluctuations and risk-adjusted valuations for the assets carried on the balance sheet. This means that connectivity to markets where the assets in question are traded or valued is critical, and pricing data must be captured on a continuous basis.

Harland: This falls into two categories: breadth and depth. On the breadth, firms need to capture data on the full range of risks they face. An example would be downgrade triggers, if a firm hasn't looked through every ISDA market agreeement they've signed to understand exactly what triggers and termination events they are exposed to, they don't know the risks they are running. On the depth, the further away from an individual deposit, or individual trade they aggregate risk, the more likely it is they are missing out on seeing.

Hills: The main issues surrounding data are collecting, harmonising and aggregating it as part of the liquidity reporting requirements. But that applies to all data banks as different areas of the bank collect data in different formats. It is a problem that is capable of being solved but there are so many more requirements for data processing and software developments in banks at the moment that it is going to have to queue up with the rest.

What is the best way to stress test a liquidity risk framework?

Hills: It has to be approached holistically. A bank needs to establish a stress-testing processes and governance structure at the highest level and, as it does that, harmonise the liquidity stress testing with the other stress tests it has to do, such as capital planning stress testing and reverse stress testing. Having three different architectures for the three different types of stress tests that the banks are being asked by the regulators to undertake is a recipe for unnecessary duplication and risks having some elements fall between the gaps. It is much better to have it under a single unified approach.

Then banks have to perform an idiosyncratic liquidity test – so how liquidity would be impacted if just one firm, your firm, was affected by liquidity stress; and then a market-wide stress test – how your firm would be affected if the whole market suffers from liquidity stress. The issue for banks is that they need to think quite creatively about the scenarios in the market-wide stress test and the impact they might have on their bank.

The FSA has given quite a lot of guidance on stress testing and have identified 10 drivers of liquidity stress that banks need to build into their liquidity stress-testing processes. Banks must articulate their stress-testing methodology by describing how scenarios and assumptions have been developed and how they incorporate the 10 FSA-defined liquidity risk drivers.

Banks have to tailor tests specific to their own organisation's circumstances, but there is recognition that the nature scale and complexity of a bank will determine their degree of granularity.

Stress testing needs to be embedded throughout the organisation, which means that it needs to be signed off by the board, probably through its risk sub-committee, and done at least annually, but banks need to be able to recognise when the external environment or its own circumstances have changed to the point that it needs to run stress tests again.

Harland: This is difficult as, essentially, you need to consider what the risk or risks are that you are underestimating. I think my best advice for that is to beware the phrase "that will never happen". Reverse stress testing also has a vital role to play, and is something we have also recently introduced.

McGovern: The scenario-based stress tests are more promising where parameters defining liquidity gaps and market-based funding costs are used over a certain range based on macro trends. The asset liquidity parameters should also be included in each scenario. A number of these scenarios (generally several hundred) are run as one simulation and repeated with updated data over several overlapping periods to establish short-term trends for each scenario set. The stress conditions are represented by the specific sets of parameters that define extreme economic situations.

How can financial institutions find the business benefit from their liquidity risk management framework rather than approaching it as a compliance exercise?

Hills: The better they do it, the less quantitative liquidity they will be required to hold by the regulators – or that is the aspiration. It is plain that regulators, authorities and politicians around the world want banks to hold more liquidity so that is what banks need to do. Better data collection and aggregation and better methodologies could lead to better internal hedges. Maybe the business of liquidity risk management becomes further optimised but basically banks don't have any option – regulators are telling them to do this.

Harland: To me, this is purely about the culture of the organisation and the power of the liquidity risk managers. Good risk managers backed up by a culture that empowers them to control risk will approach stress testing as an intellectual exercise to find the 'right answer'. In a weak organisation, the approach will be 'let's minimise the time and effort spent to fulfil a regulatory requirement'. What I say to people is, the important thing about stress testing is not looking at how the outputs change, but how the inputs change. Look carefully at the gross risks you are running and how they are changing.

McGovern: Today's banking landscape requires strategic vision and real-time responsiveness to global market developments, as well as organisational positions and developments. Insight into enterprise liquidity is critical to profitability as organisations can gain stronger cash positions through forecasting future liquidity needs or surpluses as well as allowing them to optimise funding decisions and operations. Furthermore, a strong liquidity risk management framework improves the capability for predicting and responding to future liquidity exposures and risks, thereby affecting the bottom line and bolstering an organisation's leading industry position.