Lesson 1:

Introduction to Liquidity Management

Learning Objectives

When you have studied this lesson you should:

• be able to define liquidity, cash assets and liquid assets.
• understand the basic objectives of liquidity management.
• have a sense of some practical liquidity issues facing microfinance institutions.

Pre-Test  (Solutions are at the end of the lesson)

P1 What is part of liquidity management?

a) buying and selling shares in other companies
b) planning the amount of vault cash for each branch
c) selling liquid, short-term investments for cash
d) taking in short-term money market deposits from other financial institutions, mostly banks

Choose:
A) a), b), c) and d)
B) b) and c)
C) b), c) and d)

P2 Which of the following are liquid assets in microfinance institutions?

a) cash in the vault
b) a loan to a member of a credit solidarity group that is due in two months
c) an overnight deposit with another bank

Choose:
A) a)
B) a), b) and c)
C) a) and c)

P3 What are the goals of liquidity management?

a) to comply with the minimum liquidity requirements of the regulatory framework and the minimum reserve rules
b) to keep the level of idle liquidity as low as possible and to avoid emergency borrowings or the forced liquidation of assets at the same time
c) to reduce the operating costs of a financial institution
d) to ensure sufficient liquidity to cover all cash outflows at any time

Choose:
A) a)
B) a), b) and d)
C) all of the above
1.1 Definition and Objectives

Why should you spend time and effort learning about liquidity management? The answer is simple: if your organization is not liquid, it is bankrupt. In the short-term, you can probably avoid liquidity problems simply by holding most of your assets in cash. In the long run, however, holding too much cash will also bankrupt you. Cash is a money loser because it does not earn enough to cover funding and administrative costs. This book is about finding a middle way between having too much or too little cash.

Liquidity
Liquidity is the ability of a financial institution to honor all cash payment commitments as they fall due. These commitments can be met either by drawing from a stock of cash holdings, by using current cash inflows, by borrowing cash or by converting liquid assets into cash.

Liquidity Risk
Liquidity risk is the possibility of negative effects on the interests of owners, customers and other stakeholders of the financial institution resulting from the inability to meet current payment obligations in a timely and cost-efficient manner.

Cash Assets
Cash assets (or simply cash) are generally understood to include

- currency bills and coins on hand at the financial institution (vault cash),
- demand and transaction deposits held with other financial institutions or at the central bank, and
- cash items in the process of collection (resulting from check remittances and payment transfers).

Liquid Assets
Liquid assets consist of cash assets plus other liquid assets that can readily be sold for cash with negligible price depreciation.

In commercial banks, the most common (non-cash) liquid assets are short-term loans covered by high-quality securities as collateral and investments in short-term government obligations. What makes these assets liquid is the fact that they can be sold in an active secondary market at a moment’s notice, so that the cash value is often available for use the same day. Some MFIs are beginning to use money market deposits with other banks as a way to store liquidity while earning some interest on these idle funds.

Importance of Liquidity
Liquidity is a vital condition 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 making and deposit taking business. A bank cannot afford to send away a customer who wants to withdraw cash from his account with a “maybe 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.

**Importance of Liquidity for a MFI**

Once one village bank goes under, depositors and creditors of other small financial institutions in the area will begin to wonder how safe their investments are and possibly start to withdraw their funds. Such domino effects can bring down even healthy institutions. If allowed to run unchecked, the chain reaction can bring about a liquidity crunch in the entire regional economy. The subsequent recession would severely affect the livelihood of most people in the area, many of whom may never have set foot in any kind of financial institution.

Many microfinance institutions have set out on a development path towards becoming true financial intermediaries; offering not only loans, but a full range of banking services including savings, checking and other non-cash payment services. Dealing not only with the fluctuating demand for loans but also with erratic deposit variations makes the task of liquidity management quite complex and requires systematic planning. At the same time, the growing size of MFI operations means that their liquidity has become an issue of regional economic importance. Liquidity therefore is the No. 1 concern of every microfinance institution.

**Objectives of Liquidity Management**

What constitutes good liquidity management and what are its objectives? The general goals of liquidity management are to:

- 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.

**Time Horizon of Liquidity Management**

The time horizon for liquidity management is short. It involves detailed estimations of the size and timing of cash inflows and outflows over the next few days and weeks. Often liquidity projections are extended up to a year with diminishing detail on the far end of the time line.

**Examples of Practical Liquidity Management Issues**

Typical questions that a liquidity manager needs to address include the following:

- How can an MFI in an agricultural community predict seasonal deposit variations resulting from crop production cycles?
- How does loan demand vary with macroeconomic cycles of boom and recession?
- How much of the funds in the “internal” account should a village bank keep in the vault and how much can be used for lending?
Box 1.1  Colombia Solidarios Financial Cooperative, Cali

Solidarios Financial Cooperative was a prominent credit union in Cali serving low-income communities. It was closed by the Colombian Superintendency of Banks in June 1998 because of insufficient liquidity. The government’s Deposit Insurance Fund has in the meantime begun to return savings to Solidarios’ small depositors. Solidarios failed not because it was a particularly poorly managed MFI. It was simply not prepared for the general liquidity crunch that suddenly swept the entire credit union sector. The trouble started in 1996 and early 1997 when some credit unions incurred speculative losses with fiduciary funds from the government. In March 1997, the government reacted with a decree forbidding investment of official funds in financial institutions that were not regulated by the Superintendent of Banks. At the time, this included credit unions. This prompted an immediate loss of deposits for many credit unions, but more so, it undermined the public confidence in the credit union sector. Many small depositors started withdrawing their funds from Solidarios, even though it had nothing to do with the original scandal. In the end, Solidarios did not have enough liquidity to quickly pay out all depositors and was closed by the authorities.


1.2  The Basic Challenges of Liquidity Management

Uncertainty
Liquidity management operates in an environment of uncertainty. There is uncertainty about future customer behavior, about general macroeconomic conditions, about weather patterns that influence agricultural production 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.

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 linked with deposit flows. Imagine that you are dealing essentially with the same type of clientele on the asset and liability side, say a community composed largely of coffee farmers. Most customers probably will want to withdraw a large share of their deposits during the planting season to buy fertilizers and supplies. This is precisely the time when demand for loans is highest for the same reason. At harvest time, however, customers will tend to replenish their savings while others repay their seasonal loans. Without proper diversification of its customer base, a MFI may well face wild seasonal swings between periods of unproductive excess liquidity and lost lending opportunities because of liquidity shortages.

There are many more explicit and implicit inter-relations between liquidity factors to consider. Tight liquidity, for example, which may require an MFI to refuse a loan to a qualifying customer, is not just a missed business opportunity. Turning a legitimate loan customer away can have severe implications for customer confidence. If word spreads
that loans are refused, depositors might conclude that the MFI is in financial trouble and will rush to withdraw their funds. Few banks, not even the largest ones, can expect to survive an outright run on their deposits.

**Fragile Balance**
Liquidity is a delicate balancing act. In retrospect, banks that survive always appear to have had excessive liquidity, while banks that fail were closed 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 you will never be challenged 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.

**Comprehension Check**

(Please refer to the text to find the answers)

i. What are the consequences of not meeting payment obligations on time?

ii. List the main components of cash assets.

iii. Explain how a liquidity problem at one bank may affect the economy as a whole.

iv. What are some of the uncertain factors in planning liquidity?

v. What are the direct and indirect liquidity implications of refusing a loan to a qualified borrower?
Multiple Choice Test

(Solutions are at the end of the lesson)

M1 Which of the following is not a cash asset?

A) vault cash
B) short-term investments in securities
C) transaction deposits
D) cash items in the process of collection

M2 What are the objectives of liquidity management?

a) honor all cash outflow commitments
b) minimize the cost of lost earnings on idle liquidity
c) avoid emergency borrowing at excessive cost
d) liquidate fixed assets in order to make more loans to needy clients

Choose:
A) a), b) and c)  
B) all of the above  
C) b), c) and d)  

M3 What is the typical time horizon for liquidity management?

A) a five year plan  
B) a short-term plan of one year maximum with monthly or even shorter planning intervals  
C) a two year plan with quarterly intervals  

M4 Refusing a loan to a qualified borrower improves liquidity in the short run but may reduce liquidity in the longer term.

A) True  
B) False
Solutions to Pre-Test

P1  C)  P3  B)
P2  C)

Solutions to Multiple Choice Test

M1  B)  M3  B)
M2  A)  M4  A)