# PARTICIPANT COURSE MATERIALS

# Accounting for MFIs: Fundamentals of Accounting for Microfinance Managers



**NOTE** These are participant course materials of the main technical messages and concepts delivered in this course. It is not intended to serve as a substitute for the full course materials delivered through the *Skills for Microfinance Managers* training series. Users interested in attending a training course should directly contact CGAP hubs and partners for course dates and venues. CGAP would like to thank those who were instrumental to the development and design of the original course and the revised version of the course that led to this participant summary: Michael Goldberg, Ruth Goodwin-Groen, Lorna Grace, Brigit Helms, Jennifer Isern, Joanna Ledgerwood, Patricia Mwangi, Bridge Octavio, Janis Sabetta, Djibril Mbengue, Tiphaine Crenn and all CGAP training hubs and partners. Copyright 2008, The Consultative Group to Assist the Poor (CGAP).

# Contents

Overview and Goals	4
Overview	4
Goals of the Course	
What is Accounting? •	
Basic accounting principles for MFIs:	5
Double-Entry Accounting	6
Conservatism and Prudence	<i>6</i>
Materiality	
Realization	
Matching	
Financial Statements	
Balance Sheet	10
Income Statement	
Cash Flow Statement	
Portfolio Report	
·	
The Accounting Cycle	
Step 1: Classifying Transactions	22
Step 2: Journalizing	24
Step 3: Posting	
Step 4: Trial Balance	
Step 5: Accounting Adjustments	

Accounting for Loan Loss Impairment and Write-Offs	33
Step 6: Closing Entries	34
Step 7: Draft Financial Statements	35
Step 8: Closing	35
Decision Making Tools 🔺	36
Management Information Systems	
Use of Ratios	43
Internal Controls A	44
Internal Controls	44
Sources of Risk	44
External Audits	
Overview of Financial Statements	46
Balance Sheet	
Income Statement	
Bibliography 🔺	50

#### **Overview**

International best practice for microfinance suggests that good financial analysis is the basis for successful and sustainable microfinance operations. Quality financial analysis depends on the quality of recorded information to be analyzed. This information comes largely from the accounting system, so accounting information is fundamental for achieving sustainability.

#### Goals of the Course

- To understand how financial statements are created
- To obtain basic knowledge of
  - Underlying accounting principles
  - How the results of accounting can assist a manager to identify and analyze problems
- To process accounting transactions
- To create financial statements that account for loan losses, interest revenue, and donor funds
- To generate useful information for an MFI using accounting data

# What is Accounting?

#### Accounting

- Is the process of recording, classifying, and summarizing economic events
- Leads to the preparation of financial statements
- Provides essential information that allows the manager to choose actions that will redirect the enterprise's activities to be more consistent with the mission and objectives of the business plan

# Basic accounting principles for MFIs:

- Double entry
- Conservatism and prudence
- Materiality
- Realization
- Matching

# **Double-Entry Accounting**

## Assets = Liabilities + Equity

- Any given transaction will affect a minimum of two accounts within assets, liabilities, or equity.
- If the accounting equation is to remain in balance, any change in the assets must be accompanied by an equal change in the liabilities or equity, or by an equal but opposite change (increase or decrease) in another asset account.

Revenue or expense items record non-stock transactions. Non-stock (or flow) transactions begin within a reporting period and expire at the end of the period. Ultimately, the revenue and expense accounts are netted out to result in a final profit or loss. This profit or loss is then transferred to the Balance Sheet as equity, thereby ensuring that the Balance Sheet balances.

#### Conservatism and Prudence

Conservatism means *recording* financial transactions such that **assets**, **revenues**, **and gains are not overstated** and **liabilities**, **expenses and losses are not understated**. It is intended to result in the fair presentation of financial results.

# Materiality

Each material item should be presented separately in the financial statements. Material items are those that may influence the economic decision of a user.

#### Realization

Realization requires that revenue be recognized in the accounting period it is earned, rather than when it is collected in cash. It defines the point at which revenue is recognized.

# **Matching**

Organizations incur expenses to earn revenues. Expenses should be reported on the Income Statement during the same period as the revenues they generate.

# **Financial Accounting versus Managerial Accounting**

## **Financial Accounting**

Presents a summary view of the financial results of past operations for a wider audience

External

Summary

**Historical Only** 

Standardized Format

Annual

Final, Precise

End (e.g., Independent Audit)

Reporting and Disclosure

Source: Tony Sheldon, SEEP Training Notes, 1997.

# **Managerial Accounting**

Tracks and presents projected and historical operations, at a detailed level, intended for use by managers

Internal

Detailed

Historical and Projected

**Open Formats** 

Daily/Weekly/Monthly/Quarterly/etc..

Ongoing, Flexible

Means (management tool)

**Analysis and Action** 

# Three key accounting issues relevant to MFIs:

	us Accrual Inting		ting for Revenue	Accounting for Gran and Concessional Funds		
<b>Cash</b> Revenue is not	<b>Accrual</b> Recognizes	<b>Cash</b> Records interest	Accrual Records interest	<b>Grants</b> Not included in	Concessional Loans Loans made to	
reported until cash is received and expenses are not reported until cash is disbursed.	transactions when they take	revenue when cash is received.  This is the most conservative or prudent methods – when interest is paid with each installment of the loan. However, if interest is paid up-front, it overstates the revenues of the MFI.	revenue when it falls due rather than when it is received in cash	profits or retained earnings from operations Recorded separately below the operating profit/(loss) on Income Statement Transferred to Balance Sheet as donated equity	the MFI at less than market rate of interest Recorded separately from commercial loans (in order to identify 'subsidy')	

# **Financial Statements**

MFIs commonly use four types of financial statements:

- Balance sheet
- Income statement
- Cash flow statement
- Portfolio report

#### **Balance Sheet**

## Assets = Liabilities + Equity

A **balance sheet** is a summary of the financial position at a specific point in time. It presents the economic resources of an organization and the claims against those resources.

#### **Assets**

- Represent what is owned by the organization or owed to it by others
- Are items in which an organization has invested its funds for the purpose of generating revenue.

#### **Liabilities**

• Represent what is *owed* by the organization to others.

## **Equity**

- Represents the *capital* or *net* worth of the organization.
- Includes capital contributions of members, investors or donors, retained earnings, and the current year surplus.

# **Sample Balance Sheet**

ASSETS	Accounts Payable and Other Short-term Liabilities
Cash and Due from Banks	Long-term Time Deposits
Trade Investments	Long-term Borrowings
Net Loan Portfolio	Other Long-term Liabilities
Gross Loan Portfolio	Total Liabilities
Impairment Loss Allowance	EQUITY
Interest Receivable on Loan Portfolio	Paid-In Capital
Accounts Receivable and Other Assets	Donated Equity
Other Investments	Prior Years
Net Fixed Assets	Current Year
Fixed Assets	Retained Earnings
Accumulated Depreciation and Amortization	Prior Years
Total Assets	Current Year
LIABILITIES	Reserves
Demand Deposits	Other Equity Accounts
Short-term Time Deposits	Adjustments to Equity
Short-term Borrowings	Total Equity
Interest Payable on Funding Liabilities	Total Liabilities + Equity

Source; SEEP Framework, 2005

# Effects of Transactions on the Balance Sheet A demonstration of how double-entry works

The effect of the following transactions on the Balance Sheet is shown by drawing an up arrow ( $\uparrow$ ) to show an increase in the accounts affected and by a down arrow ( $\downarrow$ ) to show a decrease.

				Assets				Liabi	lities		Equity
	Transaction	Cash	Gross Loan Portfolio	Loans Past Due	Other Invest- ments	Fixed Assets	Short-term Borrowing	Demand Deposits	Long-term Borrowing	Accounts Payable and Other ST Liabilities	Equity
1.	Purchase land on credit					<b>1</b>			<b>↑</b>		
2.	Disburse loan to client	<b>\</b>	<b>1</b>								
3.	Purchase motorcycles for staff - pay half cash; half short-term credit	<b>→</b>				1	1				
4.	Purchase office furniture on short-term credit					<b>↑</b>	<b>↑</b>				
5.	Take loan from bank at commercial rate of interest (> 1 year)	<b>↑</b>							<b>↑</b>		
6.	Purchase a Treasury Bill for cash	<b>→</b>			<b>↑</b>						
7.	Client withdraws savings	<b>\</b>						<b>\</b>			
8.	A current loan becomes past due		$\overline{}$	1							
9.	Paid out interest earned on client savings acct.	<b>\</b>								<b>\</b>	

Source: Joanna Ledgerwood and Kerri Moloney. Accounting: Study Guide. Calmeadow, Toronto, Canada, 1996.

#### Income Statement

An **income statement** reports the organization's financial performance over a specified period of time. It summarizes all revenue earned and expenses incurred during a specified accounting period. An institution prepares an income statement so that it can determine its net profit or loss (the difference between revenue and expenses).

#### Revenue

Refers to money earned by an organization for goods sold and services rendered during an accounting period, including

- Interest earned on loans to clients
- Fees earned on loans to clients
- Interest earned on deposits with a bank, etc.

An income statement

#### **Expenses**

Represent costs incurred for goods and services used in the process of earning revenue. Direct expenses for an MFI include

- Financial costs
- Administrative expenses
- Provision for loan impairment
- Relates to a **balance sheet** through the transfer of cash donations and net profit (loss) as well as depreciation, and in the relationship between the provision for loan impairment and the impairment loss allowance.
- Uses a **portfolio report**'s historical default rates (and the current impairment loss allowance) to establish the provision for loan impairment.
- Relates to a cash flow statement through the net profit/loss as a starting point on the cash flow (indirect method).
- Starts at zero for each period (in contrast to the Balance Sheet which is cumulative since the beginning of the organization's operation).

# **Sample Income Statement**

Financial Revenue	Operating Expense
Financial Revenue from Loan Portfolio	Personnel Expense
Interest on Loan Portfolio	Administrative Expense
Fees and Commissions on Loan Portfolio	Depreciation and Amortization Expense
Financial Revenue from Investments	Other Administrative Expense
Other Operating Revenue	Net Operating Income
Financial Expense	Net Non-operating Income/(Expense)
Financial Expense on Funding Liabilities	Non-operating Revenue
Interest and Fee Expense on Deposits	Non-operating Expense
Interest and Fee Expense on	Net Income (Before Taxes and
Borrowings	Donations)
Other Financial Expense	Taxes
Net Financial Income	Net Income (After Taxes and Before Donations)
Impairment Losses on Loans	Donations
Provision for Loan Impairment	Donations for Loan Capital
Value of Loans Recovered	Donations for Operating Expense
	Net Income (After Taxes and Donations)

Source: SEEP Framework, 2005

# **Comparison of Balance Sheet and Income Statement**

A Balance Sheet is a snapshot of the organization's financial position at a specific point in time. All amounts are cumulative since the organization began.

An Income Statement portrays the events that have occurred between the dates of two consecutive balance sheets.

#### Cash Flow Statement

A **cash flow statement** shows where an institution's cash is coming from and how it is being used over a period of time.

A cash flow statement

- Classifies the cash flows into operating, investing and financing activities.
  - Operating activities: services provided (income-earning activities).
  - Investing activities: expenditures that have been made for resources intended to generate future income and cash flows.
  - Financing activities: resources obtained from and resources returned to the owners, resources obtained through borrowings (short-term or long-term) as well as donor funds.
- Can use either
  - The direct method, by which major classes of gross cash receipts and gross cash payments are shown to arrive at net cash flow (recommended by IAS)
  - The indirect method, works back from net profit or loss, adding or deducting noncash transactions, deferrals or accruals, and items of income or expense associated with investing and financing cash flows to arrive at net cash flow.

Note: The Balance Sheet and Income Statement are accounting reports. The figures can be influenced by management's choices regarding accounting policies. A Cash Flow Statement cannot be changed by any accounting policy.

# Portfolio Report

A **portfolio report** provides information about the lending and savings operations of an MFI. It provides timely and accurate data about the quality of the portfolio. It usually also includes other key portfolio performance indicators (e.g., outreach).

#### Information usually includes:

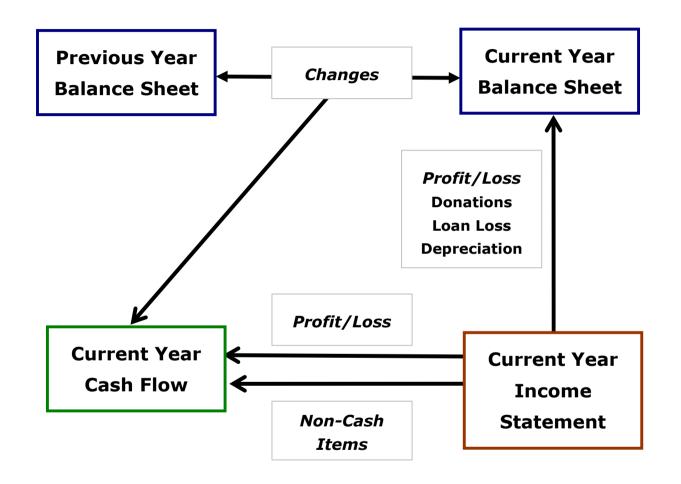
- total value and number of loans disbursed during the period,
- number and value of loans outstanding end of period,
- average outstanding balance of loans,
- value of outstanding loan balances in arrears,
- value of loans written off during period,
- aging report
- information on loan terms and loan officers

#### Characteristics of a portfolio report:

- Provides information about the lending operations of an MFI.
- Prepared weekly or monthly depending on the frequency of payments and methodology of the MFI.
- Uses input from client ledgers and loan officers.
- Relates to other statements in calculating anticipated and actual revenue from loan interest and fees, provides information for the impairment loss allowance and the resulting provision for loan impairment calculation.

Quality of portfolio ratios can be calculated from portfolio information, This
information together with the aging report can give a lot of information on the
health of the portfolio. The portfolio is the major source of revenue generation can
give valuable insight into an MFI's sustainability.

# **Relationships Between Financial Statements**



# **Three Ways in Which MFIs Treat Cash Donations**

#### Goals: 1. Grants are separated from operating income

2. Grants are fully disclosed in equity

IAS 20 Recommends Income approach

Considerations: Where to record them

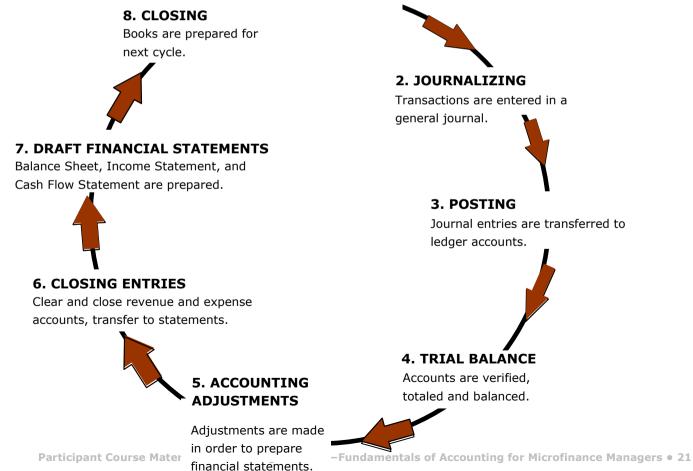
When to record them

Income Statement	Balance Sheet				
Operating Profit/Loss	Assets	Liabilities			
All Cash Grants/Donations		Equity			
for current year		Donations			
		Current year			
Operating Profit/Loss	Assets	Liabilities			
Grants for Operations		Equity			
Grants for Loan Funds	<b>——</b>	Donations			
Grants for Fixed Assets	<b>———</b>	Current year			
for current year					

# The Accounting Cycle

The eight steps of the accounting cycle describe the accounting for an economic transaction, from the time it occurs until it is ultimately reflected in the financial statements.

1. TRANSACTION OCCURS



# Step 1: Classifying Transactions

#### A chart of accounts

- Provides the structure for recording and reporting of all financial transactions for the institution.
- Classifies and determines what financial transactions can be tracked for managerial purposes and reported in the financial statements.
- Transactions are organized as either asset, liability, equity, revenue (income) or expense accounts.

#### **Determinants**

- The structure and level of detail of the chart of accounts will determine the type of information management will be able to access and analyze in the future.
- Management must design the chart of accounts and be clear about what it needs. In particular, it is
  fundamentally important to be able to differentiate between the grant income given by donors from the
  operational income earned from the MFI's products and services. Operational income is the basis for
  financial analysis, not grant income, and the importance of accurately tracking it cannot be overstated.
- Different end users of the information generated have different needs. Internal management and auditors, tax code, donors, and regulatory demands all influence how the chart of accounts is set up.
- Some charts of accounts and report formats may be legislated and therefore MFIs are obligated to follow the mandated requirements in these countries.

# **Sample Chart of Accounts**

Ass	Assets		oilities	Equ	Equity		
101	Cash and Due from Banks	201	Demand Deposits	301	Paid-in Capital		
110	Trade Investments	210	Short Term Deposits	305	Donated Equity		
115	Net Loan Portfolio	215	Short Term Borrowings	310	Prior Years		
120	Gross Loan Portfolio	220	Interest Payable on Funding Liabilities	315	Current Year		
125	Impairment Loss Allowance	225	Accounts Payable & ST Liabilities	320	Retained Earnings		
130	Interest Receivable on Loan Portfolio	230	Long term Time Deposits	325	Prior Years		
135	Accounts Receivable and Other Assets	235	Long Term Borrowings	330	Current Year		
140	Other (Long Term) Investments						
145	Net Fixed Assets						
150	Gross Fixed Assets						
155	Accumulated Depreciation and Amortization						

Rev	enue	Expenses				
400						
400	Financial Revenue	500	Financial Expense			
405	Financial Revenue from Loan Portfolio	505	Financial Expense on Funding Liabilities			
410	Interest on Loan Portfolio	510	Interest and Fee Expense on Deposits			
415	Fees and Commissions on Loan Portfolio	515	Interest and Fee Expense on Borrowings			
420	Financial Revenue from Investment	520	Other Financial Expense			
425	Other Operating Revenue	525	Impairment Losses on Loans			
435	Other non operating Revenue	530	Provisions for Loan Impairment			
440	Donations	535	Value of Loans Recovered			
		540	Operating Expense			
		545	Personnel Expense			
		550	Administrative Expense			
		555	Depreciation and Amortization Expense			
		560	Other Administrative Expense			
		565	Training and Professional Development			
		566	Rent and Utilities			
		567	Communications (phone, postage, courier)			
		568	Bank Charges			
		575	Miscellaneous			

# Step 2: Journalizing

All economic transactions are entered into the accounting system by means of a journal entry.

#### **GENERAL JOURNAL**

A general journal is a

- Daily diary of transactions
- Listing of all transactions in chronological order
- Book of original entry
- Record of debits and credits entered in columns, the left column for recording debits and the right column for recording credits

## Sample Headings in a General Journal

Date	Account Title and Explanation	Ref Num	Debit	Credit

#### **JOURNAL ENTRY**

A journal entry

• Is used to enter transactions into the accounting system

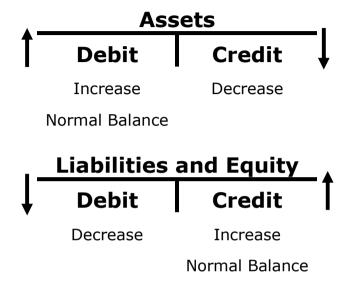
- Records how each transaction affects either an asset, liability, equity, revenue and/or expense account.
- Has three elements (T-account):
  - o Title: name of the asset, liability, equity, revenue or expense account
  - o Increases in the left side of the equation (assets) are recorded as debits
  - o Increases in the right side (liabilities or equity) are recorded as credits

**Sample T-Account** 

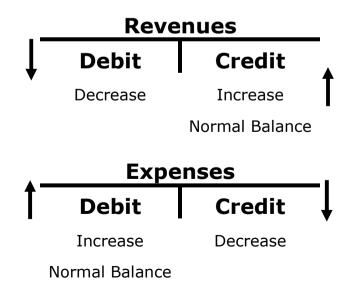
Account Title

Debit Credit

# **Effect of Accounting Transactions on the Balance Sheet**



# **Effect of Accounting Transactions on the Income Statement**



# Step 3: Posting

After journalizing, the next step in the accounting cycle is to make entries in the general ledger.

Posting is the process of copying journal entry information from the General Journal to the General Ledger.

#### **GENERAL JOURNAL**

The General Journal is a *chronological* record of transactions.

## **Sample General Journal**

Date		Account Title and Explanation	Ref.	Debit	Credit
July	1	Fixed Assets- Computer	150	4,000	
		Cash	101		4,000
		(purchased computer on cash)			
	3	Fixed Assets- Motorcycles	150	15,000	
		Cash	101		4,000
		Short-term Liabilities	225		11,000
		(purchased motorcycles on cash & credit)			
3	31	Cash	101	51,000	
		Demand Deposits	201		51,000
		(collect savings)			

#### **GENERAL LEDGER**

In contrast, the General Ledger is a record of transactions *organized by account number* beginning with the asset accounts and ending with expense accounts

Cash Account No. 101

Date		Explanation	Debit	Credit	Balance
					358,196
July	1	purchased computer		4,000	354,196
	3	purchased motorcycles		4,000	350,196
	31	collected savings	51,000		401,196

Fixed Assets

Account No. 150

Date		Explanation	Debit	Credit	Balance
					230,504
July	1	purchased computer	4,000		234,504
	3	purchased motorcycles	15,000		249,504

Ledger accounts represent the accumulation in one place of all information about changes in an asset, liability, equity, revenue, or expense item.

Each ledger account is identified by its account name and number as stated on the Chart of Accounts.

#### **OPENING BALANCES**

Ongoing balances are carried forward from period to period and represent the balance on account on the balance sheet and on the income statement. Each debit and credit entry in the cash account represents a cash receipt or a cash payment (identified by journal entries). The amount of cash owned by the organization at a given point in time (e.g., August 9) is the **account balance** for that date. The account balance equals the difference between the total debits and the total credits in the account.

- Balance Sheet accounts are a summary of the organization's assets, liabilities, and equity since the beginning of the MFI's operations.
- Income Statement accounts reflect revenue and expenses over a specified period of time and therefore are not carried over across accounting period to accounting period.

The Cash Ledger, Account 101, is used to record all cash and bank transactions. It is the most important account for MFIs because:

- The number of cash transactions in MFIs is large.
- The chances of committing fraud are higher than with other assets.
- Timely payments are important to the MFI's reputation and financial position.

#### **CASH ACCOUNT AND BANK RECONCILIATION**

On a periodic basis (usually monthly) the bank account statement should be reconciled with the accounting records. This control function allows MFIs to identify differences between cash and bank balances. These differences may be due to timing, such as outstanding (unpresented) checks or outstanding (in-transit) deposits, or to an origination error. This is done by taking the closing cash balance reported on the bank statement and subtracting any outstanding checks and adding deposits.

Regular preparation and review of bank reconciliation is a key internal control function.

# Step 4: Trial Balance

A trial balance is used to verify that the debits and credits are in balance (once all journal entries have been made and posted in the General Ledger).

The trial balance is prepared by:

- 1. Taking the account balances from the General Ledger
- 2. Listing the accounts having debit balances in one column and those having credit balances in the other column
- 3. Totaling the debit balances
- 4. Totaling the credit balances

5. Comparing the sum of the debit balances and the sum of the credit balances. (The sums should be equal in order for the ledger accounts to be in balance.)

A trial balance is a first test of accurate posting in the ledgers. However it does not mean that the ledger accounts are free from error. Some errors cannot be detected in a balanced trial balance.

# Step 5: Accounting Adjustments

Once the Trial Balance is completed and balanced, adjustments are made to record transactions that have not previously been recorded. Examples of these include adjusting for bank charges, depreciation, provisions for loan impairment, etc. .

# IMPAIRMENT LOSS ALLOWANCE, PROVISIONS FOR LOAN IMPAIRMENT AND LOSSES OR WRITE-OFFS

Impairment Loss Allowance	Provisions for Loan Impairment	Loan Losses or Write-Offs
<ul> <li>An account that represents an estimate of the amount of outstanding principal that the MFI does not expect to recover eventually</li> <li>Negative asset on the balance sheet that reduces the outstanding portfolio. (An alternative presentation is to show it as a liability.)</li> </ul>	<ul> <li>Amount expensed on the income and expenses statement.</li> <li>Increases the impairment loss allowance</li> </ul>	<ul> <li>Occur as an accounting entry.</li> <li>Do not mean that loan recovery should not continue to be pursued.</li> <li>Decrease the impairment loss allowance and the outstanding portfolio.</li> </ul>

## **Accounting for Loan Loss Impairment and Write-Offs**

**An impairment loss allowance** indicates the possibility that an asset in the Balance Sheet is not 100% realizable. The loss of value of assets may arise through wear and tear such as the depreciation of physical assets, loss of stocks, or unrecoverable debts.

**The provision for loan impairment** expenses the anticipated loss of value in the portfolio gradually over the appropriate periods in which that asset generates income, instead of waiting until the actual loss of the asset is realized.

Provisions are only accounting estimates and entries, and they do not involve a movement of cash, like saving for a rainy day.

A provision for loan impairment charged to a period is expensed in the Income Statement. The corresponding credit accumulates over time in the Balance Sheet as an allowance shown as a negative asset:

The accounting transaction is:

- **Dr** Provision for loan impairment
- Cr Impairment loss allowance

**Loan losses or write-offs** occur when it is determined that loans are unrecoverable. Because the possibility that some loans would be unrecoverable has been provided for in the accounting books through allowances, loan losses are written off against the impairment loss allowance and are also removed from the gross loan portfolio.

The accounting transaction is:

- Dr Impairment loss allowance
- Cr Gross loan portfolio

Write-offs do not affect the net portfolio outstanding unless an increase in the impairment loss allowance is made. When write-offs are recovered, they are booked in the Income Statement as Value of Loans Recovered which reduces the Provision amount.

Adapted from: Joanna Ledgerwood. Financial Management Training for Microfinance Organizations, Calmeadow, 1996.

#### **DEPRECIATION**

When a capital asset is purchased, the entire cost is not immediately recorded on the Income Statement as an expense. It is **depreciated** over time so that each year, an amount equal to the portion of its useful life is **expensed**. This entry must be made at the end of each accounting period.

#### **A**CCRUALS

Accruing revenue refers to recording revenue that has not yet been received. Accruing expenses refers to incurring and recording an expense that has not been paid for.

# Step 6: Closing Entries

Close revenue and expense accounts at the end of each accounting period by transferring their balances to the current year profit/loss account. Closing entries

- Are prepared after the final Trial Balance is completed.
- Leave revenue account with zero balance by debiting the account and crediting the current year profit/loss account.
- Leave expense account with zero balance by crediting the account and debiting the current year profit/loss account.

The net effect on the current year profit/loss account is equal to the net operating profit/loss for the period as recorded in the Income Statement.

The final step is to transfer the amounts from the final Trial Balance to the financial statements. In addition to the operating profit / loss, the donations for that year get transferred separately to the Balance Sheet from the income statement.

# Step 7: Draft Financial Statements

The Balance Sheet, the Income Statement and the Cash Flow Statement are prepared.

# Step 8: Closing

Books are prepared for the next cycle.

## **Decision Making Tools**

To make decisions, management and shareholders need both the financial statements themselves and various other reports, particularly reports that present the activity of the loan portfolio. Furthermore, various indicators can be calculated to facilitate analysis of the MFI and aid decision making.

## **Management Information Systems**

A management information system is a "series of processes and actions involved in capturing raw data, processing the data into usable information, and disseminating the information to users in the form needed."

Waterfield, Charles and Ramsing, Nick. Management Information Systems for Microfinance Institutions: A Handbook. Technical Tool Series

No. 1. Washington, DC: Consultative Group to Assist the Poor, 1998.

An accounting system and a portfolio tracking system are the primary components of the management information system. Together, the financial statements, management reports, and indicators constitute the output of the MIS.

Good information provided in a useful form on a timely basis empowers all stakeholders in the institution to participate meaningfully. An MFI must determine its information needs through identifying the users of information and evaluating the needs of each group of users.

## **Indicators for Financial Analysis, the SEEP "18"**

An MIS is created to generate information for decision making, the best information for that purpose is in the concise form of a financial or management indicator.

Waterfield and Ramsing, p. 39.

Indicators generally compare two or more pieces of data, resulting in a ratio that provides more insight than do individual data points.

### **Sustainability and Profitability**

- Operational Self-Sufficiency
- Financial Self-Sufficiency
- Return on Assets (ROA)
- Adjusted Return on Assets (AROA)
- Return on Equity (ROE)
- Adjusted Return on Equity (AROE)

### **Asset/Liability Management**

- Yield on Gross Portfolio
- Portfolio to Assets
- Cost of Funds Ratio
- Adjusted Cost of Funds Ratio
- Debt to Equity
- Adjusted Debt to Equity
- Liquid Ratio

## **Portfolio Quality**

- Portfolio at Risk (PAR) Ratio
- Adjusted Portfolio at Risk (PAR) Ratio
- Write-off Ratio
- Adjusted Write-off Ratio
- Risk Coverage Ratio
- Adjusted Risk Coverage Ratio

### **Efficiency and Productivity**

- Operating Expense Ratio
- Adjusted Operating Expense Ratio
- Cost per Active Client
- Adjusted Cost per Active Client
- Borrowers per Loan Officer
- Active Clients per Staff Member
- Client Turnover
- Average Outstanding Loan Size
- Adjusted Average Outstanding Loan Size
- Average Loan Disbursed

## **SUSTAINABILITY AND PROFITABILITY RATIOS**

RATIO	FORMULA
Operational Self-Sufficiency	<u>Financial Revenue</u> (Financial Expense + Impairment Losses on Loans + Operating Expense)
Financial Self- Sufficiency	Adjusted Financial Revenue  (Adjusted Financial Expense + Adjusted Impairment Losses on Loans + Adjusted Operating Expense)
Return on Assets (ROA)	<u>Net Operating Income - Taxes</u> Average Assets
Adjusted Return on Assets (AROA)	Adjusted Net Operating Income - Taxes Average Adjusted Assets
Return on Equity (ROE)	<u>Net Operating Income - Taxes</u> Average Equity
Adjusted Return on Equity (AROE)	<u>Adjusted Net Operating Income - Taxes</u> Average Adjusted Equity

## **Asset/Liability Management**

Interest rate management		
Yield on gross Portfolio	Cash Received from Interest, Fees and <u>Commissions on Loan Portfolio</u> Average Gross Loan Portfolio	
Cost of Funds	<u>Financial Expense on Funding Liabilities</u> (Average Deposit + Average Borrowing)	
Adjusted Cost of Funds	Adjusted Financial Expense on Funding Liabilities  (Average Deposit + Average Borrowing)	
Funding Expense Ratio	Financial Expense on Funding Liabilities  Average Gross Loan Portfolio	
Adjusted Funding Expense Ratio	Adjusted Financial Expense on Funding Liabilities Average Gross Loan Portfolio	

Asset Management		
Portfolio to Assets	Gross Loan Portfolio Assets	
Leverage		
Debt/Equity	<u>Liabilities</u> Equity	
Adjusted debt/Equity	<u>Liabilities</u> Adjusted Equity	
Liquidity Management		
Current Ratio	<u>Cash + Trade Investments</u> Demand Deposit + Short-term Time Deposit + Short-term  Borrowing + Interest Payable on Funding Liabilities +  Accounts Payable and Other Short-term Liabilities	

## **Use of Ratios**

Ratio analysis is a financial management tool that enables managers of microfinance institutions to assess their progress in achieving sustainability.

They can help answer two primary questions that every institution involved in microfinance needs to ask.

Is this institution either achieving or progressing towards profitability? How efficient is it in achieving its given objectives?

Taken together, the ratios in the framework provide a perspective on the financial health of the lending/savings, and other operations of the institution.

No one ratio tells it all. There are no values for any specific ratio that is necessarily correct. It is the trend in these ratios which is critically important.

Ratios must be analyzed together, and ratios tell you more when consistently tracked over a period of time.

## **Internal Controls**



### Internal Controls

### Internal controls

- Preserve the safety of assets,
- Improve quality of customer service,
- · Ensure reliability of financial information,
- Ensure staff adherence to policy and guidelines.

### Sources of Risk

- Delinquency / Credit risk
- Fraud
- Liquidity risk
- Operating risk
- Security risks
- Risk of computerization

### **External Audits**

An external audit is a formal, independent review of an entity's financial statements, records, transactions, and operations, performed by professional accountants, in order to

- Lend credibility to financial statements and other management reports
- Ensure accountability for investor funds
- Identify weaknesses in internal controls and systems

Scopes differ significantly, according to the objectives of each audit.

## **Overview of Financial Statements**

### **Balance Sheet**

A Balance Sheet is a summary (or snapshot) of an organization's financial position at a specific point in time; therefore it is static. It presents the institution's stock of assets (such as cash, loan portfolio, investments or fixed assets), liabilities (such as loans or accounts payable), and equity capital (net worth, or difference between assets and liabilities). All amounts are cumulative since the organization began. On a Balance Sheet, Assets equal Liabilities plus Equity.

# Why is it called a "Balance" Sheet? What elements must balance on a Balance Sheet?

All assets of the organization are funded either by outside parties (liabilities) or by investors, including donors or other interested parties (equity or net worth). The total amount of assets therefore must equal the funding sources. The two sides of the Balance Sheet are two views of the same resources of the organization: the organization's assets on one side and the funding sources for those assets on the other.

### **ASSETS**

Assets represent what is owned by the organization or owed to it. They are those items in which an organization has invested its funds for the purpose of generating future income. On the Balance Sheet, assets are always equal to the sum of liabilities plus equity.

Assets are divided in order of liquidity into *short-term* or *current assets* and *long-term assets* including *fixed assets*.

### **LIABILITIES**

Liabilities represent what is owed by the MFI to others either in the form of a loan that has been extended to it or obligations for the MFI to provide goods and services in the future.

### **EQUITY**

Equity is also referred to as *capital* or *net worth*. Unlike liabilities, the equity of an organization does not have to be repaid. It therefore represents the value or "net worth" of the MFI. Equity is equal to the amount of assets less liabilities. It represents the link between the balance sheet and the income statement in that the current year profit/loss from the income statement flows into the equity section of the balance sheet at the end of each period.

### **Income Statement**

The Income Statement is also known as the Profit and Loss Statement or the Operations Statement. It is a summary of the income, expenses and net profit or loss (the difference between income and expenses) for a period of time—say, January 1 to December 31, 2001.

### REVENUE

In accounting terms, revenue refers to money earned by the organization for goods sold and services rendered during a given period. When an organization renders services to its clients, it usually receives income in the form of cash or an account receivable.

### **OPERATING REVENUE**

Operating Income is produced by an institution's core business. For a microfinance organization operating income includes interest earned on loans to clients; fees earned on loans to clients; interest earned on funds on deposit with a bank, and so forth.

### **E**XPENSE

Expenses represent the costs incurred for services used in the process of earning revenue. They are often referred to as the "cost of doing business" since they represent the costs that are necessary for the organization to generate revenue and thus remain in operation. Direct expenses for a microfinance organization include financial costs, operating expense and provision for loan impairment.

### **OPERATING EXPENSE**

Expenses that are specific to delivery of the core business (credit and savings activities) for a specified time period. For a single-purpose MFI, all costs should be included. For multi-purpose institutions, all direct costs of financial operations and an appropriate portion of the institution's overhead should be included.

### **ADMINISTRATIVE EXPENSES**

Nonfinancial expenses (excluding personnel) Expense directly related to the provision of financial services or other services that form an integral part of an MFI's financial services' relationship with its clients.

### **NET OPERATING INCOME**

Income that is a direct result of the MFI's lending and savings activities net of the expenses directly related to these activities.

### **NET NONOPERATING INCOME/(EXPENSE)**

Net earnings from products and services not directly related to core microfinance operations.

Expenses not incurred by the core business.

### **DONATIONS**

Value of all donations recognized as revenue during the period, whether restricted or not.

## **Bibliography**

Following are additional recommended readings on accounting.

- CGAP. Disclosure Guidelines for Financial Reporting by Microfinance Institutions. Washington, DC: Consultative Group to Assist the Poor, 2001. Available at <a href="http://www.cqap.org/p/site/c/template.rc/1.9.2783">http://www.cqap.org/p/site/c/template.rc/1.9.2783</a>.
- Christen, R.P. Banking Services for the Poor: Managing for Financial Success: An Expanded and Revised Guidebook for Microfinance Institutions. Cambridge, MA: Accion International, 1997.
- Epstein, Barry, and Ali Mirza, Abbas. Wiley *IAS 2001: Interpretation and Application of International Accounting Standards 2001*. New York: John Wiley and Sons, 2001. See <a href="http://www.ids.ac.uk/cgap/static/2043.htm">http://www.ids.ac.uk/cgap/static/2043.htm</a>.
- External Audits of Microfinance Institutions: A Handbook. Technical Tool Series No. 3. Volume 1, For Audit Clients: Boards, Managers, Donors, Creditors, and Investors. Washington, DC: Consultative Group to Assist the Poorest, (1998). Available at http://www.cgap.org/p/site/c/template.rc/1.9.2999.
- External Audits of Microfinance Institutions: A Handbook. Technical Tool Series No. 3. Volume 2, For External Auditors. Washington, DC: Consultative Group to Assist the Poorest, 1998. Available at http://www.cgap.org/p/site/c/template.rc/1.9.2988.
- Helms, Brigit S. "Cost Allocation for Multiservice Microfinance Institutions". Occasional Paper No. 2. Washington, DC: Consultative Group to Assist the Poor, 1998. Available at <a href="http://www.cgap.org/p/site/c/template.rc/1.9.2697">http://www.cgap.org/p/site/c/template.rc/1.9.2697</a>.

- IASC International Accounting Standards. London: International Accounting Standards Board, 2001.
- Isern, Jennifer and Julie Abrams with Matthew Brown. 2008. *Appraisal Guide for Microfinance Institutions.*Resource Manual. Washington, D.C.: CGAP, March. http://www.cgap.org/p/site/c/template.rc/1.9.2972
- Isern, Jennifer and Julie Abrams with Matthew Brown. 2008. *Appraisal Guide for Microfinance Institutions. Revision of 1999 Appraisal Handbook*. Washington, D.C.: CGAP, March. <a href="http://www.cgap.org/p/site/c/template.rc/1.9.4394">http://www.cgap.org/p/site/c/template.rc/1.9.4394</a>
- Isern, Jennifer, Julie Abrams and Kim Craig with Matthew Brown. 2007. *Appraise.xls: Spreadsheet for Appraisal Guide for Microfinance Institutions*. Washington, D.C.: CGAP, March. http://www.cgap.org/p/site/c/template.rc/1.9.2968
- Ledgerwood, J. Financial Management Training for Microfinance Organizations, Calmeadow, 1996.
- Ledgerwood, J. *Microfinance Handbook: An Institutional and Financial Perspective*. Washington DC: Sustainable Banking with the Poor, World Bank, 1998 (ISBN 0-8213-4306-8).
- SEEP Network Financial Services Working Group and Alternative Credit Technologies, LLC, 2005.

  Measuring Performance of Microfinance Institutions: A Framework for Reporting, Analysis, and Monitoring. Washington, D.C.: SEEP Network. www.seepnetwork.org
- Tracy, John A. *Accounting for Dummies*. Second ed. IDG Books Worldwide, Inc., 2001 (ISBN 0-7645531-4-3).
- Waterfield, Charles and Ramsing, Nick. *Management Information Systems for Microfinance Institutions: A Handbook.* Technical Tool Series No. 1. Washington, DC: Consultative Group to Assist the Poor, 1998.

### Websites:

IAS international accounting standards
International Accounting Standards Board

www.iasb.org

IASPlus - News about International Financial Reporting

Powered by Deloitte

www.iasplus.com