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Basel III Liquidity Reform Package

FinArch is a market leader in integrated Risk and Finance solutions. Here, the firm's Head of Risk and Capital Management, Nancy Masschelein, address your questions.

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What work is being done, and what developments have there been, to ensure that international liquidity regulations are agreed upon?

For decades regulators and thereby financial institutions have been fixated on capital and solvency. Almost from the start of the financial crisis, there has been consensus that national and international banking systems needed massive reform and that liquidity risk, in particular, required more attention. The latter was no surprise given that the failure of liquidity risk management practices has been at the heart of the evolving crisis.

The Financial Stability Board (previously called the Financial Stability Forum) started developing recommendations on regulatory reform as early as the fall of 2007. The Basel Committee on Banking Supervision translated these recommendations into a new regulatory capital and liquidity regime and summarised them in two consultative documents published in December 2009. These documents, together with the amendment to the trading book rules and the securitisation framework, form the Basel III Framework. These will establish the rules for all countries which are members of the Basel Committee and are likely to set the tone for regulators in other countries.

In parallel, the European Commission has launched a legislative process to issue a Capital Requirement Directive which translates the Basel III Framework from the Basel Committee into European legislation.

Introducing liquidity risk regulation is critical but alone it is not enough. It is just one piece of the puzzle. Other elements such as governance, risk management and due diligence are elements that the private sector needs to address. Also the liquidity risk regulatory set as they currently stand are a stand-alone set; no links are made to capital regulations. Current regulations do not tie together regulatory capital and liquidity buffers.

What are the main components of the International Liquidity Regulation? Are the Solutions provided by FinArch designed to comply with them?

The Basel III Framework requires banks to calculate two ratios: the Liquidity Coverage Ratio and the Net Stable Funding ratio. The two ratios have some similarities with banks' internal liquidity models but are based on regulatory standard assumptions. The Liquidity Coverage Ratio identifies the amount of unencumbered liquid assets a bank should hold to offset net cash outflows under a 30 days stress scenario. The purpose

of the liquidity coverage ratio is to ensure financial institutions can manage a short-term liquidity shortfall. The Net Stable Funding ratio measures the amount of available longer-term stable sources of funding over the required amount under a one year stress scenario. The purpose of this ratio is to significantly reduce the refinancing risks on the balance sheet. Regulators will start monitoring the liquidity coverage ratio from January 2011 onwards. The ratio will become binding on January 2015. The net stable funding ratio will be monitored from January 2012 onwards and will move to a minimum standard by 1 January 2018. Regulators plan to put in place rigorous reporting processes to monitor the ratios during the transition period.

It is also important to point out that FinArch's Solutions are designed to comply with requirements beyond these minimum standards. Banks may want to apply different minimum standard assumptions for internal risk management purposes or because of different national requirements. It is likely that some of the international regulatory standard assumptions will be revised during this monitoring period. Indeed, the Basel III regulatory standard assumptions do no not express the specificities of the banks' characteristics. One-size-fits-all assumptions for the Liquidity Ratios cannot be adapted to different financial institutions. Financial institutions are intermediaries in the funding process between funding providers in the economy and funding spending units and need to guard consistency between what funding providers can deliver and between funding needs. How funds are provided and how funds are spent significantly differs across institution. As an example, European banks are more bank-intermediated than US banks, which implies that the effect of some of the regulatory standard assumptions would have greater impact on the European banks than on US banks. This is why the FinStudio Basel III Solution is flexible in its assumptions. Users can use the current set of Basel regulatory assumptions. They can equally relax the assumptions taking account of national or internal risk management requirements.

In addition, banks need to monitor and report various liquidity metrics. Example metrics are contractual maturity mismatch, available unencumbered assets, market-related monitoring tools, funding concentration by time bands etc..

Yes. The FinStudio Basel III Solution empowers banks to comply with both the liquidity ratios and the liquidity metrics.

How do these Liquidity Regulation align with the Basel III trading book revisions?

The Liquidity Risk ratios are intended to capture funding liquidity risk; the risk that a bank will not be able to settle obligations immediately when due. However, the Basel III trading book revisions are intended to capture market liquidity risk; the risk that a position cannot be sold without causing a significant movement in the price and with minimum loss of value. Market liquidity conditions determine the liquidity horizon, which measures the amount of time required to unwind a position without unduly affecting underlying instrument prices.

This liquidity horizon affects the blend of risk; meaning that market risk and default risk may grow at different rates through time. The impact of changes in the liquidity horizon, together with a change in default risk on the overall risk of a portfolio, is explored in a simulation analysis carried out by Masschelein and Tsatsaronis (2008). According to this analysis, a drying up of liquidity associated with an increase in the liquidity horizon from two weeks to six months would have the same effect on the value-at-risk of a portfolio of A3-rated assets as a downgrade of these assets by two notches from A3 to Baa2 over a two-week liquidity horizon. In an alternative scenario in which the lengthening of the liquidity horizon and the rating downgrade both occur at the same time, the combined impact on the value-at-risk is 2.3 times stronger than the sum of both effects measured separately, showing that nonlinearities can also have strong effects in the interaction of credit and liquidity risk.

In order to measure credit risk associated with trading book positions, banks can use standard economic capital models for credit risk in the banking book, which are adjusted to take account of the impact of market liquidity risk.

What will be the likely impact of the international liquidity regulations on financial institutions.

The increasing focus on liquidity risk comes with a power shift to treasury functions. Internal hurdle rates will penalise illiquid exposures and reward liquid exposures, which in turn will impact the risk-adjusted return on capital analysis. It may also affect the pricing process as the business seeks to pass its additional funding costs on to customers. This may happen gently in lending and deposit activities. It may also have a more radical impact to the extent that units may experience significant restructuring of portfolios and reduction in activities, including abolishment of some activities altogether. Possible candidates are derivatives units and market-making activities. In sum, the international liquidity regulations will lead banks to reconfigure business models.

What can banks do now to prepare for the coming liquidity risk requirements, such as more frequent reporting of liquidity levels?

Banks can prepare for the new requirements by:

- Investing in IT infrastructure to support the liquidity risk requirements and to cover the overall measurement of financial risk
- Investing in improving data quality and in the integration of data systems. The biggest obstacle to improving risk management systems has been poor data quality and the poor integration of data. These obstacles have been seen as affecting firms' abilities to measure exposures to counterparties, to implement effective transfer pricing, to aggregate exposures adequately, and to perform firm-wide stress tests.

For more information on FinArch's solutions, visit www.finarch.com.
For questions on Basel III, don't hesitate to send an email to info@finarch.com