

ASIFMA-SmartStream

Challenges and Opportunities: Intraday Liquidity Management

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Overview

Since the Global Financial Crisis, the regulatory framework has evolved significantly requiring banks to measure, monitor and report their exposures from a market, credit, and liquidity perspective. This had a significant impact on their balance sheet and capital, which has led them to review their risk management models, reassess their operating model and optimize their cash management. The topic of Intraday Liquidity Management (ILM) has become even more prevalent today with rising interest rates and the pandemic which has brought major challenges to banks, their clients and their supply chains.

In November 2021, ASIFMA and SmartStream Technologies organized a webinar on the challenges and opportunities of Intraday Liquidity Management (video on-demand available [here](#)). This short paper summarizes the key topics discussed on that day. The panel was moderated by Philippe Dirckx, Managing Director – Fixed Income at ASIFMA with the contribution of the following industry experts:

- Keith DeSouza – Executive Director – Liquidity and Funding @ DBS in Singapore
- Simon Gray – Partner @ Baringa Partners
- Nadeem Shamim - Global Head of Cash and Liquidity @ SmartStream Technologies

The regulatory backdrop that brought us to this point

The 2007-08 Financial Crisis has led regulators to mandate banks to report and monitor their liquidity positions. These are crystallized under the [Basel III pillar 2](#) and [BCBS 248 principles](#) which underline the need for banks to “actively manage their intraday liquidity positions and risks to meet payment and settlement obligations on a timely basis” (measure – monitor – report). The regulatory development at the national level -- both in Europe and in Asia Pacific -- has focused on creating a framework that will help banks effectively manage their liquidity and assess the associated risks, across asset classes, entities, and jurisdictions, as close as possible to real-time.

Cost and opportunities of Intraday Liquidity Management

Contrary to common belief, cash is not free even if not charged for. The massive liquidity injected by the central banks into the system has created liquidity surpluses that have ended up back on the central banks' balance sheets creating huge hidden costs and missed opportunities.

To assess the cost of cash, financial institutions need to look beyond the front-end of the yield curve. The compounded cost of carry can be significant and so is the opportunity cost for cash held in excess of mandatory reserves. For currencies held in Nostro accounts, the correspondent banks have become extremely sensitive to their own cost of carry hence reflecting that on their customers.

DEVELOPING ASIAN CAPITAL MARKETS

Nevertheless, running tight balances puts banks at risk of overdraft fees and penalties, and requires cash pooling and collateral optimization. Which in turn, when mobilized, reduces the opportunity for better and more effective deployment.

As most central banks embark in ending quantitative easing and in tightening their monetary policies in the wake of rising inflation, active intraday liquidity management will require operational efficiency to reduce cost effectively and structurally.

Why ILM can't be managed in a more efficient and streamlined way?

Fragmentation is probably the main element that has prevented banks from managing their ILM more efficiently. That fragmentation can be found at many levels:

- Regulations: even when following the same Basel principles, regulations will be translated differently in each jurisdiction's prudential framework.
- Cash and collateral: the lack of visibility on the various pools of liquidity and collateral (on their encumbrance), limits the ability to mobilize it efficiently.
- Operations and technology: financial institutions will need to overcome operational siloes, fragmented technology stacks and internal systems (trading systems, trade finance systems, core banking systems, loan book etc.) and progressively upgrade and align their legacy systems. This means having these different systems speaking to each other in the same language.
- Data and organization: the challenge is to move from a manual process of collecting data for periodic reporting to an automated collection of data for dynamic monitoring. The problem has been slightly more acute during the pandemic with staff dispersed in various locations hindering the ability to resolve issues in providing timely and accurate liquidity positions. Being able to gather and use data to enhance the management of liquidity between the bank's various entities and business lines and identify misuse or abuse of liquidity, means sharing that data to the multiple internal stakeholders in a transparent manner so they can understand the cost impact of their operating models.

Financial institutions have an opportunity to leverage these regulatory obligations to create and embed the appropriate stress testing tools in normal treasury activities to assess liquidity risks and reduce liquidity buffers. This is no longer just a regulatory activity but becomes a BAU activity for treasury.

Evolution and impact of the payment architecture

The payment landscape is rapidly changing and developing with instant payments and Distributed Ledger Technology (DLT) becoming ubiquitous. Correspondent banking is going through its most significant transformation with SWIFT GPI allowing cross-border transfers to reach their destination in a matter of minutes instead of days.

Central banks are migrating towards 24/7 (India, Indonesia, US and Australia amongst others) while securities markets are shortening their settlement cycles from T+2 to T+1.

But it's not because a market becomes 24/7 that the liquidity or the banking systems become available 24/7. This is a key challenge for the industry and the reason for the growing interest in Distributed Ledger Technology. Central Bank Digital Currencies (CBDC) are also emerging from the whiteboards either as prototypes or as live experiments for a particular market segment (as recently deployed in China for its retail market)

This could lead to further fragmentation of the liquidity pools, technology stacks and operational processes, hence forcing financial institutions to upgrade their technologies and back-office applications.

Solutions around these emerging trends and problems

With the above evolution and challenges in mind, the development and relative affordability (or cost flexibility) of Cloud computing allow financial institutions to consolidate data historically siloed in various systems and locations.

To digest this consolidated data, banks will have to leverage new technologies such as Artificial Intelligence or Machine Learning to move from historical data-based modeling to forecasting/predictive modeling. A particularly valuable application is to assess if and when unsettled transactions will settle, especially once the market liquidity starts reducing. This will act as an early warning mechanism for banks to make decisions on when to draw on their intraday credit lines with the central bank or with their correspondent bank, but also on releasing further payments to that particular counterparty.

In addition, an automated and flexible stress-testing tool will enhance the banks' risk management framework and capability to identify the "credit crunch points" and to understand where the vulnerabilities are and how to prevent them with tangible metrics (instead of addressing them when they occur).

Conclusion

Banks are facing a challenging environment, whether from a macro-economic, regulatory, operational or technology perspective, as the cost of managing their intraday liquidity has increased.

ILM solutions and SaaS models reduce the total cost of ownership and significantly reduce the cost barrier to implementing latest tools in managing liquidity and stress testing. This is a unique opportunity to explore new technologies and operating models that can help address these challenges and implement tools to manage and monetize their liquidity risk proactively and efficiently.