The Impact of Basel III on Intraday Liquidity Management

Conforming to recent Basel III regulations requires banks to overcome the challenges associated with intraday liquidity management and accelerate compliance with cloud-based or off-the-shelf solutions.

Executive Summary

The financial crisis of 2008 prompted the Basel Committee on Banking Supervision (BCBS) to institute a new program for revising then-current capital-adequacy guidelines for global banks. The resulting framework, Basel III, was endorsed by the G20 at its November 2010 summit in Seoul, South Korea.

This paper summarizes the key changes mandated by Basel III regulations regarding intraday liquidity management and the specific challenges banks face. We also highlight the best practices of institutions that have successfully tackled Basel III regulatory edicts.

In addition, we propose a strategic roadmap that banks can use to accelerate compliance with Basel III’s requirements for liquidity management and reporting.

Strengthening Banks’ Resilience

Before the 2008 financial crisis, bank regulations focused primarily on assuring capital adequacy. However, the minimum capital levels mandated by pre-crisis rules proved insufficient when it came to protecting banks from the vulnerabilities and actual losses they faced during the crisis. Also, the quality of the mandated capital was often not sufficient to effectively absorb banks’ costs.

The capital adequacy rules under Basel I and Basel II failed to take into account the risks posed by banks’ exposures to transactions such as securitization, derivatives and repurchase agreements, or consider the systemic risks associated with the build-up of leverage in the financial system.

Among the key elements of Basel III are liquidity ratios, which help to ensure banks’ ability to meet their short-term financial obligations on time. A new Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) will be gradually introduced in 2015 and 2018, respectively.

LCR is the stock of high-quality liquid assets/net cash outflows over a 30-day period. This ratio must be larger than or equal to 100%. It aims to ensure sufficient liquidity for 30 days under a stress scenario. NSFR refers to the available amount of stable funding/required amount of stable funding. This ratio must be greater than or equal to 100%. It aims to improve banks’ resilience in the event of liquidity shocks by promoting longer-term funding of assets and other activities.
The Impact on Intraday Liquidity Management

Intraday liquidity requirements are intended to ensure that a bank manages its intraday liquidity positions and risks to meet payment and settlement obligations under both normal and stressed conditions.

Basel III regulations mandate that global banks produce monthly reports to cover the following:

- The impacted financial system
- Ancillary systems
- Accounts with correspondent banks
- Currency
- Cross-currency, if a bank can transfer funds between two currencies easily
- A legal entity that the bank has exposure to for a given corporate (e.g., Shell US, Shell UK)
- Large value payments systems comprising:
  - Available intraday liquidity at the start of the business day can include:
    - Central bank reserves
    - Collateral pledged at the central bank
    - Collateral pledged per ancillary systems
    - Unencumbered liquid assets on a bank’s balance sheet
    - Total credit lines available – secured, committed
    - Balances with other banks
  - Intraday throughput
  - Total payments – gross payments sent, gross payments received
  - Total value of time-specific obligations

Focus Areas for Banks

Meeting BCBS reporting rules requires that banks focus on three areas (see Figure 2, page 3).

Banks should also consider setting up mechanisms for monitoring differential product pricing and liquidity. This can help them better manage liquidity and provide an incentive for doing so.
Meeting BCBS Requirements

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<th>Focus Area</th>
<th>Description</th>
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| Monitoring & Reporting| • The capability to monitor daily payments per system, based on parameters such as intraday throughputs, currency, balances with correspondent banks, settlement accounts, nostro accounts, etc.  
                         • Reporting on key parameters as mandated by Basel III.                                                                                   |
| Mobilizing Funds     | • The ability to quickly mobilize funds in case of stress scenarios such as own, counterparty, customer, market.                               |
| Forecasting          | • Behavioral analysis to forecast daily net payments outflow per system, based on parameters such as intraday throughput, currency, balances with correspondent banks, etc. |

Figure 2

Differentiating Product Pricing and Liquidity Monitoring

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| Transfer pricing                    | • Have a transfer pricing policy in place for monitoring liquidity within the bank's lines of business (LoBs). In case of shortfalls, this will ensure better controls over each LoB.  
                                        • Identify the pain points related to liquidity management and target them to improve efficiency.                                         |
| Offer differential payment pricing  | • Offer pricing based on actual liquidity consumption per day.                                                                                   
                                        • Provide premium pricing to customers consuming high liquidity.                                                                               
                                        • Offer discounts to customers with below-average liquidity consumption.                                                                        |
| Motivate clients to change pattern  | • Offer discounts to customers who change their liquidity consumption pattern, leading to net shortfall in a day, e.g., change direct debit cycle date, collection cycle date. |

Figure 3

within the bank and among clients. (See Figure 3 above).

IT Solutions for Automating and Accelerating Compliance

Banks can adopt the following solutions to modify their liquidity-management IT landscape to comply with Basel III requirements:

Option 1: A greenfield, cloud-based solution

As illustrated in Figure 4 on the next page, this approach allows banks to automate and generate the Basel III reports listed above in Figure 3. It also provides an opportunity to simulate the different stress scenarios for various liquidity risk factors.

• **Key features**
  > Consolidates the bank’s transactional data either in a central data store or in a cloud-based repository, using existing applications as the data source.
  > Basel III reports can be generated from the cloud-based presentation layer and shared with regulatory bodies and external banks.
  > Also supports simulator logic to stress-test various scenarios surrounding intraday liquidity risks.

• **Pros**
  > Banks can customize the solution.
The bank is in control of the solution; there is no need to share the business rules with a third-party vendor.

**Cons**
- IT development and deployment does not happen overnight – slowing time to market.
- Requirements-gathering will also take time, again impacting speed to market.

**Option 2: An off-the-shelf product**
An off-the-shelf (COTS) solution enables banks to generate Basel III reports listed earlier. (See Figure 5, next page).

**Key features**
- Centers on consolidating the bank’s transactional data using commercial, off-the-shelf software for liquidity management.
- Basel III reports can be generated and shared with regulatory bodies and external banks.
- Also supports simulator logic to stress-test various scenarios involving intraday liquidity risks.

**Pros**
- Faster time to market, given that the development time lines are shorter.
- Very little time/support required from the business stakeholders to define the requirements.

**Cons**
- It is an expensive proposition, since it involves licensing costs and transaction-based pricing.
- The bank's business rules/operating principles are exposed to a third-party vendor.

Most global banks have already identified intraday liquidity challenges as a priority area, and implemented product-based solutions to meet the Basel III deadline.

For example, a large Scottish Bank, having acknowledged intraday liquidity as its key focus area following the 2008 meltdown, implemented Dovetail's Intraday Cash and Liquidity Dashboard. The system enables the bank to capture, analyze and report on real-time and historical data for intraday client balances and transactions data, as well as RTGS and currency correspondent balances and transactions. It also provides a real-time, user-configurable dashboard for pulling in cash-flow events from multiple systems across the bank to maintain a centralized, normalized data set.

Another case in point: A large global bank based in the U.S. adopted a COTS product, IBM Liquidity Manager, with features for controlling payments and nostro accounts, managing risk, and arriving at positions per currency. This helps the bank monitor, forecast, schedule, reconcile, analyze and provide intraday liquidity balances.
We believe that institutions that follow these banks’ lead and take a proactive approach to managing their intraday liquidity positions and related risks will be in a prime position to meet payment and settlement commitments as mandated by Basel III.

**Footnotes**

1. G20: An international forum of finance ministers and central bank governors from the twenty most economically developed countries.

2. A legal entity is an association, corporation, partnership, proprietorship, trust or individual that has legal standing in the eyes of the law. [http://www.businessdictionary.com/definition/legal-entity.html#ixzz3VJIbyXJ9](http://www.businessdictionary.com/definition/legal-entity.html#ixzz3VJIbyXJ9)

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