



# Liquidity Risk Management Strategies to Combat Liquidity Risk in Commercial Banks.

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## Abstract

In today's world, banks and other financial institutions are the economic backbone of a nation. Every individual from each strata of the society is dependent on banks and financial institutions for their money related matters. All banks and other financial institutions must function smoothly to maintain the needs and demands of their customers. There are many factors, which cause a blow to this economic backbone. One such factor is liquidity risk. Every financial institution is prone to liquidity risk and nowadays it has emerged as one of the causative factor to bank collapse. The success of bank depends on how well it estimates its liquidity needs. Efficient liquidity management is critical to the operation of banks.

For any bank, liquidity is a very crucial element. Each bank needs to maintain a certain level of liquidity. It should be neither excessive nor inadequate. Excessive liquidity means accumulation of ideal funds, which may lead to lower profitability, increase speculation, unjustified extension, extension of liberal credit terms, liberal dividend policy etc; whereas inadequate liquidity results in interruption of bank operations. A proper balance between these two extreme situations should be maintained for efficient operation of banks through skillful liquidity risk management strategies. The need of efficient liquidity management has become greater in recent years.

**Keywords:** Liquidity, Liquidity Risk, Uncertainty, Management Strategies, Financial Obligations.

## 1.0. Introduction

Bank like any other financial institution provide financial services mainly concerned with the matter of managing fiscal exchanges like credits, cash trade, deposits, fixed deposits etc. Today's technologically advance and so-called cash-less society is dependent more or less on banks for their money related matters. Banks need to maintain some level of liquidity to meet up with the demands of the anticipated and unanticipated customers. Now-a-days banks are not only sensitive to liquidity risk (the risk that depositors will suddenly withdraw their deposit) but also to credit risk (borrowers may pay their loans on time or not), interest rate risk (the rate of interest may change at any given point of time), operational risk (the computer system of the bank can fail or other calamity like fire can occur), etc.

Inadequate liquidity or cash to meet up with the liquidity needs of the customers creates problem for the banks. Liquidity risk resulted due to inadequate liquidity proves to be very deteriorating for the health of bank as it can cause bank run and eventually fall down of the institution. Hence, the problem faced by bank is that of integration of liquidity. They tend to do so at the cost of profitability. If the bank aims to make high profit, it

will invest the liquidity at the expenditure of liquidity maintenance for its customers. This is where liquidity risk arises.

For every bank, liquidity risk management is a major task. Therefore, banks strive to provide and maintain a certain level of liquidity on a day-to-day basis. However, this liquidity threat is inexplicable but one can restrain its harmful impacts through dynamic liquidity risk management strategies.

## 2.0. Defining Liquidity and Liquidity Risk

*Liquidity* (according to The Basel Committee on Banking Supervision) is the ability of the bank to meet all regular financial obligations when they come due without suffering undesirable losses.

*Liquidity* describes the degree to which an asset or security can be quickly bought or sold in the market at a price reflecting its intrinsic value or in other words, the ease of converting it to cash.

*Liquidity risk* is define as the possibility of negative effects on the interest of owners, customers and other stakeholders of the financial institution resulting from the inability to meet current payment obligation in a timely and cost-efficient manner without acquiring unsatisfactory misfortunes.

Because banks convert short-term deposits, savings accounts and other assets into long-term loans, they are more vulnerable to liquidity risk than other financial institutions. As a result, they are susceptible to not having enough liquid assets on hand when deposits need to be withdrawn or other commitments come due.

## 3.0. Types of Liquidity Risks

Mainly there are three types of liquidity risks:

### 3.1. Trading / market liquidity risk

Market or trading liquidity risk arises when the market lacks the capacity to handle transactions.

### 3.2. Funding liquidity risk

The risk that a financial institution cannot meet up with its customer's demands when they fall due and when such demands starts to arise, the available assets may not be sold at a reasonable price.

### 3.3. Operational liquidity risk

This is a situation where a bank does not have enough cash at hand to meet operations.

Hence, each financial institution should be able to manage its liquidity to avoid risk.

## 4.0. Causes of Liquidity Risk

### 4.1. Maturity Mismatch Situation

Initially, banks tend to borrow large amount of short-term deposits and reserves from individuals and businesses and from other lending institutions and then make long term credit available to their liabilities. Seldom would incoming cash flow from assets exactly balance the cash flowing out to cover liabilities. A problem related to the maturity mismatch situation is that banks hold an unusual high proportion of liabilities subject to immediate payment such as demand deposits and money market borrowings. Thus, banks must always stand ready to meet immediate cash demands that can be substantial at times, especially near the end of the week or the first of each month, during certain seasons of the year.

### 4.2. Changing Interest Rates

Another cause of liquidity problem is when some depositors withdraw their funds in search of high returns elsewhere due to banks sensitivity to changes in interest rates raises. Many customers may postpone new loan request or speed up their drawings on other credit lines that carry lower interest rates. Thus, changing interest

rates affects both customers demand for deposits and customers demand for loans, each of which has a potent impact on a bank liquidity position. Moreover, the market value of the asset that the bank need to sell in order to raise additional liquid funds is affected by movement in interest rates and it directly affects the cost of borrowing in the money market.

#### 4.3. Failure to Meet High Liquidity Demands

Any financial institution must give high priority in meeting demands for liquidity. Hence, public confidence in the institution is severely damage due to failing in this area. One of the most important tasks of a liquidity manager is to keep close contact with the banks largest depositors and holders of large unused credit lines to determine when the withdrawal of fund will be made and to make sure that adequate funds are available.

#### 4.4. Loan Delinquency

In a financial institution, loan delinquency is a major cause of liquidity risk. For instance, when a potential customer obtains a loan from the bank and agrees to pay on a certain day and that customer falls due i.e., he or she is unable to pay back as proposed and other customers need their funds. In this case, it is evident that there will be shortage of liquidity in the bank that will create fear in the minds of customers affecting the health of the organization negatively.

#### 4.5. Fraud and Embezzlement

Additionally, fraud and embezzlement from members of the organization can cause liquidity risk in a financial institution that is very detrimental for a financial institution. It may lead to bank runs and an ultimate collapse of the bank.

### 5.0. Importance of Liquidity

Liquidity is a vital situation for any business. The failure to meet payment obligations on time can trigger bankruptcy and gives creditors the right to take possession of the organization's assets. Liquidity is even more crucial for financial institutions because they are particularly vulnerable to unexpected and immediate payment demands. This is the nature of the loan giving and deposit taking business. A bank cannot afford to send away a customer who wants to withdraw cash from his account with a "may be tomorrow." To stay in business, the bank must be able to pay out legitimate withdrawals and credit requests instantly. Moreover, in the vast majority of daily transactions, the bank does not act on its own behalf, e.g. paying rent for bank offices or buying photocopy paper, but rather functions as a financial intermediary between savers and borrowers or as a payment agent for transfers between businesses or individuals. For this reason, the failure of a large financial institution can have far-reaching economic effects on the entire national financial system. Even the failure of a small village bank will affect the majority of individuals in that village directly or indirectly.

### 6.0. Liquidity Risk Management

Liquidity risk management is a micro concern at the level of companies and a macro concern at the level of the regulators and banks which need to ensure sound and functional markets.

The main operation of the bank is to transform liquid deposits (liabilities) to illiquid loans (assets), as such they are more prone to liquidity risks. The role of liquidity risk management is to ensure their continuity. Additionally, the liquidity position of a bank is related to stakeholders' confidence. Liquidity shortfalls like withdrawal of the deposits are often faced by banks that have no confidence.

Some of the objectives of Liquidity Management are as under:

- honor all cash outflow commitments on a daily and ongoing basis,
- minimize the cost of foregone earnings on idle liquidity,

- satisfy minimum reserve requirements and other regulatory liquidity standards,
- avoid additional cost of emergency borrowing and forced liquidation of assets.

## 7.0. Basic Challenges of Liquidity Management

### 7.1. Uncertainty

Liquidity management operates in an environment of uncertainty. There is uncertainty about future customer behavior, about general macroeconomic conditions, etc. Liquidity management therefore is not about determining a single optimal level of cash to hold. It is about charting a reasonable compromise between the risk of a liquidity shortage and the loss of income from not investing idle resources in interest earning assets.

### 7.2. Inter-Dependencies

What makes liquidity management even more complex is that most of the factors determining liquidity are inter-related. Loan demand, for example, can be closely link with deposit flows.

### 7.3. Fragile Balance

Liquidity is a delicate balancing act. In retrospect, banks that survive always appear to have excessive liquidity, while banks that fail were close because they could not meet payment demands, i.e. did not have enough liquidity. No profitable bank operation can hold enough liquidity to cover a sudden mass exodus of depositors. The trick is to have enough liquidity so that bank is never challenge to use it. Conversely, a bank that is overly aggressive in minimizing liquidity in order to enhance profits may find that its correspondent banks and depositors will decide to test its liquidity by canceling credit lines and withdrawing deposits precisely when liquidity is already tight.

## 8.0. Theories of Liquidity Risk Management

### 8.1. Loanable Funds Theory

This theory refers to the sum of money saved for lending out to borrowers by individuals and organizations in an economy rather than being used for consumption. The contribution of loanable funds comes from organizations, businesses, and individuals who have saved some extra money for investment purposes. In this theory, the main cause of liquidity risk is the concentration of loans in a particular sector. Therefore, loanable funds should be diversified.

### 8.2. Shift-Ability Theory

The shift-ability theory of bank liquidity was put forth by H.G. Moulton. He asserted that if the commercial banks maintain a substantial amount of assets that can be shifted to other banks in case of necessity for cash without material loss, then there is no need to rely on maturities. According to this view, an asset to be perfectly shift-able must be immediately transferable without capital loss when the need for liquidity arises.

This is particularly applicable to short-term market investments, such as treasury bills and bills of exchange that can be immediately sold whenever it is necessary to raise funds by banks. But in a general crisis when all banks are in need of liquidity, the shift-ability theory requires that all banks should possess such assets which can be shifted on to the central bank which is the lender of the last resort.

This theory has certain elements of truth. Banks now accept sound assets that can be shifted on to other banks. Shares and debentures of large companies are accepted as liquid assets along with treasury bills and bills of exchange. This has encouraged term lending by banks.

### 8.3. Anticipated Income Theory

According to this theory, the bank plans the liquidation of the term-loan from the anticipated income of the borrower, regardless of the nature and character of a borrower's business. A term-loan is for a period exceeding one-year and extending to less than five years.

The term-loan is granted against the hypothecation of machinery, stock, and even immovable property. While granting this loan, the bank puts restriction on the financial activities of the borrower. The bank takes into consideration not only the security but also the anticipated earnings of the borrower at the time of granting a loan. Thus, a loan by the bank is repaid out of the future income of the borrower in installments, instead of in a lump sum at the maturity of the loan.

### 8.4. Liabilities Management Theory

In the year 1960s, Liabilities Management theory was developed. According to this theory, there is no need for banks to grant self-liquidating loans and keep liquid assets because they can borrow reserve money in the money market in case of need.

By creating additional liabilities against it from different sources, a bank can acquire reserves. These sources include the issuing of time certificates of deposit, borrowing from other commercial banks, borrowing from the central banks, raising of capital funds by issuing shares, and by ploughing back of profits.

### 8.5. Real Bills Doctrine

Also known as the commercial loan theory or the real bills doctrine. It states that a commercial bank should advance only short-term self-liquidating productive loans to business firms. The loans which are meant to finance the production and movement of goods through the successive stages of production, storage, transportation, and distribution are self-liquidating loans.

The loans are considered to liquidate themselves automatically when such goods are ultimately sold. For example, a loan given by the bank to a businessman to finance inventories would be repaid out of the receipts from the sale of those very inventories, and the loan would be automatically self-liquidated.

The theory states that when commercial banks make only short term self-liquidating productive loans, the central bank, in turn, should only lend to the banks on the security of such short-term loans. The proper degree of liquidity for each bank and the proper money supply for the whole economy is ensured by this principle.

## 9.0. Strategies to Manage Bank's Liquidity Problems

In today's world, because of expanding many-sided quality of budgetary markets, concerns identified with insufficient recognizable proof, overseeing liquidity chance and exacerbate by the monetary emergency, liquidity risk management is a noteworthy concentration for controllers. In view of the fact that the money related market is progressively interconnected, a liquidity shortfall at a single institution can have system-wide consequences. Some strategies to manage banks' liquidity problems are as under:

### 9.1. Asset Conversion Strategy

The best approach to meet bank's liquidity needs is asset conversion strategy or asset liquidity management. In its true form, this strategy is also called storing liquidity in the form of holding of liquid assets predominantly in cash and marketable securities. Whenever liquidity is required, selected assets are sold for cash until all the banks demand for cash are met. This liquidity management strategy is often called assets conversion because liquidity funds are raised by converting non- cash assets into cash.

This approach is used mainly by small and big banks that find it a less risky to liquidity management than relying on borrowings.

## 9.2. Borrowed Liquidity (risk) Management Methodologies

Several banks run by the biggest business started to raise a greater amount of their liquidity funds through borrowings in the currency market. This borrowed liquidity technique regularly called purchase liquidity management in its purest form calls for obtaining enough immediate spendable funds to cover every expected demand for liquidity.

## 9.3. Balance (Asset and Liability) Management Strategy

Most banks compromise in choosing their liquidity management strategy due to the risk inherent in depending on borrowed liquidity and the cost of storing liquidity in assets. Balance liquidity management approach comprises of both asset management and liability management strategy.

Anticipated liquidity needs are backstopped by advanced arrangement for lines of credit from correspondent bank or other suppliers of funds while the expected demands for liquidity are stored in assets (like marketable securities and deposit at other banks). Near-term borrowings help to meet the unexpected cash needs. Longer-term liquidity needs can be planned for and funds to meet them parked in short-term and medium-term securities that will roll over into cash as those liquidity needs arises.

## 10.0. Conclusion

It is eminent that the liquidity risk causes a fall in profit of banks and a drop in their performance, which further result in the collapse and ultimately the closure of the bank. Hence, it becomes a necessity that strategic risk management strategies must be implemented to avoid the hazards of liquidity risk. The banks should maintain the prudential ratios as to avoid the occurrence of liquidity risk. All banks must create a risk management department that effectively manages all the liquidity risk related issues. If appropriate steps are taken to manage liquidity risk at every step of the process, the short-term and long-term effects of the liquidity can be avoided.

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