

BANK ANALYSIS

ALM – Liquidity Risk

Liquidity risk is the risk for a bank being unable to meet its obligations as they come due because of insufficient liquid asset, an inability to liquidate assets or to obtain adequate funding.

One component of liquidity risk is that the bank will not be able to honor expected or unexpected current or future cash obligations, also referred to as funding liquidity risk. The other component of liquidity risk is that an institution may not be able to offset or eliminate a position without significantly affecting market prices because of inadequate market depth or market disruption. This is referred to as market liquidity risk.

Under the so-called liquid assets approach, a bank maintains liquid instruments on its balance sheet that can be drawn upon when needed. Therefore, a bank may maintain a pool of unencumbered assets (usually government securities) that can be used to obtain secured funding through repurchase agreements and other secured facilities. - Under the cash flow matching approach, on the other hand, the institution attempts to match cash outflows against contractual cash inflows across a variety of near-term maturity buckets.

As the concept of liquidity is complex, no single metric will adequately reflect the actual liquidity risk of a bank. The concept stresses, though, the importance of a pool of widely diversified funding sources across different types of depositors, investors, products, marketplaces, currencies, relationships with investors, financing and selling assets. In parallel, a bank has to regularly assess its secured and unsecured funding capacity under varying conditions. This is because liquidity risk may arise from numerous sources which are not necessarily linked to a bank's strategy: For example, a bank may become compromised or simply blocked from accessing liquidity by events having a direct or indirect impact or standing of a bank's reputation. Or a lack of access to liquidity

can at times impact the whole sector, such as in times of frictions in the overall macroeconomic environment or geopolitical events.

In regards to intraday and short term- liquidity a bank will primarily focus on cash-flow, its cash position and collateral management. Medium and long term a bank will probably take a matrix view on contractual and expected cash-flows as well as planned transactions, both in total as well as in each currency. Thereby, any forecast would include future cash flows from all of the following: assets, liabilities, but also off-balance sheet positions. Consequently, a bank's liquidity risk exposure is the anticipated possible cash-flow mismatch, or liquidity gap, along a maturity ladder.

Naturally, any bank's assets can be categorized and clustered based on to their liquidity quality: Whereby assets could be further broken down by using attributes, such as pledgeable assets (depending on central banks and industry criteria), repoable assets or securitizable assets (retail or consumer loans). Securities can also be grouped by their liquidity value, with – for example - high values applied to such eligible to be held by central banks. Other liquidity value criteria could comprise rating and credit quality, market price availability, maturity, type of security, time to settlement or else. – Reviewing its assets will also enable a bank to continuously assess its ability to convert unsecured funding towards a secured basis, not least to optimize – alas: lower - funding costs.

Constant monitoring of a bank's liquidity is also utmost relevant for a potentially occurring contingency: Therefore, an institution should always have in place an asset reduction plan and financing strategy for bank-specific and market-related liquidity events. During the disruption secured funding asset liquidation would be possible for high-grade paper (in particular, eligible central bank assets) but higher haircuts would be applied based on liquidity quality. The bank could utilize unused credit facilities, such as provided by the National Bank or other counterparties: Inter-bank lending may disappear quickly in a crisis environment.

DEPENDENCY ON
SIGNIFICANT DEPOSITS

$$\frac{\text{CASH} + \text{SECURITIES} + \text{S/T BANKING EXPOSURES}}{\text{SIGNIFICANT DEPOSITS}}$$

DEPENDENCY ON
FINANCIAL INSTITUTIONS

$$\frac{\text{CASH} + \text{SECURITIES} + \text{S/T BANKING EXPOSURES}}{\text{SIGNIFICANT RESOURCES FROM FINANCIAL INSTITUTIONS}}$$

LIQUIDITY
VULNERABILITY

$$\frac{\text{EASILY DISPOSABLE ASSETS}}{\text{EASILY WITHDRAWABLE FUNDS}}$$

COVERAGE OF
LOANS BY DEPOSITS

$$\frac{\text{DEPOSITS}}{\text{LOANS}}$$

SHORT TERM LIAB'S
COVERAGE BY
LIQUID ASSETS

$$\frac{\text{LIQUID ASSETS}}{\text{SHORT TERM LIABILITIES}}$$