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## The Management Of Liquidity

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**ABSTRACT:** Before the recent market upheaval and financial crisis, most companies would focus their business model on growth, acquisitions and gaining market share. The occasional warning to the executive management from the Treasury function concerning tight liquidity, inadequate customer credit quality or balance sheet funding gaps usually went unanswered.

The financial crisis has demonstrated the importance of liquidity management to reveal liquidity and capital positions as well as the impact of deployed capital. Tight or the lack of liquidity led to the collapse of several large financial institutions and corporations. Shortly thereafter, liquidity management and monitoring liquidity risk became the focus of the banking regulators, the rating agencies and the Central bankers.

This article examines the significant challenges continuing to face the Board of Directors and executive management at a company. Effectively managing liquidity is the essential building block in a creating sustainability and stability for a company. These challenges occur in two very important areas: uncertainty regarding a business's liquidity and managing the tolerance of that uncertainty.

To overcome these challenges, both the Board of Directors and executive managements have specific roles to play in ensuring the basic but crucial firm liquidity level is maintained, monitored and managed effectively.

Moreover, the Board must ask quality questions about the firm's likely liquidity and performance under the worst possible scenarios; and which balance sheet and liquidity levers should be pulled to make a difference. All at the same time the company executive management is pursuing the establishment of effective strategic and operational monitoring, management frameworks with contingency plans. This is a crucial differentiator between the survivors and the fallen during a liquidity crisis.

### **BACKGROUND**

Through the centuries, history has shown us that whenever a liquidity crisis has occurred, the following decade would witness both structural and regulatory changes.

The many recent developments on the regulatory front focused on international regulators revising their policies and standards. All major banking supervisory organizations – the Basel Committee on Banking Supervision (BCBS), Committee of European Banking Supervisors (CEBS)

and national regulators like the Financial Services Authority (FSA), the Institute of International Finance (IIF) and the Federal Institution for Supervision of Financial Service (Bundesanstalt für Finanzdienstleistungsaufsicht, or BaFin) – have revised their current recommendations or regulations and put forward new principals for the management of liquidity.

Generally speaking, the regulations state that each company or financial institution is responsible for sound management of its liquidity risk to define a strong management framework which guarantees that there is sufficient liquidity, including a buffer of high quality unencumbered liquid assets to be used to meet stress situations confronting the company.

The consequences of the aforementioned regulatory requirements and the market conditions handed down from the crisis are impelling companies and financial institutions to substantially evolving their liquidity management frameworks in order to support the decision process for implementing the new requirements and appropriately com-

plying with the timing.

The key components of a sound liquidity risk management process include:

- Corporate governance and accountability.
- Policies, procedures and internal controls.
- Risk measurement, monitoring and reporting systems.
- Intraday liquidity management.
- Funding diversification.
- Maintenance of a cushion of highly liquid assets.
- Comprehensive contingency funding plans.
- Limit frameworks.

#### **BASEL III**

The Basel III Accord (Basel Committee in 2010) is seen as a landmark in terms of liquidity regulation. It develops standards to measure and control liquidity risk, leading to two ratios of compulsory compliance and tools for monitoring liquidity risk.

The purpose of the LCR (Liquidity Coverage Ratio) is to guarantee that the bank or financial institution maintains a sufficient level of high quality unencumbered liquid assets to survive a 30-day liquidity stress scenario, and the aim of the NSFR (Net Stable Funding Ratio) is to ensure that there is a balanced balance sheet structure and to limit excessive dependence on short term wholesale financing, for which purpose a minimum stable financing with a one-year horizon.

In addition, independent, regular reviews of various components of a company's liquidity management processes should be conducted. These reviews should test and document the current measurement processes, evaluate the system's accuracy and recommend solutions for identified weaknesses. Independent reviews should also assess policy and procedure compliance. Noncompliance should be reported and the appropriate corrective action is taken.

## **LIQUIDITY AND RISK**

Liquidity is the lifeblood of any company, but it is particularly crucial to leveraged entities, such as financial institutions.

Sound liquidity risk management involves both the Board of Directors and executive management developing a comprehensive process that identifies, measures, monitors and controls a company's liquidity risk exposure.



Many factors can affect a company's liquidity requirements. They include balance-sheet items such as fixed assets, net receivables and payables; off-balance-sheet items such as forward-dated contract obligations and undrawn lending facilities; outstanding debt, such as unsecured fixed maturity long-term debt, committed and uncommitted facilities drawn down, time deposits, unsecured variable-term long-term debt for variable-term and call deposits and secured debt; undrawn facilities,

portfolio characteristics with assets pledged and not pledged, assets for sale and assets hedged. They can also be affected by its reputation.

Managing liquidity involves estimating present and future cash needs and providing for those needs in the most cost-effective way possible. Moreover, well-managed companies have their liquidity risk management process integrated into the company's overall strategic planning and risk management frameworks.

It is important to note that liquidity management and liquidity risk management are not the same, although regulatory supervision requires both to exist within a company. This difference has a great impact on the measures in how one or the other is being quantified and monitored.

## **LIQUIDITY MANAGEMENT**

Liquidity management begins with an understanding of the company's investment objectives. The creation of well-defined objectives combined with an understanding of the timing and the levels of cash required to support them are the foundation for forming an appropriate profile of liquidity risk.

Liquidity management is the daily management of the company's liquidity under "normal" market conditions. Whereas, liquidity risk management, in its broadest sense, includes quantitative and qualitative objec-

tives for preventing liquidity issues, hence including managing the liquidity position.

Liquidity risk refers to the risk of the company being unable to meet its financial obligations as they fall due without incurring unacceptable costs or losses through hurried fund raising and/ or assets liquidation. Liquidity risk could be a result of the inability of the company to manage unplanned decreases or changes in funding sources as well as the failure of management to recognise or address changes in market conditions that affect the company's ability to liquidate assets quickly and with minimal loss in value.

When developing, managing and monitoring liquidity, the Board of Director's must take responsibility for defining a robust company strategy, an appetite for taking risk and the establishment of limits to ensure its solvency.

**Strategy:** a company strategy or action plan is incomplete without an accompanying plan to deal with uncertainty or the risk of tight liquidity.

A company strategy is composed of both an upside and a downside analysis. It is built on clear guidance of the risks the company will encounter due to their business model as well as the various sources

of revenue that are being pursued. Focusing too much on risk and the mitigation of the risks will reduce the potential for opportunity. Beyond quantifying the risk in a company's products and services, a company needs to set clear liquidity boundaries or limits, permitting executive management to delineate as well as understand the associated risk-reward trade-off of capital investments.

The company strategy, not the needs of the current portfolio, should be the driving force of executive management in designing the company's future. Strategy requires the Board of Directors to become comfortable with the ambiguity in the information it receives and build robustness into its planning process while executive management

executes the strategy to reach the goals, constrained by measurement and monitoring.

There are two basic questions an effective corporate strategy should address:

- What is the company realistically trying to achieve given the liquidity it has?
- How much liquidity does the company, given what the business services and products are trying to achieve?

Satisfying these questions can be highly advantageous to a company while permitting it to understand which type of risks are necessary to be undertaken and how



much risk should be pursued as it moves forward to channel cash into strategic investments and generate value and earnings for its stakeholders.

**Appetite:** is an overall guide to resource deployment and capital

allocation at a company. Risk appetite is determined by the Board of Directors to recognize the impact of risk on earnings, the volatility of revenues, how capital is deployed, workforce retention and reputational integrity. A risk appetite encompasses defined risk parameters related to the company strategy, the kind of risks and environment which a business is to operate, the challenges that the businesses products and services are to face at the outset and a dashboard of “key” metrics that demonstrate adherence to the approved appetite.

The ability to articulate a company’s appetite for accepting risk is a complex process. Risk appetite changes with the macro-economic environment and differs with the maturity of a company or a financial institution. Risk appetite also reflects personal experiences and perception of those establishing it. Risk appetite should be allocated to individual risk types, businesses, and additional dimensionality (or combinations thereof) based on liquidity and capital relative to the potential returns and respective concentrations.

Whereas the risks associated with a company’s liquidity can be very difficult to manage, due to uncertainty about cash flow obligations that would depend on external

events and the behaviour of other parties it is very important to connect the setting and management of risk appetite with a comprehensive risk management process that covers identifying, measuring, monitoring and controlling the liquidity risks of

the business, the products, and the business lines in a prudent and effective manner.

There are two basic questions that an effective risk appetite should address:

- How should the company hold and generate liquidity?
- How should the company manage associated risks, such as, counterparty, sovereign, tenor, diversification and leverage?

**Capacity:** represents the maximum amount of risk that can be supported by a company expressed as an aggregate, available capital amount. The capacity for risk taking is determined by considering the availability of capital resources, the ability to raise capital (access to capital markets) and earnings strength and stability.

To establish capacity limits a company must surround the business strategy with an understanding of risk. Limits, whether

for liquidity or any other risk type, must flow to all levels of the organization. Moreover, limits must control significant risks effectively within the context of overall statement of risk appetite. Limits should be expressed in specific metrics that are appropriate for a given risk. They should also reflect a company's risk preferences and be aligned to support capital planning and allocation. Limit should also be established at levels that can be tested periodically (i.e. they should be exceeded sometimes).

There are two basic questions an effective limit structure should address:

- Who at the company is overseeing, monitoring and managing the complexity of the funding network: banks, bondholders, shareholders, suppliers and customers?
- Does the company have a robust, articulated contingency funding plan to handle liquidity problems or limit breaches?

Hence, the importance of liquidity and its' management in running a company and why it remains the focus of the regulators, the Board of Directors and executive management around the globe.

Stress testing enables the Board of Directors and executive management to oversee liquidity across subsidiaries and geographies more effectively and understand the impact of such stresses at both a local and an enterprise-wide level. Stress tests begin with scenarios to identify situations that could cause extraordinary losses; however stress testing is also about management response to these possible scenarios.

At one extreme, a company does not need to withstand every single state of the world. Central banks, for instance, are supposed to provide protection against systemic crises. Indeed, the Federal Reserve acted aggressively during the last financial crisis by injecting liquidity in the financial system. Likewise, there is little point in trying to protect against a widespread nuclear war. Relevant scenarios, however, require careful planning and a plan to respond to its occurrence.

A company must establish, test and review plausible scenarios to test its resources to navigate and survive a stressed liquidity event. Stress testing activities should be seen as work in progress requiring familiarity and support from the Board of Directors not just executive management. Stress-testing programs are needed to provide an

## **STRESS TESTING AND LIQUIDITY**



integrated view of risk that encompasses all types of risk, including secondary effects and liquidity risk, such as bank deposit outflows or counterparty failures.

The stress testing analysis platform must allow different liquidity scenarios, as well as the production of metrics, information and data for timely monitoring. An effective platform can also facilitate rapid management responses. A central organization should monitor and communicate all stress test results, thus providing risk, financial and other qualitative information that will help a company to make the proper decisions and develop effective plans.

Even the most sophisticated stress test is only as good as the scenario on which it is

based. Constructing a good scenario involves estimating the probability of an occurrence, ensuring the variables actually

influence the output concerned, taking into account various assumptions, and having clear docu-

mentation about the rationales.

Scenario analysis must correspond to the portfolio of exposure. In the world of financial institutions one-size does not fit all! That is to say, the scenarios must be relevant to the institution. It must test normal conditions as well as various versions of extreme volatility. Furthermore, to fully grasp the liquidity risk of a bank, stress-tests should cover the group-wide liquidity exposures on a consolidated basis, including the risks of multi-currency exposures, complex instruments and off balance sheet contingencies. Finally, the analysis function must concentrate risk around particular asset classes, and have outcomes

that directly assist management to take timely action.

The future could turn out to be entirely different from the scenarios tested and analysed during stress testing. Nonetheless, the scenario forecasts must be built on events and outcomes that form a cohesive story about how a business would evolve in such circumstances. The company should also have a robust governance model to ensure that the stress testing works in accordance with its objectives and that models and methodologies are consistently applied across all business units, with the results used to steer good business behaviour. To ensure the company would survive a substantial liquidity crisis, the Board of Directors needs to have Board members who possess an understanding of what can go wrong with liquidity, under normal, stressed and extreme scenarios. That will help the Board to perform their governance role more effectively on behalf of the company shareholders.

The reporting function must be able to provide internal and external liquidity reports in a seamless fashion, especially since it is likely that future regulatory requirements will demand more information on how stress testing is being conducted by a com-

pany, which assumptions are being made, which methodologies are being used and what actions plans are developed to correct instances of stress.

The Board of Directors and executive management should ensure strong and transparent linkage exists between business line strategies, liquidity,

risk, capital adequacy and limits. A company may also want to consider setting and holding liquidity buffers as part of a sound liquidity management program, which identifies and measures the full range of liquidity risks, including the interaction between market and funding liquidity and potential feedbacks on banks' reputation related to signalling effects or flawed external communication.

### **IS YOUR COMPANY PREPARED?**

The recent financial crisis and ensuing environment of uncertainty call for the Board of Directors and executive management to place a special emphasis on the active management of liquidity. Your company has a tremendous challenge beyond the need for new liquidity instruments, there is a need for the company's management to conduct very detailed stress testing of the asset and liability positions to ensure sufficient cash and safeguard solvency.

There is also the need to start preparing for upcoming regulatory challenges, specifically, the changes being proposed by Basel III. Given the consequences of the regulatory changes on the business model of financial institutions, company Board of Directors and executive management must start to ask tough questions to ensure their company or financial institutions is safe and sound.

These questions include:

- What are the Treasurers' plan to increase their additional long-term debt and capital?
- How will your financial institution reduce their committed credit and liquidity facilities?
- Who in the company will adjust the pricing of assets to compensate for the higher cost of funding?
- What impact that the requirements from the regulators will have on their liquidity management framework (e.g., the new supplemental measure of "leverage ratio")?
- Are the information systems at your company able to manage the granularity and sophistication of liquidity?

- What is senior managements' knowledge of the impending Basel III regulatory changes and what impact will that have on your company?

In anticipation of these upcoming challenges, the Board of Directors first must begin to openly communicate and discuss with businesses how liquidity is used. Second, the executive management of the company must enmesh the Treasury function into the businesses so that they become a trusted partner ensuring governance is followed and adhered with. By making a much broader treasury toolkit available to the businesses, the Treasury function will transform the way the company function; setting capital reserve requirements for its' products and services while protecting the company from all types of financial crises.

Finally, the Board of Directors and executive management should recognize that normal is not the state of nature for the company, but a state of transition.

