

Banking and Capital Markets

# The Journal

Liquidity Risk Management: Staying afloat  
in choppy seas

September 2010



## Though the storm is subsiding, liquidity remains a critical issue for financial institutions. After all, another crisis could come at any time.



**Shyam Venkat**  
PricewaterhouseCoopers (US)  
+1 646 471 8296  
shyam.venkat@us.pwc.com



**Adam Mikulka**  
PricewaterhouseCoopers (US)  
+1 646 471 0212  
adam.mikulka@us.pwc.com



**Bryan Magstadt**  
PricewaterhouseCoopers (US)  
+1 646 471 8839  
bryan.magstadt@us.pwc.com

Liquidity could begin to tighten globally as fears of weaker sovereign credit continue to spread. The finances of many developed debtor countries are also increasingly strained. The calibration of the proposed Basel net stable funding ratio is causing uncertainty and, as central banks reduce their support, there are concerns over whether market-based funding sources will prove sufficient.

It would be a mistake for firms to assume that, simply because they have survived until now, they are well-positioned to weather another liquidity crisis. In any case, another major credit event would almost certainly create new liquidity challenges that could test even the most successful of firms.

Leading financial institutions do not view liquidity risk management as a short-term operational issue, but as an integral part of their long-term enterprise strategies. They are reflecting on the lessons to be learned from the recent crisis and preparing for the new world to come.

### Challenging complexity

One of the primary characteristics of that new world will be its complexity. Global financial institutions will be obliged to comply with multiple requirements from regulators across the different regions in which they operate. A number of supervisory and industry groups – including the Basel Committee on Banking Supervision, the Committee of European Banking Supervisors, the Federal Reserve Bank and the Financial Services Authority – have

issued, or are planning to issue, updated and upgraded guidelines in an effort to establish sound, system-wide liquidity management practices.

Many institutions have expressed concern over the impact of the pending and proposed liquidity regulation reforms, which they suspect will cost them significant time and money, not least through a lack of harmonisation between home and host regimes. In addition, some host country regulators will almost certainly require that entity operating within their jurisdiction be able to handle a liquidity crisis without relying on support from the entity's parent company. Institutions that do not have an effective, enterprise-wide strategy for liquidity risk management may be left with pools of trapped liquidity in different regions and an impaired ability to move those funds to where they are needed.

Firms need to address these new regulations by implementing updated practices and capabilities that promote compliance. By doing so, they can not only meet regulatory expectations, but also substantially enhance their ability to support daily liquidity needs and maintain operations during periods of heightened stress. This could bolster financial institutions' confidence and, as a result, reduce systemic risk and improve capital markets' chances of continuing to function after major liquidity events.

Conducted with the assistance of 19 leading financial institutions, PricewaterhouseCoopers' recent global benchmarking study of

liquidity management practices reveals that there is no ‘one-size-fits-all’ approach to managing liquidity risk. Firms should seek to develop qualitative and quantitative elements in a coordinated fashion, having recognised that these elements are interrelated. The qualitative elements of liquidity risk management should be based on sound management judgement, embedded within the corporate culture of the institution, and aligned with the firm’s overall appetite for risk. The quantitative elements should be based on specific measures, thresholds or limits that are set around liquidity risk factors and diversification of funding sources, and should be coordinated with other risk management activities, such as credit risk, market risk and asset-liability management.

## Governance

Implementation of a sound liquidity risk management framework begins with appropriate governance. Leading institutions are currently focusing their efforts in five areas: centralisation of oversight; liquidity risk appetite; board oversight; delineation between tactical and structural liquidity risk; and integration of liquidity risk into strategic management of business.

Achieving the correct balance between a centralised and decentralised approach is a key factor in establishing an institution’s governance framework. Firms must establish the division of responsibility between central group management and subsidiaries. The most commonly observed structure at large financial institutions is one of centralised oversight at the group level, supplemented by decentralised units at either a regional or legal entity level.

Over the past few years, many institutions have made substantial progress towards establishing and formalising their liquidity risk appetite. As this process continues, institutions should consider articulating their liquidity appetite through both qualitative and quantitative means.

The financial crisis revealed that board members often lacked critical information about the liquidity profiles of their institutions. Firms should consider expanding board oversight of liquidity management and ensure that the board has both a broad understanding of liquidity risk management concepts as well as sufficient knowledge of the underlying technical details. In addition, management should increase the frequency and depth of liquidity management information provided to the board and consult with the board on such areas as approval of liquidity risk appetite and contingency funding planning.

As practices around liquidity risk management have become more sophisticated, institutions have increased their focus on managing liquidity risk, both on a short-term tactical level and from a long-term structural perspective. Such an approach should consider tailoring the monitoring, measuring and reporting practices to meet the demands of these two distinct liquidity risk horizons.

Integration of liquidity risk management into the strategic planning process should be implemented at the corporate and the business-line level. In addition, financial institutions should strive to improve their ability to assess the interaction of liquidity risk with other risk types, such as market and credit risk.

## Policies and procedures

Every financial institution should have a comprehensive set of policies and procedures in place which describes the fundamental aspects of its approach to liquidity management. Since policies and procedures form the foundation of an institution’s liquidity governance framework, the documents should be of a sufficient breadth and depth to guide the actions of the business units and functional groups across geographies. They should also promote a consistent approach to managing the institution’s liquidity profile. Elements that should be covered in the policy framework include: clear definitions of the risks under consideration; mandates and principles to be applied in managing liquidity; roles and responsibilities of different business units and functional support groups; authorities, controls and limits; reports produced and metrics used; and key measurement assumptions embedded in the approach.

An institution should regularly review and update its policies to ensure that these accurately reflect its current and prevailing approaches to managing liquidity. It should also ensure that its policy frameworks incorporate and reflect guidance from relevant industry groups and supervisory agencies. The frameworks’ guidance for the oversight of liquidity management should extend to both enterprise and subsidiary levels.

While it is difficult to predict the exact steps to be taken when a liquidity crisis occurs, detailed contingency funding plans allow institutions to consider the possible repercussions of a range of liquidity events. By defining formalised action plans, implementing formal simulations of

the contingency funding plan and establishing liquidity crisis teams, institutions should be able to satisfy regulatory requirements regarding contingency funding processes and, more importantly, ensure advanced and adequate preparation for potential liquidity events.

### Improved analytics and reporting practices

While measures of liquidity focusing on balance-sheet ratios are still necessary, the adoption of leading practices requires the implementation of increasingly advanced measures to capture and assess exposures that may arise and affect the liquidity position of the firm. Examples of such advanced measures include sophisticated multi-scenario stress testing and varying survival horizons, as well as monitoring intra-day exposures, intragroup exposures and various types of contingent liabilities.

Stress testing is one of the most popular tools for assessing liquidity risk. Leading institutions are incorporating a variety of scenarios with varying degrees of severity at both group and subsidiary level. Sophisticated stress-testing techniques involve implementation of institution-specific and systemic assumptions, instrument-specific haircuts, and consideration of the impact of contingent liabilities.

While daily reporting of the liquidity profile to the treasury function and the funding desks is prevalent at many institutions, there are a number of firms that could benefit from increasing the frequency of their liquidity management reporting, especially to other areas of the firm (such as senior management, ALCO, and risk committees). This broader reporting of liquidity management should provide the contextual

information and qualitative guidance that senior management needs to understand the firm's liquidity profile. The enhanced liquidity reporting content should allow other areas of the business to leverage the information produced by the treasury function and the funding desks, and be customised to address the needs of each of the constituents.

### Information systems

Many institutions lack the infrastructure required to manage liquidity at the level of sophistication and granularity that they require. There is often a reliance on multiple spreadsheets and time-consuming manual processes. Enhancing application systems and enterprise-wide platforms enables users to generate increasingly sophisticated analytics and ensures that liquidity positions can be monitored in real time. This is critical to the effective management of liquidity in times of fast-moving and stressed market conditions.

Institutions that have immediate access to all pertinent liquidity risk information are able to manage their liquidity profile more effectively. Firms should consider maintaining a centralised repository that provides immediate access to the necessary data at the desired level of quality and granularity.

Institutions should consider increasing their budgets for management information systems to fund infrastructure enhancements that improve liquidity and collateral management. Typical areas of focus for system enhancements include increasing capabilities for reporting, analytics and stress testing.

## Constant evolution

Once optimised, liquidity risk management practices need to adapt to meet new and emerging challenges. Institutions should put in place, procedures to ensure that their practices are constantly evolving.

Upcoming regulatory reforms will no doubt impose additional demands – and an increased cost burden – on financial institutions. Senior management should closely monitor market trends and other developments that may introduce significant, unprecedented and complex challenges for liquidity risk management. They should also proactively respond to these developments, adapting the institution's liquidity strategy when necessary.

## Significant benefits

Better liquidity risk management inevitably comes at a price. However, firms should find that the cost is more than set off by significant benefits.

An improved understanding of its liquidity profile and risk appetite can help an institution strike a better balance between the desire to maximise the use of capital to generate revenues and the need to set aside reserves of unencumbered liquid assets for use during periods of liquidity stress. Developing alternative sources of funding that can be used to fund profitable business opportunities helps ensure the availability of funds and reduces reliance on any single funding channel, even in times of extreme stress. Improved visibility and understanding of off-balance-sheet exposures, and the implications resulting from events that could bring these exposures onto the balance

sheet, enables a firm to remain proactive.

Identification of contingent liabilities and understanding how these could negatively influence an institution's liquidity profile allows a business to make preparations for mitigating the impact these contingencies could have on the liquidity position. Improved assessment of how a firm's overall liquidity risk exposure is affected by interaction among other risk types – such as credit risk, market risk and interest rate risk – helps ensure that there is an integrated risk management framework in use across the institution's entire risk profile. Recognition of all cash inflows and outflows, and understanding the behaviour of these cash flows under plausible adverse scenarios, provides valuable information for the management's decision-making process.

Enhanced compliance with different regulatory requirements and reporting needs across all business units and geographical areas will satisfy regulators and can send positive signals to market participants. Enhanced liquidity management techniques enable management to manage liquidity across subsidiaries and geographies more effectively and understand the impact of such stresses at both a local and an enterprise-wide level.

Thus the new world will bring huge challenges and great change. As ever, the firms that will thrive will be those that adapt and evolve quickly and effectively.

If you would like to discuss any aspect of the issues raised in this article, please speak to your usual contact within PricewaterhouseCoopers or one of the article authors.





[pwc.com](http://pwc.com)

© 2010 PricewaterhouseCoopers. All rights reserved. "PricewaterhouseCoopers" and "PwC" refer to the network of member firms of PricewaterhouseCoopers International Limited (PwCIL). Each member firm is a separate legal entity and does not act as agent of PwCIL or any other member firm. PwCIL does not provide any services to clients. PwCIL is not responsible or liable for the acts or omissions of any of its member firms nor can it control the exercise of their professional judgment or bind them in any way. No member firm is responsible or liable for the acts or omissions of any other member firm nor can it control the exercise of another member firm's professional judgment or bind another member firm or PwCIL in any way. This document is for general information purposes only, and should not be used as a substitute for consultation with professional advisors.