



**ACCOUNTING FOR
MICROFINANCE INSTITUTIONS:**
Fundamentals of Accounting for Microfinance Managers

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Table of Contents

Acknowledgments.....	iv
Introduction.....	v
Overview of the Course	vii
References for the Course.....	ix

Course Materials

Session 1: Welcome and Introduction	A-1
Handouts.....	A-23
Session 2: Introduction to Accounting	A-39
Handouts.....	A-67
Session 3: Financial Statements and Portfolio Report – Overview	A-79
Handouts.....	A-111
Session 4: Recording Transactions	A-143
Handouts.....	A-171
Session 5: Summarizing Entries	A-205
Handouts.....	A-245
Session 6: Creating Statements	A-295
Handouts.....	A-311
Session 7: Interpreting Statements	A-335
Handouts.....	A-363
Session 8: The Balancing Act	A-397
Handouts.....	A-427
Session 9: Summary and Action Planning	A-465
Handouts.....	A-469
Session 10: Course Evaluation and Closure	A-475
Handouts.....	A-477
Case Study: SAFE—“Our clients are SAFE with us”	A-483

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Introduction

BACKGROUND OF THE CGAP *SKILLS FOR MICROFINANCE MANAGERS* COURSE SERIES

In 1997, Jennifer Isern and Brigit Helms of CGAP launched a pilot program in Africa to provide financial management courses to microfinance institutions (MFIs), based on industry-wide observation that the greatest constraint to the development of microfinance in the region was the lack of management capacity. The Pilot initiative had two complementary long-term objectives: 1) to improve the institutional viability of MFIs in Africa and 2) to enhance the human resource base in microfinance in Africa through sustainable training programs that would help develop stronger MFIs and increase the market for local training services. By 1999, the Africa Pilot program had become the MFI Training Program, with new partners in South and South-East Asia, Central Europe, and the Newly Independent States (NIS). In addition, CGAP launched AFCAP, an East/Southern Africa program focusing on 12 countries and CAPAF, the Francophone Africa program focusing on 19 countries, to build the capacity of national training service providers to offer training and consulting services. During the early years, Jennifer Isern and Brigit Helms served as overall coordinators of the MFI Training Program and regional programs with colleagues Tiphaine Crenn, Nathalie D'Ambrosio-Vitale, Mike Goldberg, and Joyita Mukherjee, and primary consultants Janis Sabetta, Ruth Goodwin, and Kim Craig.

Through this initiative, CGAP developed seven courses for MFI managers conceived to be globally relevant, short and practical, and incorporating adult training design. These courses are collectively called the *Skills for Microfinance Managers* series. Based on feedback from trainers and participants from hundreds of courses, the courses were revised and improved over several years. As the program matured, Jennifer Isern, Leslie Barcus, and Tiphaine Crenn managed the Global MFI Training Program. By the time CGAP transferred its training activities to the Microfinance Management Institute in January 2007, CGAP's 39 training partners had trained more than 12,000 people in 52 countries.¹ In 2007–2008, Tiphaine Crenn coordinated revisions and overall editing of the MFI courses to reflect changes in microfinance standards, especially in financial statements and ratios.

In line with CGAP's role as a global resource center on microfinance, the full trainer materials for the seven courses developed under the MFI Training Program are now being made publicly available.

NOTICE ABOUT USING THE CGAP *SKILLS FOR MICROFINANCE MANAGERS* COURSE MATERIALS

In parallel to developing course materials, the program aimed to identify qualified national and regional training institutions and help build their capacity to deliver high-quality courses, expand their training markets, and offer courses on a cost-recovery basis. Hundreds of training of trainer (ToT) sessions were organized for the seven courses throughout the world. In some regions, CGAP also developed a certification process, and certified trainers were given broad access to the training materials. Certified training partners invested heavily in building their reputation for offering high-quality, useful courses and building up their businesses.

Although the CGAP *Skills for Microfinance Managers* course materials are now publicly available, CGAP recognizes only those partners and trainers who went through the certification process as CGAP training partners. Others who offer a course using materials from one of the CGAP *Skills for Microfinance Managers* course should not refer to themselves as CGAP trainers or CGAP-certified.

¹ By December 2008, the number of people trained was closer to 14,000, given the ongoing training activities of CAPAF's 19 training partners in Francophone Africa.

CGAP also requests that all those who offer the “Accounting” course use the following text in their marketing materials and course descriptions: “The Accounting course is based on the materials developed by CGAP which are publicly available on <http://www.cgap.org>. CGAP is a leading independent resource for objective information, expert opinion, and innovative solutions for microfinance. CGAP works with the financial industry, governments, and investors to effectively expand access to financial services for poor people around the world.”

HOW TO WORK WITH THE COURSE MATERIALS

The CGAP *Skills for Microfinance Managers* course materials are all organized in the same manner, with eight to twelve sessions in each course. Each session generally consists of the following sections:

1. **Trainer Instructions** give step-by-step instructions to trainers on how to lead the session, including when to show which PowerPoint slide, distribute handouts, organize participant activities, discuss during short lectures or general discussions, etc. The instructions include suggested timing, although this should be adapted according to the context. The first page (Session Summary) of the Trainer Instructions section in each session lists all the supplies, technical materials, overheads, handouts, and case study sections that will be required for that specific session. ***Optional overheads and handouts, which are included in the course material for use at the discretion of the trainer, are clearly identified within shaded boxes in the Session Summary.*** If there are additional technical materials in the session, the Trainer Instructions include a section called Trainer Materials, marked M in the right-hand top corner. Trainer Instructions are not intended for participants. If technical explanations are included in the Trainer Instructions, they are also generally provided in the handouts for the participants.
2. **Overheads** introduce topics, underscore key messages, and summarize issues. Overheads are clearly marked O in the right-hand top corner. (For example, A3-O2 means that this is the second overhead of the third session in the Accounting course.) ***Optional overheads*** are identified by black (as opposed to white) reference numbers. The overheads are in PowerPoint format but can be printed out on transparencies and shown using an overhead projector. Overheads are not meant to be distributed to participants since the handouts in the same session will cover the same points, generally in greater detail.
3. **Handouts** are marked H in the top right-hand corner, in the same manner as the overheads. Handouts include exercises, instructions, and financial statements, as well as additional reading and in-depth information on the topic. Some handouts give instructions to the trainers about a publication to distribute, and these publications may need to be ordered or downloaded separately.
4. **Case studies** are used in most of the CGAP courses. Files for the case study are sometimes kept separate from the other handouts. The instructions in the Trainer Notes explain the section of the case study at each point in the session. Printing case studies on colored paper (and using different colors for different sections of the case) makes it easier for participants to organize their materials.
5. **Reference materials** and additional reading are listed for each course. Excerpts or the entire document are often included in the handouts. On the Web site, each course home page contains a box on the right-hand side with links to download the documents, if they are available publicly, or information on how to purchase them.

Please note that the overheads in PowerPoint format need to be downloaded separately. The course file contains the trainer instructions, the trainer technical materials, the overview of the overheads, the handouts, and the case study. The pages are formatted to be printed double-sided and blank pages are included as necessary.

Overview of the Course

Based on the premise that MFIs have to be sustainable for long-term impact and that sound accounting is one of the pillars of financial health for an MFI, the “Accounting for Microfinance Institutions: Fundamentals of Accounting for Microfinance Managers” course introduces MFI managers to the basics of accounting and how to create the most commonly used financial statements like the Balance Sheet, the Income Statement, and the Chart of Accounts. During this three- to four-day course, managers gain an understanding of accounting principles, methods, and procedures through exercises, group activities, and the accounting game “Balancing Act.”

INTENDED AUDIENCE

This course is recommended for Executive Directors, Finance Managers, Credit Managers, Operations Managers, Branch Managers and Board Members from microfinance NGOs, credit unions, banks and other financial institutions, microfinance networks, apex institutions, national government regulators, and donors and consultants. It is not recommended for trained accountants.

COURSE OUTLINE

Session 1: Welcome and Introduction

Session 2: Introduction to Business Planning

- Definition of Accounting
- Accounting principles and their application to MFI accounting
- Reasons why accounting for an MFI is different from other businesses, financial institutions, and multipurpose institutions
- The difference between accrual and cash accounting
- Ways MFIs account for interest and donations and what this means to managers

Session 3: Financial Statements and Portfolio Report – Overview

- The purpose and components of the three types of financial statements and the portfolio report
- Formatting Income Statements and Balance Sheets according to the SEEP format
- Relationships between financial statements and the portfolio report
- Transactions and their effect on the Balance Sheet

Session 4: Recording Transactions

How to:

- Record transactions of an MFI’s credit operations
- Use double-entry accounting principles recording ‘debits’ and ‘credits’
- Design and use of a chart of accounts
- Make journal entries for both Balance Sheet accounts (Assets, Liabilities, and Equity) and Income Statement accounts (Revenue and Expenses)
- Create a general journal

Session 5: Summarizing Entries

How to:

- Post entries to the general ledger and the cash ledger
- Reconcile bank accounts and the cash ledger
- Create a trial balance
- Make the necessary accounting adjustments

Session 6: Creating Statements

How to:

- Prepare an Income Statement and a Balance Sheet from the Trial Balance
- Discuss the importance and use of a cash flow statement
- Record closing entries to clear and close revenue accounts

Session 7: Interpreting Statements

- How financial statements can be used to identify and analyze problems
- Key indicators that help monitor an MFI
- Useful reports generated by an MIS
- The importance of internal controls and audits

Session 8: The Balancing Act

By playing the Balancing Act, participants apply all the accounting skills they have learned. The first team to create its financial statements and to balance its accounts wins!

Session 9: Summary and Action Planning

- The accounting cycle and its components
- Tracing a transaction from point of entry to financial statements
- Key indicators for Financial Analysis

Session 10: Course Evaluation and Closure

Date of last substantive update: 2008

References for the Course

(updated in 2008)

KEY DOCUMENTS

- CGAP. 1999. "External Audits of Microfinance Institutions: A Handbook." Technical Tools Series, No. 3. Washington, D.C.: CGAP, March. <http://www.cgap.org/p/site/c/template.rc/1.9.2999> and <http://www.cgap.org/p/site/c/template.rc/1.9.2988>.
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- 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. <http://www.seepnetwork.org>
- Tracy, John A. 2001. *Accounting for Dummies, 2nd edition*. Boston, Mass.: IDG Books Worldwide, Inc. ISBN: 0764553143.
- Waterfield, Chuck, and Nick Ramsing. 1998. *MIS for Microfinance Institutions: A Handbook*. Washington, D.C.: CGAP. <http://www.microfinancegateway.org/content/article/detail/1631/>.

WEB SITES

- IAS international accounting standards, International Accounting Standards Board: <http://www.iasb.org>.
- IASPlus – News about International Financial Reporting, powered by Deloitte: <http://www.iasplus.com>.

SESSION 1: WELCOME AND INTRODUCTION

Session Summary

OBJECTIVES: By the end of the session, participants will be able to:

- Introduce participants to each other
- Determine their training needs
- Establish expectations
- State the training objectives
- Describe the tone for the training workshop

TIME: 90 minutes

SUPPLIES: Flipcharts
LED projector
Markers
Name tags
Index cards

TRAINER MATERIALS

A1-M1 Sample Name Tents
A1-M2 Training Needs Audit Answers
A1-M3 Suggested Duration of Sessions

PARTICIPANT MATERIALS

OVERHEADS: A1-O1 Goals
A1-O2 Sustainability
A1-O3 Objectives
A1-O4 I hear, I see, I do

HANDOUTS: A1-H1 Expectations
A1-H2 Training Needs Audit
A1-H3 Accounting Goal and Objectives
A1-H4 SEEP Framework for Reporting, Analysis, Monitoring, and Evaluation
A1-H5 CGAP Appraisal Guide for Microfinance Institutions
A1-H6 CGAP Microfinance Consensus Guidelines: Disclosure Guidelines for Financial Reporting by Microfinance Institutions
A1-H7 Organizational Information (*only if not returned with registration*)

PREPARED FLIPCHARTS:

“Welcome” sign (*to be posted in training room prior to participant arrival*)
Ice-breaker questions and answers
Instructions for introductions
Expectations
Financial information to sustainability flow
Questions/Clarifications (*title only*)

Session 1: Welcome and Introduction

WELCOME

1. (3 minutes) Have the representative from sponsoring organization welcome participants and open the workshop.
2. (5 minutes) Follow this with remarks from official guests.
3. (2 minutes) Introduce and hand the workshop over to the trainers.

INTRODUCTION

4. (5 minutes) Open the session by making the following points: (Note: do not read these points but be familiar with the concepts to talk them through with the participants. Be inspirational!)
 - International best practice in microfinance around the world suggests that good financial analysis is the basis for successful and sustainable microfinance operations. Some would even say that without financial analysis an MFI will never achieve sustainability and reach significant numbers of clients.
 - The quality of financial analysis depends on the quality of the information recorded to be analyzed. This information is largely from the accounting system, so accounting is the bedrock for achieving sustainability.
 - Therein lies the purpose of the course—**for you as microfinance managers to be able to use sound accounting principles (in your MFIs) to ensure the superior quality of your financial analysis and thus make sound managerial decisions.**
 - Show and review A1-O1, Workshop Goals.
 - Over the next four days the group will be discussing accounting methods, procedures, and systems, which are intended to provide your institution with the tools needed to perform accurate and timely assessment of your accounting operations and show how to move toward financial sustainability.
 - What is meant by **Sustainability?** (Use A1-O2.) You can look at sustainability in terms of an equation. Sustainability = Coverage of financial expenses + loan loss + operating expenses + capitalization for growth from financial revenue. Sustainability is ensuring that the institution will be able to serve clients in the future. The course will clearly show how to calculate and analyze each of these components so your progress toward sustainability can be easily monitored.
 - You will discuss **the accounting cycle from transaction to financial statements, creating statements that are specific to MFIs in the way they account for loan loss, interest revenue, donor funds, subsidized loans, and savings. You will also briefly analyze financial statement**

information. The focus, of course, will be for managers to understand and apply these in a microfinance institution, and so provide a basis for moving toward sustainability.

- Upon completion of the course, it is hoped that you will be able to operate your **accounting system in a more accurate and transparent** manner, allowing you to make more informed financial and operational decisions.
- **A case study** of an MFI will be the major learning tool used throughout the course. A unique MFI accounting game, **Balancing Act**, will be used as a learning review. Of most importance, however, will be developing an implementation plan to introduce new concepts and systems into your own institution. And in all cases, the course will require your active participation to succeed.
- Welcome, and let's get started.

ICE-BREAKING EXERCISE

5. (15 minutes) Inform participants that they will spend some time getting to know each other and introducing ourselves.

Using the multiple-choice questions previously prepared as handouts or overheads, present one question at a time. Read the question and the four answers. Ask participants to choose one answer and move to the corner with the number representing their choice for an answer. Remind participants there is no one right answer! When everyone is in a corner ask them to discuss, standing up, why they made their choice with a number of people in their group.

(Do not let this drag; if conversation has stopped ask the next question.) After three minutes, ask participants to stay where they are while you present the second question. Ask them once again to move to the corner of the room with the number that represents their choice for an answer. Allow two to four minutes for participants to share their views. Repeat for the third question. When finished, ask participants to return to their seats

INTRODUCTIONS

6. (3 minutes) Tell the group: You now know a little about each other, so let's continue learning more.

Pass out index cards. Show the example as instructions are given. Have participants write their initials on the top of a card. They should then write words that tell people something about themselves or their role in the MFI, using each letter of their initials. They will be sharing these with the large group. For example, "MFI" could be mighty, fine, individual, or manager, financially oriented, or independent. Be prepared to use his or her own initials as an example.

M – Mighty	M – Manager
F – Fine	F – Financially oriented
I – Individual	I – Independent

7. (12 minutes) One by one, have all members of the group introduce themselves to the entire group in **less than 20 seconds**, using the following format printed on a flipchart. Introduce yourself first as an example.

One by one, participants should:

Stand (at their seats).

State their initials.

State the adjectives that begin with those initials.

State what organization they work for and their position.

State their full names.

Sit down.

Keep the group moving and ensure time is kept and directions are followed. Make sure that the person's name is given last, since that is what the group should remember.

8. (3 minutes) After introductions are made, thank participants for sharing a bit about their values and themselves and encourage them to continue to get to know each other during the course.

Next, pass out name tags and tents (A1-M1) and ask participants to write their names on both.

EXPECTATIONS

9. (10 minutes) Pass out A1-H1, Expectations, and ask participants to list their "assets"—the advice, information, or skills on the topic that they bring to the workshop—and their "liabilities"—the advice, information, and skills they need/expect to get from the workshop. Collect completed handouts.

TRAINING NEEDS AUDIT

10. (15 minutes) Pass out A1-H2. Ask participants to complete the audit as best they can, giving answers as they understand/use the concepts in their organizations. Tell the group they will have 15 minutes to complete the task.

Review the group's answers to the Expectations exercise while participants are taking the Training Needs Audit. List points from the Expectations on two separate flipcharts.

On one flipchart, put the most usual expectations and those most likely to be met. Do not list all at this point, but try to group expectations into main categories that reflect general ideas.

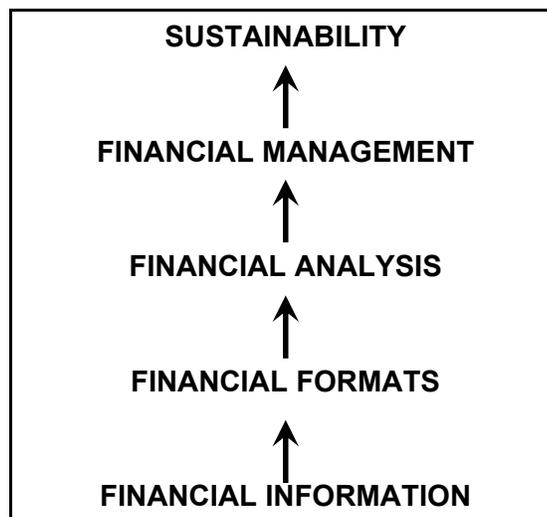
On the other flipchart, list the most exceptional expectations—those most likely not to be met. It is important to let participants know which expectations will not be met by the course. Consider suggesting some options (if applicable) for meeting those expectations: other courses, evening and lunch discussions, and so forth.

These Expectations flipcharts will be reviewed in step 11.

GOALS AND OBJECTIVES

11. (5 minutes) Present the overhead with the workshop seminar goals (A1-O1) again. Review it briefly. Show A1-O3, Workshop Objectives. Post the Expectations flipcharts at the same time. If participants do not already have A1-H3, Workshop Objectives, in their notebooks, distribute it now. Hand out the course schedule previously prepared using A1-M3. Have the group match expectations to objectives and sessions on the schedule. Use the schedule to show participants how they will learn the accounting they need as managers.

Use a flipchart with the following diagram to show how good accounting—that is, financial information and financial statements—is necessary to reach sustainability. (Joke with the group that this is sometimes light-heartedly called the “mantra.”)



Leave this on the wall for reference throughout the course.

Also discuss those expectations that clearly will not be met, referring participants to other courses and/or resources to help get those expectations met outside the sessions. Keep the flipcharts posted and tell participants that the remaining expectations will be revisited at the end of the course to see how well they have been met.

12. (5 minutes) Explain the flow of schedule and training methodologies, showing A1-O4. Describe active learning for the group. Many participants may only be used to the lecture method and may be resistant to the methodologies used in the course. Cite specific examples of how the workshop differs from traditional learning. Emphasize sessions building on one another, the active nature of the course, the case study and the game. Stress participation, practice, application, and fun!

Be sure to explain the TEAM teaching approach of the training, noting that all trainers will be building upon each other and adding comments as needed. Tell

the group that each trainer brings specific expertise to the training that must be complemented by the other trainers for a full transfer of knowledge.

13. (2 minutes) Tell the group that it is good also to have a common understanding of terms that will be used in the course. Distribute A1-H4 and A1-H5, SEEP Framework and CGAP Appraisal Guide, as a reference and ask participants to review the use of terms in the two handouts and refer to them as the course develops. Encourage participants to ask when the term is used or to add a question to the flipchart posted for just such a purpose if there is need for clarification.

14. (2 minutes) Present the workshop “rules” light-heartedly—for example, using a summary flipchart with the title “Don’t Forget!”

All questions are good questions. There are no stupid questions. The only stupid question is the one that goes unasked.

There is a blank flipchart titled Questions and Clarifications. It will remain posted for participants to record unanswered and further questions as they arise during the workshop.

Everyone needs to participate in order to succeed and reach their goals. Acknowledge different levels of background and experience and encourage those with more experience to assist those with less. It is not always the trainer who should give the answers—those who know are encouraged to speak up.

Last but not least: HAVE FUN!

15. (5 minutes) Review logistical arrangements. (For example, break times, where facilities are, who is in charge of logistics, ticket confirmations, confirmation of name spellings and contact information, and so on.)

16. (2 minutes) **Optional:** Distribute A1-H6, CGAP Microfinance Consensus Guidelines: Disclosure Guidelines for Financial Reporting By Microfinance Institutions, and collect A1-H7, Organization Information, if it will be used by trainers and if not previously completed. This information also can be used to know participants better and as a reference later in the course in the optional part of Session 7.

17. (2 minutes) Appoint a “stretch monitor” (see Trainer Notes) if desired.

18. (1 minute) Close the session and bridge to next session.

Trainer Notes

- A1-H7 (Organizational Information) can be completed during the registration process or handed out at the beginning of the session as participants enter the training room. If the latter, it needs to be collected at the end of this session.
- Before the workshop begins, prepare for the introduction phase by previously taking four pieces of paper, numbering them 1, 2, 3, and 4 and posting them in the four corners of the room. Write (beforehand) these questions and answers (or similar ones), one each, on a flipchart or an overhead:

What is the most important goal of a microfinance institution?

1. Serving the poorest
2. Getting the most donor funds
3. Reaching as many people as possible
4. Reaching financial sustainability

To establish an impairment for loan loss account is for:

1. The MFI who has bad clients
2. To comply with audits
3. To gain knowledge of the portfolio
4. To enable decisions to be made

What do you most value in an accountant/financial manager?

1. Loyalty
2. Creativity and numerical skills
3. Thoroughness
4. People skills

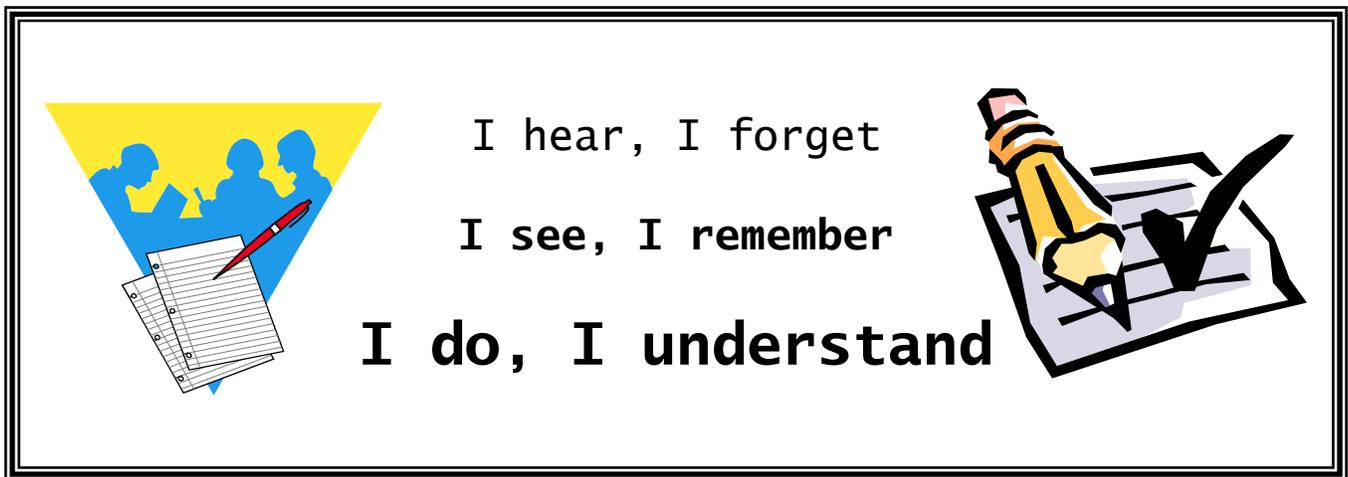
- You can create other questions as appropriate for the group (What kinds of systems do you employ?) but each question must have only four choices for answers.
- Before conducting the Training Needs Audit, prepare and post a flipchart with group numbers one through five or six, and the names of group members.
- The pre-test will be used to help select/balance small groups. It will also help participants to assess how well their understanding of key topics has changed during the days of the workshop. As soon as possible (over the next few sessions), categorize or grade participants and designate groups of three to four, with a mix of knowledge and ability. Be sure that participants from the same organization are not in the same groups.
- Due to the sometimes tedious nature of this course, it may be helpful to introduce the “stretch monitor.” This concept gives participants input into the pace of the program and allows them to set short breaks. At the end of the session at step 17, tell the participants that they will be responsible for their not becoming overtaxed during the workshop. Ask for two to three volunteers to take on this responsibility. (Or you can make the whole group stretch monitors.)
- Tell the volunteers that they are stretch monitors and that if they feel like standing up or having a stretch during the program, they are to do so. Tell the other participants that they must do what the stretch monitors do.
- Also tell the group that you as the trainer don’t have the power to override the stretch monitors and that you have to remain silent while the group performs the exercise. You should prompt one of the volunteers to stretch shortly into the session so that everyone can see what happens.
- When introducing A1-H4 and A1-H5, point out that the SEEP Framework is the result of a long process of consultation among donors, practitioners, experts, and rating agencies to arrive at a consensus on financial standards for the microfinance industry. The CGAP Appraisal Format uses the SEEP standards (that is, the same financial statements, methods for calculating adjustments, ratio definitions, and so forth) and has two volumes—the Technical Guide and the Resource Manual. Open to page 96 of the Resource Guide and show the participants that the terms and definitions of the financial statements that you will be using are listed there and on the following pages for easy reference.

Trainer Instructions

- You can also mention that both CGAP and SEEP have developed Excel-based tools to help fill out the financial statements and calculate adjustments and financial ratios. The Internet addresses where the Excel tools can be downloaded are included on the List of Accounting References in Session 9 (A9-H2).
-

Sample Name Tents

participating
name tents
goes
array



To Use: Cut along solid lines, then fold on dotted line. Make sufficient copies (preferably copied on hard paper) for all participants. Distribute to participants and ask participants to write their name in the space provided.

participating nurses goes away



I hear, I forget

I see, I remember

I do, I understand



Participant Name Goes Here



I hear, I forget

I see, I remember

I do, I understand



Training Needs Audit Answers

(Value for the correct answer shown on the right)

1. Financial accounting for MFIs has to be different from “regular” accounting and cannot follow international accounting standards.

True or False **False 1**

2. Which of the following statements describes a Balance Sheet?
 Which of the following statements describes an Income Statement?
 - a. Shows financial performance over a period of time **Income Statement**
 - b. Shows financial position at a certain point in time **Balance Sheet**
 - c. Both
 - d. I don't know

(1 for each correct) 2

3. Write in the correct order for the following steps in the Accounting Cycle:
 - 5 _____ Adjusted Trial Balance
 - 7 _____ Draft Financial Statements
 - 2 _____ Post to General Ledger
 - 6 _____ Closing Entries
 - 4 _____ Accounting Adjustments
 - 1 _____ General Journal
 - 3 _____ Trial Balance

(1 for each correct) 7

4. Changing write-off policies could affect an MFI's profitability.

True or False **True 1**

5. Identify which of the following are International Accounting Principles:
 - No _____ Accuracy
 - Yes _____ Prudence
 - Yes _____ Materiality
 - No _____ Transparency
 - Yes _____ Consistency
 - Yes _____ Matching

(1 for each correct) 6

6. A balance sheet has three basic components: Assets, Liabilities, and Equity.
 Please put the following accounts next to one of these categories, if at all:

a. Gross Loan Portfolio	Assets: a, c, e
b. Commercial Loans	Liabilities: b, f
c. Impairment Loss Allowance	Equity: could put i here
d. Investment Income	None of the above:
e. Buildings and Equipment	d, g, h, could also put i here
f. Client Savings	
g. Salary Expense	
h. Provisions for Loan Impairment	
i. Grants <i>(this will get them thinking!)</i>	

(1 for each correct) 9

7. Which of the following is the best measure of an MFI's profitability?
 a. Yield on portfolio
b. Adjusted return on assets
 c. Repayment rate
 d. Income minus Expenses
 e. I don't know 1
8. To reflect the fair value of the portfolio, MFIs make entries to account for probable future loan losses. Such entries will affect:
 a. Balance Sheet
 b. Income (Profit and Loss) Statement
c. Both of the above
 d. Neither of the above
 e. I don't know (1 for each correct) 2
9. Which two categories of accounts are affected by each of these transactions:
 – Assets, Liabilities, Equity
 – Revenues or Expenses?
 a. Receive interest payment—**assets (cash) and revenues (interest income)**
 b. Incur a liability—**assets (cash) and liabilities**
 c. Receive a grant for next financial year's operations—**assets (cash) and liabilities (deferred revenue)**
 d. Pay salaries—**assets (cash) and expenses (personnel expenses)**
 e. Write off a loan—**assets (gross loan portfolio) and assets (loan loss reserve)**
(1 for each part correct) 10
10. Please show the debits and credits for this transaction:
 Receive Cash of 55
 For a principle payment of 50 and an interest payment of 5

Cash
55
Loans Outstanding – Current
50
Interest on Current Loans
5

(1 for each correct part) 3

TOTAL = 42

Suggested Duration of Sessions

ACCOUNTING COURSE

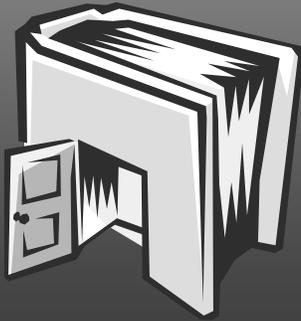
		<i>Minutes</i>	
		<i>Min</i>	<i>Ma</i>
			<i>x</i>
1	Welcome and Introduction	90	90
2	Introduction to Accounting	65	70
3	Financial Statements and Portfolio Report – Overview	160	160
4	Recording Transactions	190	250
5	Summarizing Entries	250	300
6	Creating Statements	150	150
7	Interpreting Statements	155	180
8	The Balancing Act	300	420
9	Summary and Action Planning	60	120
10	Course Evaluation and Closure	30	30
Total	minutes	1,295	1,610
Total	hours (<i>divide by 60</i>) 21.58		26.83
	Total 6-hour days	3.60	4.47
	Total 6.5-hour days	3.32	4.13

Overheads

OVERHEADS FOR SESSION 1 ARE CONTAINED IN POWERPOINT FILE ENTITLED "CGAP ACCOUNTING OVERHEADS_1."

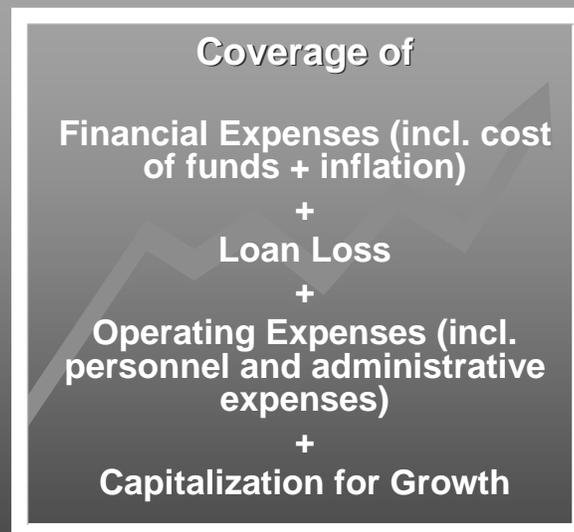
Goals

- Understand how financial statements are created
- Obtain basic knowledge of:



- Underlying accounting principles
- How the results of accounting can assist a manager to identify and analyze problems

Sustainability Equals



from Financial Revenue

Objectives

- To process accounting transactions
- To create financial statements that account for loan losses, interest revenue, and donor funds according to SEEP and CGAP formats
- To use accounting data to generate useful information for an MFI
- To make more informed decisions as a result of better information and financial statements



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I hear  I forget

I see  I remember

I do  I understand

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Handouts

ASSETS – What I already know	LIABILITIES – What I need to learn in this course

Training Needs Audit

(Please use a pen.)

Name: _____ Organization: _____

Please mark your answers on this question sheet. If you are not reasonably sure of the answer please mark "I don't know" instead of guessing. Thank you—this will help the trainers.

1. Financial accounting for MFIs has to be different from "regular" accounting and cannot follow international accounting standards.

True or False (Circle one)

2. Which of the following statements describes a Balance Sheet?
Which of the following statements describes an Income Statement?

- a. Shows financial performance over a period of time _____
- b. Shows financial position at a certain point in time _____
- c. Both _____
- d. I don't know _____

3. Write in the correct order for the following steps in the Accounting Cycle:

- _____ Adjusted Trial Balance
- _____ Draft Financial Statements
- _____ Post to General Ledger
- _____ Closing Entries
- _____ Accounting Adjustments
- _____ General Journal
- _____ Trial Balance

4. Changing write-off policies could affect an MFI's profitability.

True or False (Circle one)

5. Identify which of the following are International Accounting Principles.

(Mark them Yes or No)

- _____ Accuracy
- _____ Prudence
- _____ Materiality
- _____ Transparency
- _____ Consistency
- _____ Matching

6. A balance sheet has three basic components: Assets, Liabilities, and Equity. Write in the letter of the following accounts next to one of these categories below. Just continue to next account if you don't know.

- | | |
|------------------------------|----------------------------------|
| a. Gross Loan Portfolio | f. Client Savings |
| b. Commercial Loans | g. Salary Expense |
| c. Impairment Loss Allowance | h. Provision for Loan Impairment |
| d. Investment Income | i. Grants |
| e. Buildings and Equipment | |

Assets _____

Liabilities _____

Equity _____

None of the above _____

7. Which of the following is the best measure of an MFI's profitability? _____

- a. Yield on portfolio
- b. Adjusted return on assets
- c. Repayment rate
- d. Income minus Expenses
- e. I don't know

8. To reflect the fair value of the portfolio, MFIs make entries to account for probable future loan losses. Such entries will affect: _____

- a. Balance Sheet
- b. Income (Profit and Loss) Statement
- c. Both of the above
- d. Neither of the above
- e. I don't know

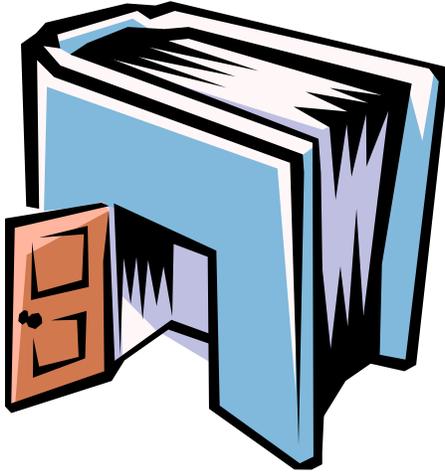
9. Which two categories of accounts are affected by each of these transactions:
 – assets, liabilities, equity
 – revenues or expenses?

- a. Receive interest payment—
- b. Incur a liability—
- c. Receive a grant for next financial year's operations—
- d. Pay salaries—
- e. Write off a loan—

10. Please show the debits and credits for this transaction:

Receive cash of 55

For a principle payment of 50 and an interest payment of 5



Accounting

Goal

Understand how financial statements are created and obtain basic knowledge of underlying accounting principles and how the results of accounting can assist a manager to identify and analyze problems

Objectives

- ✓ To process accounting transactions
- ✓ To create financial statements that account for loan losses, interest revenue, and donor funds according to SEEP and CGAP formats
- ✓ To use accounting data to generate useful information for an MFI
- ✓ To make more informed decisions as a result of better information and financial statements



SEEP Framework for Reporting, Analysis, Monitoring, and Evaluation

Measuring Performance of Microfinance Institutions: Framework for Reporting, Analysis, Monitoring, and Evaluation, The SEEP Network, 2005.

TECHNICAL GUIDE

<http://www.seepnetwork.org>

FRAME 2.0 SOFTWARE

<http://www.seepnetwork.org>

CGAP Appraisal Guide for Microfinance Institutions

TECHNICAL GUIDE, MARCH 2007 (2 VOLUMES)

<http://www.cgap.org/p/site/c/template.rc/1.9.2972>

<http://www.cgap.org/p/site/c/template.rc/1.9.4394>

APPRAISE KEY DATA CALCULATOR

<http://www.cgap.org/p/site/c/template.rc/1.9.2968>

**CGAP Microfinance Consensus Guidelines:
Disclosure Guidelines for Financial Reporting by
Microfinance Institutions**

<http://www.cgap.org/p/site/c/template.rc/1.9.2785>

Organizational Information

(Please use a pen.)

Name: _____ Organization: _____

Date organization started credit activities: _____

Number of clients: _____ as _____ of _____

Number of staff: _____ as _____ of _____

Net loan portfolio outstanding: _____ as of _____

Describe briefly your main credit product:

Your current interest rate: _____% per ___ month flat or declining
 _____% per ___ year flat or declining

Current fee structure:

Type When	Charged	Amount
(Registration, membership, loan processing, late fees, etc.)	(When loan is applied for, granted, upon joining, etc.)	(Percent of loan amount, fixed amount in currency)

Describe any collateral, guarantee, or forced savings requirements.

Briefly describe your main voluntary savings product.

Description and terms:

Rate:

Minimum balance:

Withdrawal frequency:

Minimum /maximum withdrawal amounts:

Other:

What financial statements are created in your institution? How often? At what level (branch or headquarters)?

Statement Frequency

Level

Describe the management information system presently in use in your MFI.

SESSION 2 INTRODUCTION TO ACCOUNTING

Session Summary

OBJECTIVES: By the end of the session, participants will be able to:

- Define accounting
- State at least two accounting principles and their application to MFI accounting
- State three ways in which accounting for an MFI is different from other businesses, financial institutions, and multipurpose institutions
- Define and distinguish between accrual and cash accounting
- Discuss the ways MFIs account for interest and donations and what this means to managers

TIME: 70 minutes

SUPPLIES: Flipchart
Markers
LED projector

TRAINER MATERIALS

A2-M1 Technical Notes
A2-M2 Trainer Notes on Accrual Accounting
A2-M3 Trainer Notes on Accounting for Grants

PARTICIPANT MATERIALS

OVERHEADS: A2-O1 Definition of Accounting
A2-O2 Double Entry Accounting
A2-O3 Conservatism Principle
A2-O4 Financial Accounting and Managerial Accounting (*definitions*)
A2-O5 Financial Accounting versus Managerial Accounting
A2-O6 Cash and Accrual (*definitions*)
A2-O7 Accounting for Interest
A2-O8 Accounting for Grants and Concessional Funds

HANDOUTS: A2-H1 Accounting Principles
A2-H2 Financial Accounting versus Managerial Accounting
A2-H3 Technical Notes

PREPARED FLIPCHARTS:
Accounting Differences, MFIs, Other Businesses, Multipurpose

Session 2: Introduction to Accounting

1. (5 minutes) Ask participants: What is accounting? Allow one minute of silence for individuals to think of an answer. Then ask participants to work in threes, with their neighbors, to define accounting.
2. (10 minutes) Ask for a definition. Have participant volunteer definitions in part or whole and write answers on a flipchart. Facilitate a discussion, deleting duplicate phrases, unnecessary ones, and so forth. Build to a group-generated operating definition of accounting.
3. (2 minutes) Post plausible responses and add your own if necessary, per A2-M1. Use A2-O1, Definition of Accounting. Highlight a few points about accounting and conclude with the message that accounting leads to the production of financial reports.
4. (5 minutes) Ask participants: What are the basic accounting principles? (Or what are the principles that govern accounting?) Take answers and present a brief overview of accounting principles that are International Accounting Standards, (not U.S. or U.K. or other countries' principles—see A2-M1). Highlight those most applicable to MFIs and this course without going into great detail: double entry, conservatism/prudence, matching, and realization. Provide examples as necessary to emphasize their application to microfinance managers.

Consider putting the following key principles on flipcharts on the wall for reference during the course. If the group is strong, make the connection between the principles to how they affect an MFI's calculation of sustainability.

- Double entry accounting – Explained by using A2-O2.
- Conservatism/Prudence – Use A2-O3. This is a very important principle. Record accrued income only for cases where income is certain to be realized, such as investments or T-bills, and not for interest due on outstanding loans.
- Materiality – Each material item should be presented separately in the financial statements. Materiality is based on both the nature and the size of an item.
- Realization – If interest revenue is received on a loan in advance, the revenue due for that year is recorded as income and revenue due in the following year is recorded as deferred revenue (this example will be used in the Balancing Act Game in Session 8).
- Matching – Expensing loan officer salaries for the year requires recording revenue earned by loan officers in that same year.

Distribute A2-H1 as summary, and, if necessary, assure participants that if they are not 100 percent certain about what the principles mean in practice, the best way to understand them is to use them, so the group will be using them throughout the course!

5. (10 minutes) Ask participants: What do you mean by financial accounting? Managerial accounting? Show A2-O4 with definitions. Briefly discuss the differences. Show A2-O5 with differences in summary and hand out A2-H2.

Tell the group that they will discuss both methods and introduce statement formats that are useful for managerial purposes and are in compliance with IFRS (International Financial Reporting Standards). Explain that MFIs have grown in size, type, number, and complexity. At the same time, more emphasis has been placed on financial accountability, management, and viability. Many financial terms and indicators considered “standard” continue to differ in name and content. These SEEP formats were developed over the years to better serve the industry and standardize the presentation of financial information and are now used by CGAP and others. The emphasis in this course is on the use of financial information to make good managerial decisions—*it is not about being an auditor and preparing audited financial statements.*

6. (10 minutes) Lead a brainstorming session on the differences between MFIs, other businesses, financial institutions, and multipurpose MFIs with regard to accounting. Keep simultaneous flipcharts (one each for MFIs, businesses, FIs, Multipurpose) to record responses. Keep the session moving! Do not discuss points in depth.

Possible answers include:

Other Businesses

- The main asset for MFIs is the portfolio of loans lent out to their clients. In other businesses, loans are usually what they have borrowed, so they are liabilities.
- Other businesses do not account for loan losses; however, they do account for bad debt (that is, people who owe them money and have not paid).
- Other businesses usually have substantial fixed assets; MFIs do not.
- Other businesses usually have inventory and work in progress; MFIs do not.

Other Financial Institutions

- Other FIs do not usually receive donor funds.
- Other FIs usually fund their assets with more debt (usually client savings) than equity; most MFIs have more equity (usually donor contributions) than debt; others such as credit unions and other savings-based schemes fund their assets with member savings.

Multipurpose MFIs

- Accounting needs to be separate for MFI activities and all other activities of the organization.

7. (5 minutes) Review the list and make sure that the above-mentioned points are included. Summarize by stating that what is peculiar to MFIs will be addressed in

this course and that accounting for this type of financial institution in particular may not be familiar to the participants who are trained as business accountants. Try to recognize skills of participants: Tell the group that for the managers with experience in business or formal financial institutions, this course should build on that experience and help them apply it to accounting for MFIs.

8. (15 minutes) Gives a brief overview of the following three points, using A2-M1, that are accounting issues particularly relevant to accounting in an MFI. Tell participants that these three concepts will just be *reviewed* now, and that they will be used, and the management implications discussed in detail, during the course of the training.

Accrual versus Cash Accounting—Using A2-O6, refer back to the Accounting Principles. Highlight the managerial implications of both for microfinance institutions. Refer to IAS 1(r2007).27, Accrual basis of accounting: “An entity shall prepare its financial statements, except for cash flow information, using the accrual basis of accounting.” (Use A2-M2, Trainer Notes on Accrual Accounting, for more detailed background if needed.)

Accounting for Interest—Using A2-O7, A2-M1 and A2-H2, outline two different methods of accounting for interest.

- Option 1 – using Cash Accounting focuses on the Conservatism principle.
- Option 2 – using Accrual Accounting focuses on the Realization principle. The key issues are (1) not overstating revenues on financial statements and (2) when a loan falls delinquent, it is appropriate at some point to stop accruing more interest income on the loan and to reverse previously accrued income.

Institutions taking savings should also accrue for interest expenses on deposits, even if they are not paid regularly. (The basic sets of T-accounts for these examples are also given in A2-M1 and may be used here if there are questions or may be included in the discussion of A4-O7. Again, use A2-M2, Trainer Notes, if more detailed background is needed.)

There is no firm recommendation on which method to use. However, only the accrual method is compliant with IAS 1. Methods should **always** be in compliance with local laws and regulations and follow the accounting principles. Decisions to use cash-based accounting for interest may be more prudent for new MFIs and those with weak information systems.

Accounting for Grants and Concessional Funds—Using A2-O8, try to elicit information from the participants through questioning, and summarize using the lecture points and examples from A2-M1 and A2-H3. (Use A2-M3, Trainer Notes, for more detailed background if needed.)

If more time is taken here to discuss these points, later sessions will need to be shorter.

9. (5 minutes) Summarize main points, explaining that the group now has laid out the building blocks for the course. Pass out A2-H3 and ask for any further questions. Lead into the next session.

Technical Notes

This session gives the foundation for the whole course. It is therefore important for the trainer to be very clear and concise so participants easily grasp the main concepts.

ACCOUNTING PRINCIPLES

Double-entry Accounting—is based on the concept that every transaction affects and is recorded in two or more accounts on a business's books (referred to as the *Dual Aspect Concept*) and thus requires entries in two or more places ("double-entry"). The accounting equation states that: $ASSETS = LIABILITIES + EQUITY$ because all the assets of the business are financed either by creditors (liabilities) or owners (equity). Each transaction affects Assets, Liabilities, and/or Equity (sometimes through Revenue or Expenses). And for every account affected by a transaction, there is an equal effect on other accounts that keeps the accounting equation balanced. Thus, an increase in a business's assets must be offset by either a decrease in another asset, or an increase in liabilities or equity.

The Conservatism/Prudence Principle—accountants must choose the method of presenting information on financial statements that ensures that: assets, revenues, and gains are not overstated (so revenues are recognized only when reasonably certain) and conversely, that liabilities, expenses, and losses are not understated (so expenses are recognized as soon as possible). Conservatism cannot be used to intentionally understate assets, revenues, and gains or overstate liabilities, expenses, and losses. It is intended to result in fair presentation of information from period to period.

The Materiality Principle—each material item should be presented separately in the financial statements. Immaterial information should be aggregated with similar accounts; it need not be presented separately. Information is material if its nondisclosure could influence the economic decisions of users. Materiality relates to both the nature and size of an item.

The Consistency Principle—an organization must consistently apply the same accounting principles from period to period unless it has a sound reason to change. This ensures that reports from various periods may meaningfully be compared.

The Realization Principle—in effect, it requires that revenue be recognized in the accounting period it is earned, rather than in the period it is collected in cash.

The Going Concern Concept—the Balance Sheet of a business is developed with the assumption that the business will continue to operate indefinitely and thus the assets used in carrying out operations will not be sold.

The Business Entity Concept—every business is a separate entity, distinct from its owner and from every other business. Therefore, the records and reports of a business should not include the transactions or assets of either its owner(s) or those of another business.

The Matching Principle—requires that revenues and expenses be matched in the same accounting period. An organization incurs expenses in order to earn revenues. Therefore expenses should be reported on the Income Statement during the same period as the revenues they generated.

The Cost Principle—all assets must be recorded on the books of a business at their actual cost. This amount may be different from what it would cost today to replace them or the amount for which the assets could be sold.

The Money Measurement Principle—a record is made only of information that can be expressed in monetary terms.

Sources: *International Accounting Standards, 2000*, published by the International Accounting Standards Committee, London; Anthony, R.N. and J.S. Reece (1989). *Accounting: Text and Cases* (eighth edition), Irwin, Illinois.

WHAT IS ACCOUNTING?

- **Accounting** is the process of recording, classifying, and summarizing **economic events** that leads to the preparation of financial statements.
- **Accounting** is often referred to as the **language of business**.
- It provides a **vocabulary** with which one can talk about **quantitative objectives**: *planning, implementation, and ongoing measurement*.
- Financial information, as expressed in the terminology of accounting, reports **what is actually going on in the organization**. Accounting reports allow the manager to sort through the copious information generated, and to organize it into meaningful formats. These reports provide essential information that allows the manager to choose those actions that will redirect the enterprise's activities to be more consistent with the mission and objectives of the business plan.¹

Accounting rules vary from country to country. It is important to understand that the numbers seen on financial statements are affected by the set of rules used to compile them. In most countries, there are some basic principles that do not change which make up the rules of accounting and influence how the financial activities of an MFI are recorded.

WHAT DO WE MEAN BY....?

- ⇒ **Financial accounting** is concerned with presenting a summary view of the financial results of past operations. Intended largely for external audiences, financial accounting reports are generally subject to an independent auditor's opinion to verify the fairness of the information presented. Though the standards vary from country to country, there are strict conventions for format and content to which financial accounting reports must adhere. Financial accounting reports, generally included in an organization's annual report, aim to present final, precise information, often comparing the results of two or more years.

¹ This page is taken from *Principles and Practices of Financial Management*, Women's World Banking, New York, 1994.

- ⇒ **Managerial accounting** information, on the other hand, is tracked and presented at a much more detailed level, such as by program or branch. It is concerned with projected as well as historical operations, and is intended for internal use by the organization's managers. There are no predetermined formats for managerial accounting reports, although the most widely used are adapted from the formats of the three primary financial accounting reports, which will be discussed below.

Management reports are prepared on a more frequent basis, generally monthly or quarterly. They report on an ongoing basis the differences between planned and actual results. Management accounting is a means rather than an end: it is a tool to enhance a manager's ability to interpret the results of ongoing operations and to take constructive actions to affect future results. Additional management accounting reports would include whatever information—actual or projected—that is of value in managing the enterprise, such as portfolio projections and financial indicators.

ACCUAL VERSUS CASH ACCOUNTING

- ⇒ **Accrual accounting**—records transactions when they take place whether or not cash has been exchanged. According to IAS, financial statements should be prepared using accrual accounting. However, it also recognizes that “The preparers of financial statements have to contend with uncertainties... such as the collectability of doubtful receivables...” Such situations require “the exercise of prudence.”
- ⇒ **Cash accounting**—accounting revenue is NOT reported until cash is received and expenses are not reported until cash is disbursed.

Example 1: An MFI that uses **accrual accounting** purchases a T-bill for 90 days on December 1. On December 31 the MFI has earned 31 days worth of interest revenue on the T-bill. However, it will not actually receive this revenue until the T-bill matures on February 28. When reporting its revenue to December 31, the MFI includes the portion of interest revenue it has earned on the T-bill (that is, 31 days) as accrued revenue. If the MFI used **cash accounting**, it would only report the interest revenue on the T-bill when it was actually received—that is, February 28.

Example 2: An MFI that uses **cash accounting** pays the rent in advance on its office building twice a year. If the MFI uses cash-based accounting, it would record the full amount of the rent as an expense on the day it was paid rather than each month as the expense is incurred as would be the case if the MFI used **accrual accounting**.

Example 3: An MFI pays its clients interest on their deposits; if it records this expense only when it pays the client in cash, it would be practicing cash-based accounting. However, if it should accrue this interest expense routinely as it is due, not when paid in cash, it would follow accrual-based accounting.

IAS 1(r2007). 27 Accrual basis of accounting: An entity shall prepare its financial statements, except for cash flow information, using the accrual basis of accounting.

ACCOUNTING FOR INTEREST REVENUE

There are two primary ways that MFIs record interest revenue:

- i) **Cash-basis accounting: record interest revenue when cash is received** (usually as part of the loan repayment).

This is one of the most conservative or prudent methods (applying the principle of conservatism) when interest is paid with each installment of the loan. It gives managers a realistic view of progress to sustainability.

However, if interest is paid up front—that is, deducted from the loan amount—then cash accounting is not the most conservative method because it overstates the revenues of the MFI (see ii b below for an alternative).

- ii) **Accrual-basis accounting: record interest revenue when it falls due rather than when it is received in cash.**

- a) When interest falls due, record the interest revenue (income statement) and interest receivable (asset account). When cash is collected, record cash (asset account) and reverse interest receivable (asset account).

This approach is effectively the same as cash accounting if interest payments are on time. However, it could appear to overstate interest revenue if there are delinquent loans. (The reader of the financial statements needs to know that he or she must check the interest receivable account to see how much interest has not yet been collected.) MFIs that use this method need clear, rigorous policies for not recognizing interest on late loans and for when to reverse interest revenue if the loan becomes delinquent.

- b) When interest is collected up front: Record interest collected as cash (asset account) and as deferred revenue (liability account). When the related loan payment period falls due, transfer the interest earned for that period from deferred revenue to interest revenue.

CGAP Microfinance Consensus Guidelines: Disclosure Guidelines for Financial Reporting by Microfinance Institutions

4. MICROLOAN PORTFOLIO ACCOUNTING ISSUES

- 4.5 **If an MFI accrues unpaid interest on late loans, there should be a clear and thorough explanation of its policies on this matter, especially the point at which further accrual of unpaid interest ceases and previous accruals are either reversed out of income or expensed.**

Many financial institutions continue to recognize interest income on a loan as it comes due even when the interest has not been received because payment is late. There is a tendency to continue this accrual past the point where collection of the interest becomes doubtful. Thus it is important to disclose the policies behind such accrual.

METHODS OF ACCOUNTING FOR INTEREST REVENUE AND ACCOUNTING PRINCIPLES

METHOD OF ACCOUNTING FOR INTEREST	ACCOUNTING PRINCIPLE FOLLOWED	
	CONSERVATISM: Choose the method of presenting information that ensures that: <ul style="list-style-type: none"> assets, revenues, and gains are not overstated liabilities, expenses, and losses are not understated 	REALIZATION: Recognize revenue in the accounting period it is earned, rather than in the accounting period it is collected in cash.
Cash basis and Accrual basis when interest is collected at the due date*	✓	✓
Cash basis	✓ exercises prudence when collections are overdue	✗ understates revenues by overdue but doubtful amounts
(a) when interest collections are overdue	✗ overstates revenues by collections in advance	✗ overstates revenues by collections in advance
(b) when interest collections are ahead of the due date		
Accrual basis	✗ overstates revenues by overdue and doubtful amounts, need a clear policy for reversing interest revenue if the loan is delinquent	✓ States the appropriate revenues for the period, BUT includes doubtful amounts
(a) when interest collections are overdue		✓ States the appropriate revenues to the relevant periods
b) when interest collections are ahead of the due date	✓ defers revenues to the appropriate period	

*Note: In situations where interest is collected at the time it is due, there is no difference between the two methods of accounting for interest.

In reality, however, interest is not always collected on the due date. The cash basis can be a more prudent method than the accrual basis—unless interest is collected ahead of the due date, or “up front,” then cash basis is less prudent and fails to conform to the realization principle. There need to be procedures to defer recognition of the advance collections as income to the appropriate period.

The cash basis is used by many MFIs for two main reasons. First, this method is prudent and results in realistic figures for tracking sustainability. Second, MFI information systems are often not elaborate enough to handle the accrual basis and the adjustments that would have to be made to reflect a prudent position. This is especially critical given the current rapid rate of expansion of several MFIs.

Commercial banks have elaborate information systems that can track detailed information on a daily basis. They follow the method recommended by governing regulatory institutions. Most banks use the accrual method combined with procedures for reversing out any interest accrued on loans that have been classified as nonperforming. The period it takes to classify a loan as nonperforming varies with superintendencies and can range from 90 days to 180 days in arrears.

ACCOUNTING FOR GRANTS AND CONCESSIONAL FUNDS

Most MFIs receive grants and concessional funding (loans made to the MFI at less than a market rate of interest). It is important that MFIs do not include grants for any purpose in operational revenue. They should be recorded on the Income Statement below the operating profit/(loss) line. (This is very highly summarized. There will be in-depth discussion of this point in Session 4.) For more discussion of these points, see Trainer Notes on IAS 20 – Accounting for Grants and Donations.

Concessional loans should also be recorded separately from commercial loans so that it is possible to identify how much “subsidy” is being provided through concessional funding (discussed in Session 5).

CGAP Microfinance Consensus Guidelines: Disclosure Guidelines for Financial Reporting by Microfinance Institutions

3. DONATIONS

3.1 The amount of any current-period donations should be shown. If the donations are reported as revenue on the income statement, such revenue should be shown separately from income generated by an MFI’s financial operations. The source and amount of any current-period donations should be reported.

Financial statements for MFIs that are nongovernmental organizations (NGOs) sometimes include revenue from donations on their income statement and may lump donation revenue together with revenue from normal operations (mainly interest and fee income). Most MFIs cannot rely on such donations over the long term. Thus, to appraise the long-term viability and capacity of an MFI to grow without continuous infusions of donor funds, stakeholders need to know what the MFI’s financial performance would look like without donations. Profit or loss from financial operations cannot be determined unless donation revenue is reported separately.

If donations are included in the income statements, the MFI’s net operating income or **loss** (interest and fee income from normal financial service operations, minus the expenses of those operations) should be shown, and donations should be separated out as nonoperational income, either in the income statement or in a note.

Guideline 3.1, like all the rest in this document, defines informational content to be disclosed, not the format for disclosure. In a departure from that principle, this footnote (which is not part of the guidelines) highlights a format issue. MFIs wanting to separate grant income (to show it below the net operating income or loss) have sometimes found their auditors reluctant to do so. CGAP recommends that the full amount of grants and donations be disclosed separately both in the income statement and balance sheet for the following reasons:

1. Putting grant income below operating income or loss is consistent with IFRS. IAS 1, point 67, allows the presentation of additional line items, headings, and subtotals on the balance sheet when “such presentation is necessary to present fairly the enterprise’s financial position.” Point 68 states that line items are added when “the size, nature, or function of

an item is such that separate presentation would assist in presenting fairly the enterprise's financial position.”

2. Grants are less reliable than operating income as a source of future cash flow. Thus, it is more transparent to report these items separately, so the reader can assess the financial position before funding.

3.2 The method of accounting for donations should be explained.

Separate disclosure of grants is necessary for a proper understanding of financial statements (IAS 20:31) and to facilitate comparison with other periods and other MFIs.

There are two main issues associated with the recording of grant income.

The first issue is where to record a grant: whether to report the grant directly as equity (“capital approach”) or to run it through the income statement (“income approach”).

The second issue is a deferral issue: when to recognize the grant income (or capital). Is the grant recognized when it is received, or when the work for which it is earmarked has been performed? Where a grant is recognized as income (or capital) over more than one period, on what basis is the amount transferred to income (or capital) determined?

The MFI's financial statements need to explain the method chosen.

SEEP FRAMEWORK

Box 2.2. Dealing with Donations

Consider two issues when recording donations: where to record them and when to record them.

- This Framework recommends the income approach to donations so that all donations for operations and loan funds used in the current operating period are recorded as (I28) Donations on the income statement, which flow into (B25) Donations, Current Year, on the balance sheet. At the beginning of a new year, they are transferred from (B25) to (B24) Donations, Previous Years. Donations for operations and loan funds to be used beyond the current operating period are recorded as deferred revenue. If the donation or grant agreement specifies when the donations must be used, record those that must be used within 12 months as (B17) Accounts Payable and Other Short-term Liabilities, and record the remainder as (B20) Other Long-term Liabilities. When a portion of donations is used, that portion is transferred to the income statement (I28) Donations.
- MFIs may record grants for fixed assets as deferred revenue (B20) Other Long-term Liabilities. When the asset is purchased, the purchase amount is transferred to (I30) Donations for Operating Expense.
- If fixed assets are donated, MFIs should record their value as deferred revenue in (B20) Other Long-term Liabilities. Each accounting period, usually monthly or quarterly, an amount equal to the period's depreciation for the donated asset is transferred to (I28) Donations for Operating Expense, and the same amount is credited to (I17) Depreciation and Amortization. If the MFI is not recognizing a fixed asset donation in this manner, it should include the value of the fixed asset as part of this adjustment.

T-ACCOUNTS FOR METHODS OF ACCOUNTING FOR INTEREST

1. Cash-basis accounting: Record interest revenue when received in cash

Cash (B/S – Asset)	Interest on Loan Portfolio (I/S – Revenue)
20	20

2. Accrual-basis accounting: Record interest revenue when it falls due rather than when it is received in cash

a) When interest falls due:

Interest Receivable on Loan Portfolio (B/S – Asset)	Interest on Loan Portfolio (I/S – Revenue)
20	20←

When 20 is collected in cash:

Cash (B/S – Asset)	Interest Receivable on Loan Portfolio (B/S – Asset)
20	20

For 2 a) above, you need a system for tracking and reversing the interest that's never been received from the account marked ←.

b) When interest is collected up front:

Cash (B/S – Asset)	Accounts Payable Deferred Revenue (B/S – Liability)
100	100

When the related payment period falls due:

Accounts Payable Deferred Revenue (B/S – Liability)	Interest on Loan Portfolio (I/S – Liability)
20	20

3. Accrual basis accounting: Record interest expense when it falls due rather than when it is paid in cash

a) When interest expense is due:

Interest Payable on Funding Liability (B/S – Liability)	Interest and Fee Expense on Deposits (I/S – Expense)
20	20←

When 20 is collected in cash:

Cash (B/S – Asset)	Interest Receivable on Loan Portfolio (B/S – Asset)
20	20

Trainer Instructions

b) When interest is collected upfront:

Cash (B/S – Asset)	Accounts Payable Deferred Revenue (B/S – Liability)
100	100

When the related payment period falls due:

Accounts Payable Deferred Revenue (B/S – Liability)	Interest on Loan Portfolio (I/S – Liability)
20	20

Trainer Notes on Accrual Accounting

International Accounting Standard on Accrual Accounting IAS 1 Presentation of Financial Statements

This is a summary of issues for MFIs around the International Accounting Standard (IAS) on accrual accounting as described in IAS 1. During the Accounting and Financial Analysis courses, difficult questions have been asked about IAS 1, so we thought it would be helpful to give you a summary of the key points and where to go for more information.

IAS AND CGAP COURSES

Before going any further, it is important to differentiate the purpose of the IAS and the purpose of the courses. The CGAP courses are focused on enabling microfinance managers to improve the performance of their MFIs. The Accounting and Financial Analysis courses cover the basics of accounting and financial analysis for MFI managers so they can improve their management skills in these areas. These courses are not designed to tell MFIs how to present audited financial statements. In contrast, the IAS are written specifically to give direction on how to record and present financial statements.

Please see A2-M3 for Trainer Notes on IAS 20 for more background on the International Accounting Standards and CGAP publications on MFI audited financial statements.

International Accounting Standard 1 is on “Presentation of Financial Statements” and this message is specifically on the “Accrual Basis of Accounting.” It will really help if you have your hard copy of the IAS in front of you so you can follow the quotes and make notes in the margin if you need to! The quotes are taken from the IAS 1 (Revised 2007) “Presentation of Financial Statements,” which was issued on 6 September 2007 and is effective for annual periods beginning on or after 1 January 2009, with early application permitted.

IAS 1(r2007).27 states: “An entity shall prepare its financial statements, except for cash flow information, using the accrual basis of accounting.”

In summary, this means that to be compliant with IAS 1, MFIs must use accrual accounting in their audited financial statements. As MFIs grow, they will need to develop an information system that enables them to do accrual accounting. There is no other way forward for institutions that want to be considered serious providers of financial services. However, while MFIs are still small, it is possible to use cash accounting for management purposes and then make accrual adjustments at the end of the financial year.

Nevertheless, there is one complicating question for MFIs:

Can accrual accounting for a microfinance loan portfolio “overstate” the income the MFI has earned? (As a reminder, the way to accrue interest income is: debit interest receivable and credit interest income.)

Answer: It depends on:

- a. The level of accounting knowledge of MFI’s financial statement readers
- b. The MFI’s interest accrual policies

- a. The reader who understands accounting will know that the interest receivable account on the asset side of the Balance Sheet shows how much interest income is due but uncollected (usually this is just from loans, but could be from investments too). However, many donors and MFIs do not understand accounting that well and just look at the operating profit/loss on the Income Statement. If the MFI has an operating profit then they do not look further. They are not aware that, in fact, some of that interest income has not actually been collected, and when they discover it later, they feel that the MFI has “overstated” its income.
- b. If the MFI has rigorous interest accrual policies then this accrued interest will be immaterial to the financial performance of the MFI. However, if the MFI keeps on accruing interest on overdue loans, it can reach a level that is material to the MFI’s financial performance. In that case, those who do not understand accounting so well think the MFI has “overstated” its interest income.

To overcome these problems and ensure transparency in reporting the income from their loan portfolio in their audited financial statements, some MFIs use cash accounting for the income from loans and use accrual accounting for the rest of their financial statements—but officially they are not compliant with IAS 1 point 27. Is there another solution?

MFIs have two options (in order of preference) to give readers of MFI financial statements information as transparent as possible in their audited financial statements and to use accrual accounting in compliance with IAS 1:

- 1. Use accrual accounting and establish a clear accrual policy that does not accrue income on late microloan payments that are unlikely to be collected.**

Each MFI needs to establish a standard for not recognizing income that is due on late loan payments, based on the historical probability of receiving the interest. It should be as rigorous as possible, for example, no accrual of interest on loan payments more than 30 days late. If this policy is rigorous then the amount of accrued interest income will not be material to the financial performance of the MFI.

- 2. Use cash accounting for internal management purposes, but at the end of the financial year make accrual adjustments on all relevant accounts for the financial statements, including accruing income on late loans in the microfinance loan portfolio. Again, the MFI would need to establish a clear accrual policy that does not accrue income on late microloan payments that are unlikely to be collected.**

This is just a short-term solution until the MFI has developed an information system that enables it to do accrual accounting on all accounts. However, realistically, it is where the majority of MFIs are currently positioned.

The CGAP Financial Statement Disclosure Guidelines recommends:

- 4.5 If an MFI accrues unpaid interest on late loans, there should be a clear and thorough explanation of its policies on this matter, especially the point at which further accrual of unpaid interest ceases and previous accruals are either reversed out of income or expensed.**

This means that the MFI’s accrual policy on late loan payments must be clearly documented in the Notes to the Financial Statements.

The CGAP Financial Statement Disclosure Guidelines echoes the disclosure requirement of IAS 30 for banks and similar financial institutions. This standard prescribes the mandatory

disclosure of banks regarding the specific recognition policies for their principal types of income.

Either of these options complies with IAS 1, in that the MFI's financial statements use accrual accounting and disclose relevant information in an MFI's Income Statement.

HOW DOES IAS 1 APPLY TO THE ACCOUNTING AND FINANCIAL ANALYSIS COURSES?

The Accounting and Financial Analysis courses are focused on the basics of accounting and financial analysis for MFI managerial purposes. They are not designed to tell MFIs how to present audited financial statements.

The specific sessions where knowledge of IAS 1 will be helpful are Accounting sessions 2, 5, and 8 and Financial Analysis sessions 3, 9, and 10.

Awareness of IAS 1 means trainers will need to be very clear when they are referring to internal management reports and when they are referring to audited financial statements. When trainers are referring to audited financial statements there is no question that MFIs must present their financial position using accrual accounting. However, when trainers suggest, for example, cash accounting for interest income as a practical option for most of their course participants (so that they will have the information they need to be able to move their MFI towards sustainability), it must be clear that this is for internal management reporting only. It is not commenting on what should happen in the MFI's audited financial statements. If MFI managers want to continue to use cash accounting for income on the loan portfolio internally then they would use option 2 above for their audited financial statements.

Trainer Notes on Accounting for Grants

International Accounting Standard on Accrual Accounting IAS 20 Accounting for Government Grants and Disclosure of Government Assistance

This is a summary of the issues for MFIs related to the International Accounting Standard (IAS) on accounting for grants (“Accounting for Government Grants and Disclosure of Government Assistance”)—that is, IAS 20. During the Accounting and Financial Analysis courses, difficult questions have been asked about IAS 20, so we thought it would be helpful to give you a summary of the key points, which have also been discussed at length with professors of accounting, chartered accountants, certified financial analysts, and MFI accountants from different regions, and suggest where to go for more information.² *The SEEP Framework for Reporting, Analysis, and Monitoring* has been checked against IAS and does not contravene its recommendations.

IAS AND CGAP COURSES

Before going any further, it is important to differentiate the purpose of the IAS and the purpose of the courses. The CGAP courses are focused on enabling microfinance managers to improve the performance of their MFIs. The Accounting and Financial Analysis courses cover the basics of accounting and financial analysis for MFI managers so they can improve their management skills in these areas. These courses are not designed to tell MFIs how to present audited financial statements. In contrast, the IAS are written specifically to give direction on how to record and present financial statements.

IAS BACKGROUND

There is increasing recognition in microfinance of the importance of internationally recognized accounting standards for presentation of audited financial statements. The leading body in setting these standards is the International Accounting Standards Committee (IASC). (In the past, European and a wide range of other national accountants have supported the IASC and now the USA is beginning to support them.) Thus, the International Accounting Standards issued annually are gaining increased credibility. (A very interesting paper outlining the importance of IAS, and comparing national accounting standards and IAS, can be found at <http://www.kpmg.com/news>) For the microfinance industry, IAS are the only international standards we have that can guide MFIs globally.

² Note that IAS has been subsumed into the International Financial Reporting Standards. We recommend that trainers go to the FASB website from time to time to see if any changes have been made to IAS. FASB is reissuing global accounting standards from a convergence of disparate standards which may eventually affect or change some of the IAS discussed in the course. Note, however, that FASB is beginning this work in the more urgent areas affecting international business.

CGAP RECOMMENDATIONS ON MFI AUDITED FINANCIAL STATEMENTS

CGAP has published the *External Audit Handbook* as part of its *Technical Tool* series as a useful reference for MFIs wanting more information on their audit process and audited financial statements.

International Accounting Standard 20 is on “Accounting for Government Grants and Disclosure of Government Assistance.” It will really help if you have your hard copy of the IAS in front of you so you can follow the quotes and make notes in the margin if you need to! The quotes are taken from IAS 2007, with revisions, under discussion since 2004, planned for 2008.

DEFINITION OF TERMS

Government – “refers to government, government agencies and similar bodies whether local, national or international.” This can be broadly interpreted to mean public funding or funding from a source that is not interested in debt or an ownership position. This definition includes almost all those who give grants to MFIs.

Types of grants – Grants related to assets—primary condition is acquisition (either purchase or construction) of long-term assets. For most MFIs, this would typically be fixed assets. Grants related to income—grants other than grants related to assets. For most MFIs, this would typically include grants for both operations and microloans.

KEY SECTIONS OF IAS 20 AND THEIR APPLICATION TO MFI’S AUDITED FINANCIAL STATEMENTS (IN ORDER OF IMPORTANCE)

IAS 20 point 12 states: “The grant is recognized as income over the period necessary to match them with the related costs, for which they are intended to compensate, on a systematic basis, and should not to be credited directly to equity.”

In summary, this means that MFIs should book all grants and donations as income, not as equity. The recognition of that income should match the period when the costs are incurred. Therefore, if an MFI gets a large donation at the end of its financial year, only that portion for which the MFI has incurred expenses, should be booked as income. The rest of the grant should be booked in a liability account—deferred income. During the following financial year, as the MFI recognizes the expenses associated with grant, it will also recognize the grant income (see point 17 also).

The CGAP publications on audited financials specifically recommend that income from grants and donations shown on the income statement should be clearly separated out as grant or nonoperating income, below the net operating profit/loss. This is consistent with IAS 20 point 29 that states: “each material item should be presented separately in the financial statements.”

IAS 20 point 7 states: “A government grant is recognized only when there is reasonable assurance that (a) the enterprise will comply with any conditions attached to the grant and (b) the grant will be received.”

In summary, this means that when an MFI receives a grant that has restrictions (such as loans in a specific region) it should first be recorded on the Balance Sheet as a liability—that is, deferred income. Only when the MFI meets the conditions of the grant and disburses it accordingly should that amount be transferred to the Income Statement as income. It also

means that a grant should typically not be booked until the MFI has actually received the cash.

IAS 20 point 24 states: "A grant relating to assets may be presented in one of two ways: 1) as deferred income, or 2) by deducting the grant from the asset's carrying amount."

In summary, this means that if an MFI has a grant for fixed assets it should be recorded on the Balance Sheet in the liability account, deferred income, and only recognized as income on a systematic basis over the useful life of the asset. Point 17 also states that the income recognition would usually be equivalent to the assets' annual depreciation. This income approach is the clear recommendation of IAS 20 for assets, despite the caveat in points 13 and 14 described below.

IAS 20 point 13 states: "Two broad approaches may be found to the accounting treatment of government grants: the capital approach, under which a grant is credited directly to shareholders' interests, and the income approach, under which a grant is taken to income over one or more periods."

In summary, even though IAS 20 is clear in point 12 that it recommends the income approach and all subsequent IAS recommendations follow the income approach—in points 13 and 14, IAS presents the arguments for the alternative capital approach. The capital approach means that grants to an MFI are booked directly to equity (rather being first booked in the income statement). This is because:

- a. Grants for MFIs are a financing device and so should be dealt with on the Balance Sheet.
- b. Grants are not earned and do not incur related costs.

MFI auditors have been found to use the capital approach under three different circumstances. The most common use is when the national accounting policy follows the capital approach, as is common in Central and Eastern Europe and Newly Independent States. (For example, Russian accounting law requires that all grants for assets should be booked directly to equity, not recognized as income. Some MFIs therefore book all grants to equity.) Secondly, MFI auditors may conclude that the capital approach is also valid when grants are very similar to equity and are unequivocally a financing device, say, an endowment. The third circumstance when auditors may choose the capital approach is when the donor clearly does not fit under the broad definition of "government" given under IAS 20 (and the grant is material).

If auditors choose to use the capital approach, then they are required to disclose this departure from the recommended income approach and give the reasons for their decisions.

In the CGAP publications on audited financial statements, CGAP's primary concern is the transparency of an MFI's financial position. Whatever the decision by the MFI's auditors, CGAP recommends that the full amount of the grants and donations be totally transparent and that donor funds in equity be disclosed separately. In addition, the reasons for the treatment would need to be included in the notes to the Financial Statements. Some auditors may think it unnecessary to separate grants and donations in equity, but IAS 1 point 67 allows presentation of additional line items, headings, and subtotals on the balance sheet when "such presentation is necessary to present fairly the enterprise's financial position."

Furthermore, IAS 1 point 68 states that: "line items are added ... when the size, nature, or function of an item is such that separate presentation would assist in presenting fairly the enterprise's financial position." Most MFIs are still dependent on grant funding, so to ensure

fair presentation of the MFIs financial position, MFI-audited financial statements need to disclose grant funding on both the income statement and balance sheet.

DISCLOSURE AND TRANSITIONAL PROVISIONS IN IAS 20 POINT 39

The following must be disclosed: [IAS 20.39]

- **Accounting policy adopted for grants, including method of balance sheet presentation**
- **Nature and extent of grants recognized in the financial statements**
- **Unfulfilled conditions and contingencies attaching to recognized grants**

Government grants do not include government assistance whose value cannot be reasonably measured, such as technical or marketing advice. [IAS 20.34] Disclosure of the benefits is required. [IAS 20.39(b)]

MFIs should carefully follow these disclosure and transitional provision recommendations in their audited financial statements.

HOW DOES IAS 20 APPLY TO THE ACCOUNTING AND FINANCIAL ANALYSIS COURSES?

As you know, the courses focus on managerial use of financial statements. They do not directly address how to present audited financial statements. IAS and the courses, therefore, have very different objectives. However, the Accounting and Financial Analysis courses do directly address the treatment of donations, so we thought it would be helpful for you to have an analysis of this treatment based on IAS 20.

The treatment of cash grants and donations is addressed the same way in Accounting session 2 (and 8) and in Financial Analysis session 4, and their compliance with IAS 20 is noted.

- A. All of that year's grants and donations are first recorded in the Income Statement below the Operating Profit/Loss. (This would include the total amount of unrestricted grants and the portion of restricted grants or donations for which the conditions had been met that year.) These grants and donations are then transferred as one amount on the Balance Sheet, separate from the Operating Profit/Loss.**

This treatment is consistent with the income approach recommended in IAS 20.

- B. All of that year's grants and donations are first recorded in the Income Statement, below the Operating Profit/Loss, but the restricted grants or donations for which the conditions had been met, are divided according to purpose: e.g. Operations, Loan Fund, or Fixed Assets. The grants and donations are then transferred according to their purposes on the Balance Sheet, separated from the Operating Profit/Loss.**

This treatment is consistent with the income approach recommended in IAS 20.

A word of warning on both A and B: If an MFI includes multiyear grants, all of a restricted grant, or all of a grant for fixed assets in the income statement for the current year, then they would no longer comply with IAS 20:

- **For multiyear grants**, only the portion of the grant for the current year should be recognized this year. The portion of the grant for subsequent years should be recorded in the liability account—deferred income (see points 12 and 7 above).

- **For restricted grants**, only that amount of the grant for which the MFI had met the conditions (for example, loans to a specific region) should be recognized that year. The remaining amount should be recorded in the liability account—deferred income (see point 7 above).
- **Grants for fixed assets** should be recorded as deferred income and only recognized as grant income on a systematic basis over the useful life of the asset (see point 24 above).

C. That year's unrestricted grants and donations and the funds restricted for operations are recorded in the Income Statement below the operating profit/loss. They are then transferred to the Balance Sheet, separated from the operating profit/loss. That year's grants or donations restricted for loan fund or fixed assets are recorded directly into equity on the Balance Sheet.

This treatment does not comply with the income approach recommended in IAS 20 because part of the grants and donations are booked directly into equity. It also does not comply with the capital approach because part of the grants and donations are booked as income. However, it does comply with some national accounting policies.

If MFIs are using this approach in compliance with their national accounting policies, they need to be aware that they do not comply fully with IAS 20.

The options for MFIs in this situation that are consistent with the need for transparency in audited financial statements are:

- (i) Continue with the current approach but ensure that the reasons are fully disclosed in the notes to the financial statements, with the recognition that they do not comply with IAS
- (ii) Book all grants and donations directly to equity and completely follow the capital approach, with a note to the financial statements giving the reasons for this approach
- (iii) Apply the income approach recommended by IAS 20 to all future grants, with a note to the financial statements explaining this change to comply with IAS
- (iv) Adjust their prior-year financial statements in accordance with IAS 20 and IAS 8

If the MFI decides on option (ii) then there may be a question of how best to disclose the grants separately in the equity section of the balance sheet. If it is a problem, IAS 1 point 86 requires that all movements in the equity account of items booked directly into equity, such as grants, be presented in a separate component of its financial statements, called the Statement of Changes in Equity.

This is probably much more detail that you will ever use during a course but we wanted you to feel equipped to deal with any questions that might arise on these points.

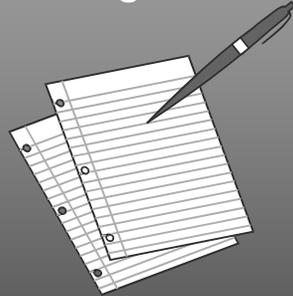
Overheads

OVERHEADS FOR SESSION 2 ARE CONTAINED IN POWERPOINT FILE ENTITLED "CGAP ACCOUNTING OVERHEADS_1."

A2-01

Definition of Accounting

Recording, classifying, and summarizing economic events:



- Leads to the preparation of financial statements

- Provides information to people who want to make sound business decisions



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A2-02

Double Entry Accounting

QZ-HZCOA YZHEFRBCO
GZ-HZCOA YZHEFRBCO

$$\text{ASSETS} = \text{LIABILITIES} + \text{EQUITY}$$

Any given transaction will affect a minimum of two accounts.

If the accounting equation is to remain in balance:

any change in the left side
(assets or expenses)

must be accompanied by an *equal but opposite* change in the left side

or

by an equal change in the right side
(liabilities, equity, or revenues).

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Conservatism Principle

**CHOOSING to present
financial information that ensures**

**Assets, revenues, and gains
are
not overstated**

AND

**Liabilities, expenses, and losses
are
not understated**

**Intended to result in fair presentation of information
from period to period**



Financial Accounting

**is concerned with
presenting a summary view of the
financial results of past operations
for an external audience**

Managerial Accounting

**is concerned with
projected as well as historical operations,
tracked and presented at a much more detailed
level, intended for internal use by managers**



A2-05

Financial Accounting versus Managerial Accounting

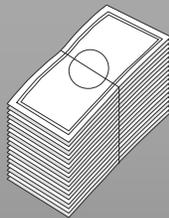
External	vs.	Internal
Summary	vs.	Detailed
Historical only	vs.	Projected also
Standardized format	vs.	Open formats
Annual	vs.	Monthly/quarterly
Final, precise	vs.	Ongoing, flexible
Ends (e.g., audit)	vs.	Means (management tool)
ANALYSIS	vs.	ANALYSIS AND ACTION

Source: Tony Sheldon, SEEP Training Notes, 1997.

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A2-06



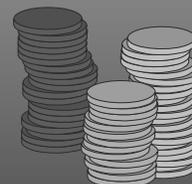
Cash

Under the cash basis of accounting,
revenue is not reported until cash is received and
expenses are not reported until cash is disbursed

Accrual

system of accounting

recognizes transactions when revenues are
earned and expenses incurred whether or not
cash changes hands



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Accounting for Interest



Cash basis:

Record interest revenue when cash is received

Accrual basis:

Record interest revenue when it falls due rather than when it is received in cash

Accounting for Grants and Concessional Funds

Grants

- Not included in profits or retained earnings from operations
- Recorded separately below the operating profit/(loss) on I/S
- Then transferred to B/S as equity

Concessional Loans

- Loans made to the MFI at less than market rate of interest
- Recorded separately from commercial loans (in order to identify 'subsidy')



OPERATING INCOME

Handouts

Accounting Principles

Double-entry Accounting—is based on the concept that every transaction affects and is recorded in two or more accounts on a business's books (referred to as the *Dual Aspect Concept*) and thus requires entries in two or more places ("double-entry"). The accounting equation states that: $ASSETS = LIABILITIES + EQUITY$ because all the assets of the business are financed either by creditors (liabilities) or owners (equity). Each transaction affects Assets, Liabilities, and/or Equity (sometimes through Revenue or Expenses). And, for every account affected by a transaction there is an equal effect on other accounts that keeps the accounting equation balanced. Thus, an increase in a business's assets must be offset by either a decrease in another asset, or an increase in liabilities or equity.

The Conservatism/Prudence Principle—accountants must choose the method of presenting information on financial statements that ensures that: assets, revenues, and gains are not overstated (so revenues are recognized only when reasonably certain) and conversely, that liabilities, expenses, and losses are not understated (so expenses are recognized as soon as possible). Conservatism cannot be used to intentionally understate assets, revenues, and gains or overstate liabilities, expenses and losses. It is intended to result in fair presentation of information from period to period.

The Materiality Principle—each material item should be presented separately in the financial statements. Immaterial information should be aggregated with similar accounts; it need not be presented separately. Information is material if its nondisclosure could influence the economic decisions of users. Materiality relates to both the nature and size of an item.

The Consistency Principle—an organization must consistently apply the same accounting principles from period to period unless it has a sound reason to change. This ensures that reports from various periods may meaningfully be compared.

The Realization Principle—in effect, it requires that revenue be recognized in the accounting period it is earned, rather than in the period it is collected in cash.

The Going Concern Concept—the Balance Sheet of a business is developed with the assumption that the business will continue to operate indefinitely and thus the assets used in carrying out operations will not be sold.

The Business Entity Concept—every business is a separate entity, distinct from its owner and from every other business. Therefore, the records and reports of a business should not include the transactions or assets of either its owner(s) or those of another business.

The Matching Principle—requires that revenues and expenses be matched in the same accounting period. An organization incurs expenses in order to earn revenues. Therefore expenses should be reported on the Income Statement during the same period as the revenues they generated.

The Cost Principle—all assets must be recorded on the books of a business at their actual cost. This amount may be different from what it would cost today to replace them or the amount for which the assets could be sold.

The Money Measurement Principle—a record is made only of information that can be expressed in monetary terms.

Sources: International Accounting Standards, 2000, published by the International Accounting Standards Committee, London; Anthony, R.N. and J.S. Reece (1989). Accounting: Text and Cases (eighth edition), Irwin, Illinois.

Financial Accounting versus **Managerial Accounting**

External	vs.	Internal
Summary	vs.	Detailed
Historical only	vs.	Projected also
Standardized format	vs.	Open formats
Annual	vs.	Monthly/quarterly
Final, precise	vs.	Ongoing, flexible
Ends (e.g., audit)	vs.	Means (management tool)
ANALYSIS	vs.	ANALYSIS AND ACTION

Technical Notes

WHAT IS ACCOUNTING?

- **Accounting** is the process of recording, classifying, and summarizing **economic events** which leads to the preparation of financial statements.
- **Accounting** is often referred to as the **language of business**.
- It provides a **vocabulary** with which one can talk about **quantitative objectives**: *planning, implementation, and ongoing measurement*.
- Financial information, as expressed in the terminology of accounting, reports **what is actually going on in the organization**. Accounting reports allow the manager to sort through the copious information generated, and to organize it into meaningful formats. These reports provide essential information that allows the manager to choose those actions that will redirect the enterprise's activities to be more consistent with the mission and objectives of the business plan.

Accounting rules vary from country to country. It is important to understand that the numbers seen on financial statements are affected by the set of rules used to compile them. In most countries, there are some basic principles that do not change which make up the rules of accounting and influence how the financial activities of an MFI are recorded.

WHAT DO WE MEAN BY....?

- ⇒ **Financial accounting** is concerned with presenting a summary view of the financial results of past operations. Intended largely for external audiences, financial accounting reports are generally subject to an independent auditor's opinion to verify the fairness of the information presented. Though the standards vary from country to country, there are strict conventions for format and content to which financial accounting reports must adhere. Financial accounting reports, generally included in an organization's annual report, aim to present final, precise information, often comparing the results of two or more years.
- ⇒ **Managerial accounting** information, on the other hand, is tracked and presented at a much more detailed level, such as by program or branch. It is concerned with projected as well as historical operations, and is intended for internal use by the organization's managers. There are no predetermined formats for managerial accounting reports, although the most widely used are adapted from the formats of the three primary financial accounting reports, which will be discussed below.

Management reports are prepared on a more frequent basis, generally monthly or quarterly. They report on an ongoing basis the differences between planned and actual results. Management accounting is a means rather than an end: it is a tool to enhance a manager's ability to interpret the results of ongoing operations and to take constructive actions to affect future results. Additional management accounting reports would include whatever information—

actual or projected—that is of value in managing the enterprise, such as portfolio projections and financial indicators.

ACCRUAL VERSUS CASH ACCOUNTING

- ⇒ **Accrual accounting**—records transactions when they take place whether or not cash has been exchanged. According to IAS, financial statements should be prepared using accrual accounting. However, it also recognizes that “The preparers of financial statements have to contend with uncertainties... such as the collectability of doubtful receivables...” Such situations require “the exercise of prudence.”
- ⇒ **Cash accounting**—accounting revenue is NOT reported until cash is received and expenses are not reported until cash is disbursed.

Example 1: An MFI that uses **accrual accounting** purchases a T-bill for 90 days on December 1. On December 31 the MFI has earned 31 days worth of interest revenue on the T-bill. However, it will not actually receive this revenue until the T-bill matures on February 28. When reporting its revenue to December 31, the MFI includes the portion of interest revenue it has earned on the T-bill (that is, 31 days) as accrued revenue. If the MFI used **cash accounting**, it would only report the interest revenue on the T-bill when it was actually received—that is, February 28.

Example 2: An MFI that uses **cash accounting** pays the rent in advance on its office building twice a year. If the MFI uses cash-based accounting, it would record the full amount of the rent as an expense on the day it was paid rather than each month as the expense is incurred as would be the case if the MFI used **accrual accounting**.

Example 3: An MFI pays its clients interest on their deposits; if it records this expense only when it pays the client in cash, it would be practicing cash-based accounting. However, if it should accrue this interest expense routinely as it is due, not when paid in cash, it would follow accrual-based accounting.

IAS 1(r2007). 27 Accrual basis of accounting: An entity shall prepare its financial statements, except for cash flow information, using the accrual basis of accounting.

ACCOUNTING FOR INTEREST REVENUE

There are two primary ways that MFIs record interest revenue:

- i) **Cash-basis accounting: record interest revenue when cash is received** (usually as part of the loan repayment).

This is one of the most conservative or prudent methods (applying the principle of conservatism) when interest is paid with each installment of the loan. It gives managers a realistic view of progress to sustainability.

However, if interest is paid up front—that is, deducted from the loan amount—then cash accounting is not the most conservative method because it overstates the revenues of the MFI (see ii b below for an alternative).

- ii) **Accrual-basis accounting: record interest revenue when it falls due rather than when it is received in cash.**
 - a) When interest falls due, record the interest revenue (income statement) and interest receivable (asset account). When cash is collected, record cash (asset account) and reverse interest receivable (asset account).

This approach is effectively the same as cash accounting if interest payments are on time. However, it could appear to overstate interest revenue if there are delinquent loans. (The reader of the financial statements needs to know that he or she must check the interest receivable account to see how much interest has not yet been collected.) MFIs that use this method need clear, rigorous policies for not recognizing interest on late loans and for when to reverse interest revenue if the loan becomes delinquent.

- b) When interest is collected up front: Record interest collected as cash (asset account) and as deferred revenue (liability account). When the related loan payment period falls due, transfer the interest earned for that period from deferred revenue to interest revenue.

CGAP Microfinance Consensus Guidelines: Disclosure Guidelines for Financial Reporting by Microfinance Institutions

4. MICROLOAN PORTFOLIO ACCOUNTING ISSUES

- 4.5 If an MFI accrues unpaid interest on late loans, there should be a clear and thorough explanation of its policies on this matter, especially the point at which further accrual of unpaid interest ceases and previous accruals are either reversed out of income or expensed.**

Many financial institutions continue to recognize interest income on a loan as it comes due even when the interest has not been received because payment is late. There is a tendency to continue this accrual past the point where collection of the interest becomes doubtful. Thus it is important to disclose the policies behind such accrual.

ACCOUNTING FOR GRANTS AND CONCESSIONAL FUNDS

Most MFIs receive grants and concessional funding (loans made to the MFI at less than a market rate of interest). It is important that MFIs do not include grants for any purpose in operational revenue. They should be recorded on the Income Statement below the operating profit/(loss) line. (This is very highly summarized. There will be in depth discussion of this point in Session 4.) For more discussion of these points, see Trainee Notes on IAS 20—Accounting for Grants and Donations.

Concessional loans should also be recorded separately from commercial loans so that it is possible to identify how much “subsidy” is being provided through concessional funding (discussed in Session 5).

CGAP Microfinance Consensus Guidelines: Disclosure Guidelines for Financial Reporting by Microfinance Institutions

3. DONATIONS

- 3.1 The amount of any current-period donations should be shown. If the donations are reported as revenue on the income statement, such revenue should be shown separately from income generated by an MFI’s financial operations. The source and amount of any current-period donations should be reported.**

Financial statements for MFIs that are nongovernmental organizations (NGOs) sometimes include revenue from donations on their income statement and may lump donation revenue together with revenue from

normal operations (mainly interest and fee income). Most MFIs cannot rely on such donations over the long term. Thus, to appraise the long-term viability and capacity of an MFI to grow without continuous infusions of donor funds, stakeholders need to know what the MFI's financial performance would look like without donations. Profit or loss from financial operations cannot be determined unless donation revenue is reported separately.

If donations are included in the income statements, the MFI's net operating income or **loss** (interest and fee income from normal financial service operations, minus the expenses of those operations) should be shown, and donations should be separated out as nonoperational income, either in the income statement or in a note.

Guideline 3.1, like all the rest in this document, defines informational content to be disclosed, not the format for disclosure. In a departure from that principle, this footnote (which is not part of the guidelines) highlights a format issue. MFIs wanting to separate grant income (to show it below the net operating income or loss) have sometimes found their auditors reluctant to do so. CGAP recommends that the full amount of grants and donations be disclosed separately both in the income statement and balance sheet for the following reasons:

1. Putting grant income below operating income or loss is consistent with IFRS. IAS 1, point 67, allows the presentation of additional line items, headings, and subtotals on the balance sheet when "such presentation is necessary to present fairly the enterprise's financial position." Point 68 states that line items are added when "the size, nature, or function of an item is such that separate presentation would assist in presenting fairly the enterprise's financial position."
2. Grants are less reliable than operating income as a source of future cash flow. Thus, it is more transparent to report these items separately, so the reader can assess the financial position before funding.

3.2 The method of accounting for donations should be explained.

Separate disclosure of grants is necessary for a proper understanding of financial statements (IAS 20.31) and to facilitate comparison with other periods and other MFIs.

There are two main issues associated with the recording of grant income.

The first issue is where to record a grant: whether to report the grant directly as equity ("capital approach") or to run it through the income statement ("income approach").

The second issue is a deferral issue: when to recognize the grant income (or capital). Is the grant recognized when it is received, or when the work for which it is earmarked has been performed? Where a grant is recognized as income (or capital) over more than one period, on what basis is the amount transferred to income (or capital) determined?

The MFI's financial statements need to explain the method chosen.

T-ACCOUNTS FOR METHODS OF ACCOUNTING FOR INTEREST

1. Cash basis accounting: Record interest revenue when received in cash

Cash (B/S – Asset)	Interest on Loan Portfolio (I/S – Revenue)
20	20

2. Accrual basis accounting: Record interest revenue when it falls due rather than when it is received in cash

a) When interest falls due:

Interest Receivable on Loan Portfolio (B/S – Asset)	Interest on Loan Portfolio (I/S – Revenue)
20	20 ←

When 20 is collected in cash:

Cash (B/S – Asset)	Interest Receivable on Loan Portfolio (B/S – Asset)
20	20

For 2 a) above, you need a system for tracking and reversing the interest that's never been received from the account marked ←.

b) When interest is collected up front:

Cash (B/S – Asset)	Accounts Payable Deferred Revenue (B/S – Liability)
100	100

When the related payment period falls due:

Accounts Payable Deferred Revenue (B/S – Liability)	Interest on Loan Portfolio (I/S – Liability)
20	20

SESSION 3: FINANCIAL STATEMENTS AND PORTFOLIO REPORT – OVERVIEW

Session Summary

OBJECTIVES: By the end of the session, participants will be able to:

- State the purpose and components of the three types of financial statements and the Portfolio Report
- Format Income Statements and Balance Sheets according to the SEEP and CGAP format
- Identify relationships between financial statements and the Portfolio Report
- Identify the effect of transactions on the Balance Sheet

TIME: 160 minutes

SUPPLIES: LED projector

TRAINER MATERIALS

A3-M1 Technical Notes – Why Are We Interested in Financial Statements?

A3-M2 Trainer Notes on IAS 7 Statement of Cash Flows

PARTICIPANT MATERIALS

OVERHEADS: A3-O1 Balance Sheet (*definition*)
A3-O2 Sample Format for a Balance Sheet
A3-O3a–b Effects of Transactions on the Balance Sheet
A3-O4 Sample Format for an Income Statement
A3-O5a–b MicroFund Inc. Income Statement
A3-O6a–b Direct Method – Cash Flow Statement
A3-O6c–d Indirect Method – Cash Flow Statement

A3-O7a–b Sample Portfolio and Activity Report

A3-O8 Sample Nonfinancial Data Report

A3-O9 Data Source Summary

Optional

A3-O10 Relationship between Statements

A3-O11 So What's Different?

A3-O12 Two Ways MFIs Treat Cash Donations

HANDOUTS: A3-H1 Balance Sheet with Definitions (SEEP)
A3-H2a Effects of Transactions on the Balance Sheet – Exercise
A3-H2b Effects of Transactions on the Balance Sheet – Answers
A3-H3 Income Statement with Definitions (SEEP)
A3-H4a Income Statement – Exercise
A3-H4b Income Statement – Answers
A3-H5a Direct Method – Cash Flow Statement

A3-H5b Indirect Method – Cash Flow Statement

A3-H6	Sample Portfolio and Activity Report	Optional
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A3-H7 Why Are We Interested in Financial Statements?

A3-H8	Two Ways MFIs Treat Cash Donations	Optional
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PREPARED FLIPCHARTS:

- Balance Sheet exercise
- Balance Sheet component titles—Assets, Liabilities, Equity
- Income Statement titles—Revenue, Expenses
- Case Study (Trainer could take advantage of this to illustrate talking points if needed to support concepts.)

Session 3: Financial Statements and Portfolio Report – Overview

INTRODUCTION

1. (1 minute) Tell the group that session 2 introduced the basics of accounting and how accounting for MFIs is different from other businesses and other financial institutions. Explain that before actually dealing with accounting entries themselves, this session provides an overview of the financial statements that *result* from the accounting process. Refer to the flipchart in session 1 with progress from financial information to sustainability. Tell participants that one of their goals as managers is to generate excellent financial information so they can make good decisions about the sustainability of their MFI.
2. (3 minutes) Ask participants what types of statements and/or reports they generate from their accounting/financial system and quickly list answers (or have them prepared) on a flipchart. Be sure to have a brief discussion on the inclusion of the Portfolio Report. (Answers should include Balance Sheet, Income Statement, Cash Flow Statement, Portfolio Report, Nonfinancial Data Report.)

Summarize that these are the main reports needed in an MFI. However, since this is an accounting course, they will focus on the financial statements in this course and only refer to the others as they might be needed.

THE BALANCE SHEET

3. (5 minutes) Ask: What does a Balance Sheet represent and how is it used in your organization? Why is it called a Balance Sheet?
Prompt the group to come up with a definition. Show A3-O1, Balance Sheet Definition.
4. (10 minutes) Brainstorm/Ask: What are the broad components of a Balance Sheet? Explain that they will be using a format that may be new to participants, but includes all best practice elements. Show the format blank on a flipchart. Then show how a typical (host country) Balance Sheet fits into the CGAP format.

Write the components of the typical host country balance sheet on separate pieces of paper and tape them onto the outline of a typical host country balance sheet on a flipchart. On another flipchart, write the outline of the Balance Sheet format used in the course. Then take components off the typical B/S one by one and place them in the proper place on the new B/S. Make the point that even though the formats are slightly different, the components are the same.

Be sure to relate back to the discussion on why this statement is called a Balance Sheet. Remind participants (or introduce the concept) that the Balance Sheet balances—that is, $\text{Assets} = \text{Liabilities} + \text{Equity}$. Ask the question about how a Balance Sheet balances again as appropriate to highlight the Balance Sheet Equation.

Tell the group that it is important to note that they will use this format because it is structured to help microfinance managers better analyze their MFI's financial performance and also can be easily used for benchmarking. It also obviously shows the impact of donor funds. However, this is not the only correct way to format financial statements—it is *one* way.

(Do not engage in lengthy and detailed discussions at this point; that will come later, as the course proceeds. The purpose of this activity is to relate the currently used format to the SEEP (and CGAP) recommended format, to show that the major components are the same, only organized differently).

5. (5 minutes) Tell the group that they now will look at the Balance Sheet more closely.

Ask participants to work in threes; each group should generate three lists of different types of assets, liabilities, and equity.

6. (12 minutes) Ask for answers to assets and record them on a flipchart. Then ask for additions or suggestions or deletions if necessary. Make sure that “outstanding portfolio” appears on the list. Review the answers for accuracy and understanding, including definitions as necessary. (For example, they will include fixed assets, so explain that fixed assets always means gross fixed assets, net fixed assets always means gross fixed assets minus accumulated depreciation.) Give a brief summary, noting the main points on assets in A3-M1 and from the SEEP Framework.

7. (5 minutes) Repeat the process for liabilities and then equity. Ensure participants understand equity and that donor funds are discussed.

8. (7 minutes) Distribute A3-H1 and ask participants to compare the items on this Balance Sheet with those on the brainstormed list.

Ask: What is different? Key points should include:

- Donor funds are transferred from the I/S to equity
- Subsidized loans are disaggregated from commercial loans
- Assets go from most liquid to least liquid
- Loan portfolio is an asset (typically 70 percent of assets)
- Savings are disaggregated between voluntary and compulsory

Lead a brief discussion on the main differences in a Balance Sheet, emphasizing their importance for managers of microfinance institutions. To make discussion easier, refer to line items by number and title, using A3-O2.

9. (10 minutes) Hand out the Effects of Transactions on the Balance Sheet exercise A3-H2a. Ask participants to work in pairs on the exercises. Allow 10 minutes to complete.

10. (5 minutes) Pass out A3-H2b with the answers and allow a few moments for participants to check their own answers. Take questions and review any discrepancies, using A3-O3.
11. (3 minutes) Summarize what has been covered, making sure the participants understand why assets have to equal liabilities and equity. Include the following points:
 - A Balance Sheet shows what the overall financial position of an organization is at a particular point in time; it is like a snapshot/photograph of an institution's financial position.
 - It shows what the enterprise has—its assets—and how those assets were funded: from what it owes—its liabilities—and what it owns—its equity. It is the financial statement that is used to evaluate how well an organization manages its financial resources.

Move on to Income Statements.

THE INCOME STATEMENT

12. (3 minutes) Ask participants to describe an Income Statement and its purpose in an MFI. Lead a brief discussion on the main points, using A2-M1 and the SEEP Framework, noting that if the B/S is a snapshot, then the I/S is a movie, showing all the revenues and expenses over the period. (If the components have not already been discussed, ask: What are the main components of the Income Statement? Answer: revenues and expenses.)

Revenues and Expenses

13. (5 minutes) Build a sample Income Statement using two flipcharts. (Write ahead of time "Revenue" at the top of one flipchart and "Expenses" on the other.) Have the group brainstorm types of revenue that an MFI might earn and record the answers. Then do the same with expenses. Be sure to clearly distinguish between income and expenses directly related to its core business—which is lending money—and other income—such as from training provided to clients, income from study tour visits, grants, and so forth, and their associated costs. (Refer to A3-O4 and A3-H3 definitions.)

Be prepared for questions defining operating income.

14. (7 minutes) Display A3-O4, Income Statement, and pass out A3-H3 at the same time. Allow a few moments for participants to read A3-H3. Compare this statement to the one created during the brainstorming. Briefly review definitions, differences, and use. Explain its importance for microfinance managers, particularly keeping donor funds separate from operating revenues.

Income Statement Exercise

15. (15 minutes) Distribute A3-H4a and explain the Income Statement exercise. Ask participants to complete it individually and to use the recommended format of A3-H3.

16. (5 minutes) Review answers together, using A3-O5a–b and A3-H4b answers.

Cash Flow Statement (Optional—if the level of the participants and time allows)

17. (5 minutes) Ask participants: Who includes a Cash Flow Statement as an integral part of their standard financial statements? If some participants answer yes, then ask how many use one, how often, how is it formatted, how is it used, what are other names for it, and so on. If it is not used by anyone in the group, try to discover why not. Encourage a brief discussion, which should include defining what a Cash Flow Statement is, using the SEEP Framework, A2-M1, and A2-M2 Trainer Notes on Cash Flow. Also point out that the group is not referring to a cash flow projection of future liquidity but an analysis of the past year.

18. (7 minutes) Explain to the group that many MFIs include this statement as an integral part of their standard financial management reports. The cash flow statement has gone by many different names in the past and has many different formats. Now it internationally accepted as being called the Statement of Cash Flows (as per IAS 7).

Make the following points:

- The statement of cash flows can be even more important than the balance sheet or the income statement when analyzing an organization's financial health because it shows where an institution's cash is coming from and how it is being used.
- The balance sheet and income statement are accounting reports. Their figures can be influenced by management's choices regarding accounting policies, such as how quickly assets are depreciated, when loans are written off, or how inventory is valued.
- A statement of cash flows cannot be changed by any accounting policy. It reflects the ability of the enterprise to generate cash. Bills cannot be paid, nor loans disbursed, from profits or accumulated surplus: cash is cash. Thus, an organization's ability to meet its financial obligations and to carry out its activities is based fundamentally on its cash flow.
- Cash Flow Statements all classify cash flows by operating, investing, and financing activities. Operating activities include providing services—the income earning activities. Investing activities include expenditures that have been made for resources intended to generate future income and cash flows. Financing activities include obtaining resources from and returning resources to the owners, obtaining resources through borrowings (short-term or long-term), as well as donor funds. Either the Direct Method or the Indirect Method can be used. The group will now look at both of them (or just one).

Show A3-O6a–b, the Direct Format Cash Flow, and pass out A3-H5a. Using the OH, explain that the Direct Method starts from cash receipts and cash payments and then shows all the major classes of cash receipts and cash payments to arrive at net cash flow. This method is very straightforward.

Put up A3-O6c–d, the Indirect Format Cash Flow, and pass out A3-H5b. Using the OH, explain that the Indirect Method starts from the net operating profit or loss and is then adjusted for the effects of transactions of a noncash nature. Then other sources and uses of cash not reflected in the income statement are factored in. These are determined by looking at the differences in assets and liabilities between the opening and ending balance sheets to arrive at net cash flow.

For operating cash flows, the direct method of presentation is encouraged, but the indirect method is acceptable. [IAS 7.18]

In both cases, the net annual increase (or decrease) in cash should be the same as the difference between the cash amount in the opening balance sheet and the figure for cash in the ending balance sheet.

19. (3 minutes) Summarize the Cash Flow Statement and clarify any outstanding issues.

Tell the group that they have discussed formats for the B/S, I/S and Cash Flow Statement that managers will find useful. All formats are in compliance with IFRS (as of 2007). CGAP is NOT trying to change the way participants structure audited accounts or keep records for tax purposes. There are often legal requirements for audited financial statements as well as national accounting policies that must be followed. MFIs must comply with such requirements. However, for internal financial analysis purposes, MFI managers need formats that allow better and more accurate analysis of financial information. What they are studying here is the best found so far, and they are consistent with IAS. These formats just show the **minimum** necessary for MFI managers to understand their financial performance. MFIs are encouraged to “standardize” reports for benchmarking. Note that other forms that have more information are equally as much “best practices.”

PORTFOLIO REPORT

20. (4 minutes) Reviews the preceding points and introduce the Portfolio Report by asking: Why are Portfolio Reports included in this system? Be sure that the link between the Portfolio Report and the statements is included in the answers.
21. (5 minutes) Brainstorm what information should be included on a Portfolio Report. Record the group’s answers on a flipchart. Define and summarize the characteristics of a Portfolio Report.
22. (7 minutes) Display A3-O7 and pass out optional A3-H6, Sample Portfolio Report. Compare items it includes with those the participants have generated. Review items and clarify any questions. Be sure to explain that Portfolio Reports should include information that is useful to the institution, and that formats vary according to organizational needs. The production of a nonfinancial data report is also needed in MFIs for good tracking and analysis. More information on this report can be found in the Framework.

Optional: Show A3-O8 and pass out A3-H7. You may also want to use A3-O9, Data Source Summary, to show the relationship between the portfolio data and data for other statements.

RELATING THE BALANCE SHEET AND INCOME STATEMENT

23. (10 minutes) Ask participants what the relationship is between the three financial statements. Start by asking how the Balance Sheet relates to the Income Statement.

(Answers: provision for loan impairment, depreciation, and excess of revenue over expenses, donations.)

Then ask: What is the relationship of the B/S and I/S with the cash flow? (Answer: The Balance Sheet shows changes in the uses and sources of funds between years and the Income Statement shows cash generated from operations at the end of the year.)

Briefly discuss each point. Display A3-O10 and explain how the Balance Sheet, Income Statement, and Cash Flow Statement are linked.

24. (2 minutes) Ask participants: How are the recommended statements different from what you usually see? Summarize the discussion on Balance Sheets and Income Statements, using A3-O11, “So What’s Different?”:

- Income Statement – Donor funds are treated “below the line.” That is, donor money is only included after the Net Operating Profit/Loss.
- Balance Sheet – Subsidized loans are separated from commercial loans. There are three separate sources of equity from the Income Statement:
 - Retained earnings/losses – current year
 - Donations – current year
 - Other capital accounts – including net nonoperational income

This is important because it allows managers to see over time the proportion of equity that is from the MFI itself versus the amounts contributed by donors.

25. (5 minutes) Using A3-O12, discuss various ways that donations can be treated with regards to equity.

For a more detailed discussion of the issues, use A2-M2, Trainer Notes on IAS 20, and SEEP Framework, page 19, box 2.2.

Pass out A3-H8.

26. (5 minutes) Ask participants why they as managers would want to separate donor funds and show the separate sources of equity. (Answer: to see their progress towards sustainability.)

27. (3 minutes) Ask why they should be so interested in statements, and in particular the formats of the Balance Sheet and Income Statements just introduced. Have the discussion focus on the management uses of the financial statements.

Summarize and resolve any issues.

Ensure participants understand that CGAP is not asking them to change their audited financials. The purpose of this exercise is for managers of the MFIs to understand the fundamental concepts of good financial information and analysis, grasp their true operating financial position, and move their institutions to sustainability. These formats will enable them to do just that and to use that information when working with donors, banks, or investors.

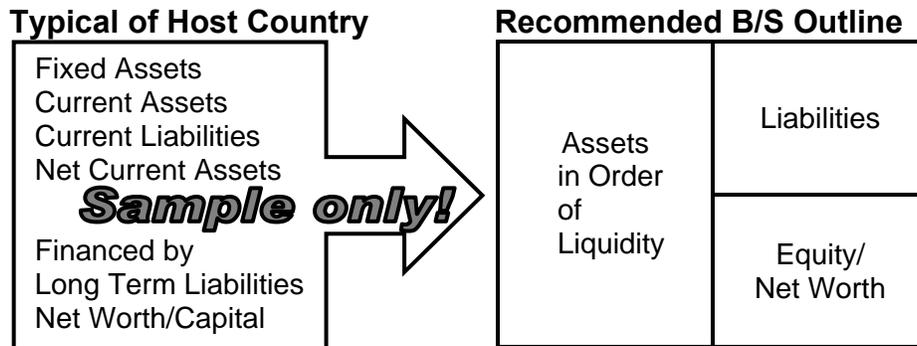
28. (1 minute) Close the session and link to the next by saying that now that the group knows what they will produce, it's time to start back at the beginning to see how they will get there.

If there are more questions about these formats, invite participants to write them on the “Questions” flipchart and address them later in the course as they build up the accounting information used to create these statements.

Trainer Notes

- For the Balance Sheet flipchart exercise, use the following sample format:

ELEMENTS OF A BALANCE SHEET



- The example on the left above is for East Africa; please choose an example from your own country.

Technical Notes

Why Are We Interested in Financial Statements?*

Additional information can be found in the FRAME document, pages 9–37.

Answer: Financial information, as expressed in the terminology of accounting, provides an understanding of what is going on financially in the organization. Financial statements allow managers to sort through the copious information generated by an organization, and to organize it into meaningful formats. These statements provide essential information that allow managers to choose those actions that will redirect the organization's activities to be more consistent with the mission and objectives of the business plan.

Balance Sheet: snapshot of financial position

Income Statement: revenue and expenses incurred over a specific period of time
(like a movie)

Cash Flow Statement: summarizes the cash flow of the organization over a specific period of time

Portfolio Report: summary statement of loans outstanding, including an aging report of delinquent loans

The Balance Sheet is a snapshot of the organization's financial position at a specific point in time. Therefore it is "static." All amounts are cumulative since the organization began. The income statement, by comparison, portrays the events that have occurred between the dates of two balance sheets.

Why do we call this the "Balance" Sheet? What elements must balance on the Balance Sheet?

Answer: 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.

On a Balance Sheet: $\text{Assets} = \text{Liabilities} + \text{Equity}$

THE BALANCE SHEET: ASSETS

Assets represent what is owned by the organization or owed to it. Every asset (other than cash) is either an account receivable (cash owed to the organization) or is expected to be converted to cash, either directly through its sale or indirectly through the economic benefits it provides to an organization.

*Portions of this section are taken from Principles and Practices of Financial Management, Women's World Banking, New York, 1994 and from Joanna Ledgerwood and Kerri Moloney, Financial Management Training for Microfinance Organisations: Accounting Study Guide, for Calmeadow: Pact Publications, New York, 1996.

For example, a client may purchase potatoes for resale. The potatoes become her “inventory” (asset), which is sold and turned into cash.

Inventory →→→→→→→→→→ Cash

Suppose the client was a tailor and purchased a sewing machine. The sewing machine is an asset acquired because of the future economic benefit—clothing available for sale for cash.

Sewing Machine →→→→→→→→→→ Economic Benefits

In the future, the tailor may sell her sewing machine. In this case, the sewing machine is inventory that when sold is turned into cash.

Sewing Machine →→→→→→→→→→ Cash

Common examples of assets of an MFI are cash, outstanding loan portfolio, investments, equipment, and motorcycles.

Portfolio →→→→→→→→→→ Cash

Investments →→→→→→→→→→ Cash

Equipment →→→→→→→→→→ Economic Benefits

Motorcycles →→→→→→→→→→ Economic Benefits

General points about assets:

- Assets can be understood as **what an organization has**; that is, **the resources in which it has invested**.
- It is important to recognize that **assets, with the exception of cash, represent uses of funds**. An MFI invests a portion of its funds in assets that will contribute to its ability to carry out its activities.
- From a financial perspective, these **assets represent an investment for the generation of future receipts of cash**. For example, one lends out funds with the expectation that the funds will be repaid with interest; the loan portfolio is an investment of cash that is expected to be returned with additional interest income. Investing in a piece of equipment enables the organization to carry out its activities, which in turn generate cash. Purchasing a vehicle for credit officers allows them to evaluate, disburse, monitor, and collect loans and the related income; the assets represent an investment for the future receipt of cash.
- Assets are either **short-term or long-term**. Short-term, or current, assets are those that will be converted into cash in the normal course of business within the next 12 months, such as loans in the portfolio that will be paid back in full within a year. Long-term assets are those in which the organization must keep its funds invested for more than a year, such as equipment.
- Assets are generally **listed in order of their liquidity**—that is, how readily they can be converted to cash.

THE BALANCE SHEET: LIABILITIES AND EQUITY

Liabilities

Liabilities are what the organization owes to other parties either in the form of a loan that it received or obligations to provide goods and services at a later date. Liabilities are debts the organization has incurred that remain outstanding as of the date of the Balance Sheet. These debts usually require payment of assets (cash) or the rendering of services or delivering of products.

Trainer Instructions

For example, an organization incurs a liability when it buys services or products for its operations and agrees to pay cash at a later date. This is called an Account Payable. If an organization borrows money, it incurs an obligation to repay the loan. The liability created is called a Loan Payable.

Accounts Payable	→→→→→→→	Pay Cash
Loans Payable	→→→→→→→	Pay Cash

An organization also incurs a liability if it receives payment for a product or service that will be delivered at a later date.

Receipt in Advance	→→→→→→→	Deliver Products
Receipt in Advance	→→→→→→→	Provide Services

Liabilities are generally recognized (reported) only after a transaction has taken place. The receipt of cash or other assets by the organization in exchange for a promise to pay cash or deliver products or services in the future indicates that a transaction needs to be recorded.

In the sewing machine example, assume the tailor borrowed \$1,000 to purchase the machine. Once she received the funds, she incurred a liability of \$1,000.

General points about liabilities:

- In the same way that assets represent what an organization has, liabilities are what it owes.
- Liabilities are the debts that the organization has incurred and still must pay as of the date of the balance sheet. Examples include:
 - Savings deposited by clients/members
 - Principal balances due to banks for borrowed funds and accrued interest that has not been paid
 - Salaries earned but not yet paid to employees
- Liabilities are an important source of funds for an organization. For example, an MFI will often make use of borrowed funds from another financial institution, lending this money to its clients at a higher interest rate than it has to pay on the borrowed funds. The borrowed funds are a debt to the organization, and in this sense represent a requirement, or a commitment, for future cash disbursements. Without this source of borrowed funds, the MFI would have lower assets, or less in its loan portfolio, and therefore less invested for the generation of future cash receipts. Similarly, savings collected from clients or members serve to both fund the assets of the MFI and provide a service to the clients.

Equity

Equity is equal to assets less liabilities. This difference represents the organization’s net worth. It is obtained by rewriting the basic equation:

$$\begin{array}{rcccl}
 \text{ASSETS} & = & \text{LIABILITIES} & + & \text{EQUITY} \\
 & & \text{OR} & & \\
 \text{ASSETS} & - & \text{LIABILITIES} & = & \text{EQUITY}
 \end{array}$$

Unlike liabilities, equity does not have to be repaid. It therefore represents the value of the organization.

Equity is comprised of three main categories: contributions from donors (either transferred from the I/S or booked directly into equity), the accumulated surplus or deficit of income over

operating expenses (also called profit/loss), and other capital accounts including net nonoperational income. See Trainer Notes on IAS 20 for much more detail on this topic!

A balance sheet shows what the overall financial position of an organization is at a particular point in time. It shows what the enterprise has—its assets—and how those assets were funded: from what it owes—its liabilities—and what it owns—its equity. It is the financial statement that is used to evaluate how well an organization manages its financial resources.

The Importance of Leverage

Leverage refers to the extent to which an MFI borrows money relative to its amount of equity. In other words, it answers the question: For every dollar of funds owned by the MFI, how many additional dollars are mobilized by borrowing or collecting savings? It is widely recognized that donor grants and subsidized loans are limited and only those MFIs able to leverage their equity will attain significant outreach. However, in order to leverage equity effectively, MFIs must be sustainable.

An MFI whose **assets have been financed largely by debt or client savings** will have high liabilities relative to its equity, thereby incurring high financing expenses. On the other hand, an MFI that has a **high amount of equity relative to its liabilities** may not be making sufficient use of available external sources of funds, such as a bank loan or savings deposits. In this case, the MFI might want to consider increasing its liabilities in order to increase its cash-generating assets.

THE INCOME STATEMENT

- Records revenue and expenses over a certain time period (like a movie)
- Shows profit or loss at end of that period (which flows to the equity section of the Balance Sheet)
- Starts at zero for each period (in contrast to the Balance Sheet, which is cumulative since the beginning the organization's operations)

The income statement reflects a dynamic picture of what is earned by or contributed to the activities of the institution, the total costs involved in carrying out those activities, and whether there is a net surplus or deficit (a profit or loss) for the period under consideration.

Revenue

- Revenue is the amount earned by an MFI, such as:
 - Interest and fees charged to clients
 - Revenue earned on investments
- Revenue is referred to as operating income.
- Amounts received as grants from funders in support of the MFI's activities are not recorded as operating income and are thus included “below the line” at the bottom of the income statement. Grant revenue is deemed as unearned as it is not paid as direct compensation for services provided.

Expenses

- Expenses are broken down into various categories, such as personnel, rent, and transportation.
- Expenses are also often classified as direct or indirect. Direct expenses are those that relate to a particular activity. For example, salaries for credit officers are direct expenses of

the credit department or the branches, just as space rental for a training seminar is a direct expense of the training program.

- Indirect expenses, also referred to as overhead, are those expenses that cannot be traced exclusively to a single department. They are generally expenses incurred in the head office. For example, the executive director's salary and the office rent are not directly related to one particular program, but are incurred as part of the overhead required to support all departments.
- It is important to note that certain items are recorded as expenses even though they are noncash items. For example, depreciation of fixed assets is recorded on the income statement, as is the provision for loan impairment.

CASH FLOW STATEMENT

The main objective of the Cash Flow Statement is to show where an institution's cash is coming from and how it is being used over a period of time.

Many MFIs include this statement as an integral part of their standard financial statements. The Cash Flow Statement has gone by many different names in the past, including the Statement of Changes in Financial Position and the Sources and Uses of Funds. Now it is internationally accepted as being called the Cash Flow Statement.

Though the name and the **format will differ from country to country**—and sometimes, in fact, **from accountant to accountant** within the same country—this report **shows the changes in cash position from one balance sheet to the next**.

For an analysis of an organization's financial health, the statement of cash flows **can be even more important than the balance sheet or the income statement**.

- The balance sheet and income statement are **accounting reports**. Their figures can be **influenced by management's choices** regarding accounting policies, such as how quickly assets are depreciated, when loans are written off, or how inventory is valued.
- A **statement of cash flows cannot be changed by any accounting policy. It reflects the ability of the enterprise to generate cash**. Bills cannot be paid, nor loans disbursed, from profits or accumulated surplus: cash is cash. Thus, an organization's ability to meet its financial obligations and to carry out its activities is based fundamentally on its cash flow.

Cash Flow Statements classify the cash flows into operating, investing, and financing activities, so they provide more useful information about the types of activities that are generating and using the cash. Operating activities include providing services—the income-earning activities. Investing activities include expenditures that have been made for resources intended to generate future income and cash flows. Financing activities include obtaining resources from and returning resources to the owners, obtaining resources through borrowings (short-term or long-term), as well as donor funds.

The Direct Method

The direct method starts from cash receipts and cash payments and then shows all the major classes of cash receipts and cash payments. This method is very straightforward and recommended by IAS.

The Indirect Method

Starting with the net surplus from the income statement, the statement of cash flows adds back those expense items in the income statement that do not represent outflows of cash.

Then other sources and uses of cash—not reflected in the income statement—are factored in. These other sources and uses are determined by the differences in assets and liabilities between the opening and ending balance sheets.

In either method, the loan portfolio can be classified as either an operating or investing activity. IAS recommends financial institutions classify lending as an operating activity.

Also in either method, savings can be classified as either an operating or financing activity. IAS recommends financial institutions classify savings as an operating activity.

The net cash flow in both methods gives the net change in cash during the year. This figure should be the same as **the difference between the cash amount in the opening balance sheet and the figure for cash in the ending balance sheet.**

Key questions the cash flow answers are:

- What are the major amounts, timing, and nature of cash flows over a series of statements and how much control does the MFI have over them?
- How does the financial performance of this MFI compare with similar institutions once all the different accounting conventions, regional formats, and so forth are removed?
- How did the institution do when its cash flow projections are compared to the actual in the Cash Flow Statement? (Then, how can we use the actual cash flow to feed back into the projections?)

PORTFOLIO REPORT

What information should be included on a Portfolio Report?

- 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 and can give valuable insight into an MFI's sustainability.

Trainer Notes on IAS 7 Statement of Cash Flows

The objective of IAS 7 is to require the presentation of information about the historical changes in cash and cash equivalents of an enterprise by means of a statement of cash flows, which classifies cash flows during the period according to operating, investing, and financing activities.

IAS 7 sets out very clearly the information that is needed about the changes in cash and cash equivalents of an enterprise during the period and how to categorize them in order to achieve these objectives.

The statement of cash flows analyzes changes in cash and cash equivalents during a period. Cash and cash equivalents comprise cash on hand and demand deposits, together with short-term, highly liquid investments that are readily convertible to a known amount of cash, and that are subject to an insignificant risk of changes in value.

“Information about the cash flows of an enterprise is useful in providing users of financial statements with a basis to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilize those cash flows.”

PRESENTATION OF THE STATEMENT OF CASH FLOWS

Cash flows must be analyzed between operating, investing, and financing activities. [IAS 7.10]

Key principles specified by IAS 7 for the preparation of a statement of cash flows are as follows:

- **Operating activities** are the main revenue-producing activities of the enterprise that are not investing or financing activities, so operating cash flows include cash received from customers and cash paid to suppliers and employees. [IAS 7.14]

Application to microfinance: IAS 7 is clear that the cash flows from the loan portfolio should be classified as an operating activity. This is particularly applicable to microfinance because the loans are very short-term and so are clearly part of the organization’s regular operations. (This might be seen to be in contrast to larger financial institutions that make much longer-term loans). IAS 7 Appendix 2 also shows that financial institutions should classify savings as an operating activity.

- **Investing activities** are the acquisition and disposal of long-term assets and other investments that are not considered to be cash equivalents. [IAS 7.6]

Application to microfinance: IAS 7 point 14 is clear that loans made by a financial institution are not an investing activity. As noted above, IAS 7 point 6 specifically states that lending is an operating activity for financial institutions. This would also apply to MFIs. Many financial institutions include the loan portfolio under investing. Their reason is that the loan portfolio is an asset upon which “expenditures have been made for resources intended to generate future income and cash flows.” If you look at the cash flow statements of many major international banks, the loan portfolio is an investing activity. This makes some sense for large financial institutions that have a significant percentage of their loan portfolio in longer-term loans. It is more difficult to make this argument for microfinance institutions making small short-term loans, but some still do so.

- **Financing activities** are activities that alter the equity capital and borrowing structure of the enterprise. [IAS 7.6]

Application to microfinance: Financing activities include obtaining resources from and returning resources to the owners and also includes obtaining resources through borrowings (short-term or long-term) and repayments of the amounts borrowed.

One of the major sources of financing for an MFI is donor funds. Even though they are not mentioned specifically in IAS 7, donor funds result in changes in the size and composition of the MFI's equity and so are always included under financing activities.

- Interest and dividends received and paid may be classified as operating, investing, or financing cash flows, provided that they are classified consistently from period to period. [IAS 7.31]
- Cash flows arising from taxes on income are normally classified as operating, unless they can be specifically identified with financing or investing activities. [IAS 7.35]
- For operating cash flows, the direct method of presentation is encouraged, but the indirect method is acceptable. [IAS 7.18]

HOW DO YOU REPORT CASH FLOWS?

IAS 7 point 18 states:

An enterprise should report cash flows from operating activities using either:

- (a) the direct method, whereby major classes of gross cash receipts and gross cash payments are disclosed; or**
- (b) the indirect method, whereby net profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows.**

Enterprises are encouraged to report cash flows from operating activities using the direct method. The direct method provides information that may be useful in estimating future cash flows and that is not available under the indirect method.

The **direct method** shows the items that affected cash flow and the magnitude of those cash flows. Cash received from, and cash paid to, specific sources (such as customers and suppliers) are presented.

An important advantage of the direct method is that it permits the user to better comprehend the relationships between the company's net income (or loss) and its cash flows. For example, payments of expenses are shown as cash disbursements and are deducted from cash receipts. In this way, the user is able to recognize the cash receipts and cash payments for the period. (If you need to find formulas for conversion of various income statement amounts from the accrual basis to cash basis for direct method presentation, they are available in Epstein and Mirza, IAS 2001 Interpretation and Application.)

The **indirect method** (sometimes referred to as the reconciliation method) is the most widely used means of presentation of cash from operating activities, primarily because it is easier to prepare. It focuses on the differences between net operating results and cash flows. The indirect format begins with net income (or loss), which can be obtained directly from the income statement. It then adds or deducts revenue and expense items that do not affect cash to work backwards and arrive at net cash provided by operating activities. For example,

depreciation and amortization are added back because these expenses reduce net income without affecting cash.

The statement of cash flows prepared using the indirect method emphasizes changes in the components of most current asset and current liability accounts. Changes in inventory, accounts receivable, and other current accounts are used to determine the cash flow from operating activities. Although most of these adjustments are obvious (most preparers simply relate each current asset or current liability on the balance sheet to a single caption in the income statement), some changes require more careful analysis. For example, it is important to compute cash collected from sales by relating sales revenue to both the change in accounts receivable and the change in the related bad debt allowance account.

The drawback to the indirect method involves the user's difficulty in comprehending the information presented. This method does not show from where the cash was received or to where the cash was paid. Only adjustments to accrual-basis net income are shown. In some cases the adjustments can be confusing. For instance, the sale of equipment resulting in an accrual-basis loss would require that the loss be added to net income to arrive at net cash from operating activities. (The loss was deducted in the computation of net income, but because the sale will be shown as an investing activity, the loss must be added back to net income.)

Although the indirect method is more commonly used in practice, the IAS encourages enterprises to use the direct method. As pointed out by IAS 7, a distinct advantage of the direct method is that it provides information that may be useful in estimating or projecting future cash flows, a benefit that is clearly not achieved when the indirect method is utilized instead.

Application to microfinance: Most microfinance institutions that prepare cash flow statements use the national standards. In the Accounting course, both the direct and indirect methods are presented. This will allow MFIs to choose the format that is most helpful for them for internal management decision making.

Net Reporting by Financial Institutions

The emphasis in the statement of cash flows is on gross cash receipts and cash payments. For instance, reporting the net change in bonds payable would obscure the financing activities of the entity by not disclosing separately cash flows from issuing bonds and cash outflows from retiring bonds.

IAS 7 points 22–24: cash flows from investing and financing activities should be reported gross by major class of cash receipts and major class of cash payments except for the following cases, which may be reported on a net basis. [IAS 7.22–24] **These include:**

- Cash receipts and payments on behalf of customers (for example, receipt and repayment of demand deposits by banks, and receipts collected on behalf of and paid over to the owner of a property)
- Cash receipts and payments for items for which the turnover is quick, the amounts are large, and the maturities are short, generally less than three months (for example, charges and collections from credit card customers, and purchase and sale of investments)
- Cash receipts and payments relating to fixed maturity deposits
- Cash advances and loans made to customers and repayments thereof

Application to microfinance: Rather than follow this point of IAS 7, some MFIs record all loan disbursements and loan payment receipts separately in their cash flow statement. This is not wrong, although it is not necessary. To effectively compare the cash flows of MFIs that provide the gross cash flows with either an MFI that provides the net cash flow from the loan portfolio or even with another MFI that provides the gross cash flows, the reader needs to be aware of two key points. Any MFI that chooses to show the gross cash flows will show huge cash flows because cash is the business of microfinance. An MFI's business is to lend cash and be paid back! It is not the MFI's unique ability to generate cash, it is the nature of the business. The term of the loans will directly affect the size of the cash flows: the shorter the term, the greater the cash flows.

Assessing the Cash Flow Statement

One purpose of the Cash Flow Statement is to show readers what judgment calls and financial decisions the business's managers made during the period. Of course, management decisions are always subject to second-guessing and criticizing, and financial statements do not reveal the pressures faced by the managers during the period. Maybe they made the best decisions possible, given the circumstances. Maybe not.

Application to microfinance: Four of the questions that the cash flow helps answer (as outlined above) are:

1. What are the major amounts, timing, and nature of cash flows over a series of statements and how much control does the institution have over them?
2. How does the present value of this institution's cash flow compare to similar institutions?
3. How does the financial performance of this institution compare with similar institutions once all the different accounting conventions, regional formats, and so forth are removed?
4. How did the institution do when its cash flow projections are compared to the actual in the Cash Flow Statement? (Then, how can we use the actual cash flow to feedback into the projections?)

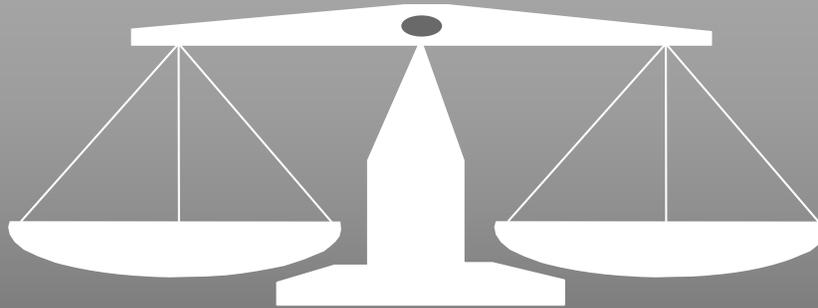
Answering these questions for MFIs is a good place to start. For example, one of the ways that some analysts find it useful to begin to answer question (a) is to do a percentage distribution of the cash flows (like the balance sheet percentage distribution in the Financial Analysis course). Another question some analysts ask is: Does this MFI have enough cash to operate with? You can't answer that question by just examining the Cash Flow Statement, or any one of the financial statements, for that matter. Every MFI, like every business, needs cash to protect against unexpected developments and to take advantage of unexpected opportunities. If you were the manager of an MFI, how much working cash balance would you want? Not an easy question to answer! You need to look at all three primary financial statements—the income statement and the balance sheet as well as the Cash Flow Statement—to get the big picture of a business's financial health.

Overheads

OVERHEADS FOR SESSION 3 ARE CONTAINED IN POWERPOINT FILE ENTITLED "CGAP ACCOUNTING OVERHEADS_1."

A balance sheet is a listing of

A3-01



ASSETS

What the business
HAS (or is OWNED)

=

LIABILITIES

What the business
OWES to others

+

EQUITY

What has been invested
in the business

cumulative information up to one point in time

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Sample Format for a Balance Sheet

A3-02

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 Network 2005.

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Effects of Transactions on the Balance Sheet

A3-O3a

	ASSETS				
	Cash	Gross Loan Portfolio	Loans Past Due	Other Investments	Fixed Assets
i. Purchase land on credit					↑
ii. Disburse loan to client	↓	↑			
iii. Purchase motorcycles for staff—pay half cash; half short-term credit	↓				↑
iv. Purchase office furniture on short-term credit					↑
v. Take loan from bank at commercial rate of interest (> 1 year)	↑				
vi. Purchase a Treasury Bill for cash	↓			↑	
vii. Client withdraws savings	↓				
viii. A current loan becomes past due		↓	↑		
ix. Paid-out interest earned to clients on their savings accounts	↓				

Source: Adapted from Joanna Ledgerwood and Kerri Moloney, Accounting: Study Guide; Calmeadow, Toronto Canada, 1996

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Effects of Transactions on the Balance Sheet *(continued)*

A3-O3b

	LIABILITIES				+	EQUITY
	Short-term Borrowing	Demand Deposits	Long-term Borrowings	Accounts Payable and Other ST Liabilities		Equity
i. Purchase land on credit			↑			
ii. Disburse loan to client						
iii. Purchase motorcycles for staff—pay half cash; half short-term credit	↑					
iv. Purchase office furniture on short-term credit	↑					
v. Take loan from bank at commercial rate of interest (> 1 year)			↑			
vi. Purchase a Treasury Bill for cash						
vii. Client withdraws savings		↓				
viii. A current loan becomes past due						
ix. Paid-out interest earned to clients on their savings accounts				↓		

Source: Adapted from Joanna Ledgerwood and Kerri Moloney, Accounting: Study Guide; Calmeadow, Toronto Canada, 1996

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Sample Format for an Income Statement

A3-O4

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 Nonoperating Income/(Expense)
Financial Expense on Funding Liabilities	Nonoperating Revenue
Interest and Fee Expense on Deposits	Nonoperating Expense
Interest and Fee Expense on Borrowings	Net Income (Before Taxes and 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 Network 2005.

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MicroFund Inc. Income Statement

A3-O5a

For the period ended December 31, 2007

Financial Revenue		6,200
Financial Revenue from Loan Portfolio		
Interest on Loan Portfolio	4,500	
Fees and Commissions on Loan Portfolio	1,500	
Financial Revenue from Investments	200	
Other Operating Revenue		
Financial Expense		620
Financial Expense on Funding Liabilities	620	
Interest and Fee Expense on Deposits	20	
Interest and Fee Expense on Borrowings	600	
Other Financial Expense	0	
Net Financial Income		5,580
Impairment Losses on Loans		1,000
Provision for Loan Impairment	1,000	
Value of Loans Recovered	0	

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MicroFund Inc. Income Statement *(continued)*

A3-O5b

Operating Expense		4,390
Personnel Expense	2,000	
Administrative Expense	2,390	
Depreciation and Amortization Expense	110	
Other Administrative Expense	2,280	
Net Operating Income		190
Net Nonoperating Income/(Expense)		
Nonoperating Revenue		
Nonoperating Expense		
Net Income (Before Taxes and Donations)		
Taxes		
Net Income (After Taxes and Before Donations)		
Donations		2,000
Donations for Loan Capital		
Donations for Operating Expense		
Net Income (After Taxes and Donations)		2,190

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Direct Method – Cash Flow Statement (SEEP Format)

A3-O6a

Ref.	Term	
CASH FLOWS FROM OPERATING ACTIVITIES		
C1	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	
C2	Cash Received from Interest on Borrowings	
C3	Cash Received as Other Operating Revenue	
C4	Value of Loans Repaid	
C5	(Cash Paid for Financial Expenses on Funding Liabilities)	
C6	(Cash Paid for Other Financial Expenses)	
C7	(Cash Paid for Operating Expenses)	
C8	(Cash Paid for Taxes)	
C9	(Value of Loans Disbursed)	
C10	Net (Purchase)/Sale of Trade Investments	
C11	Deposits/(Withdrawals) from Clients	
C12	Cash Received/(Paid) for Other Operating Assets and Liabilities	
C13	Net Cash from Operating Activities	

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A3-O6b

Direct Method – Cash Flow Statement *(continued)*

Ref.	Term	
CASH FLOWS FROM INVESTING ACTIVITIES		
C14	Net (Purchase)/Sale of Other Investments	
C15	Net (Purchase)/Sale of Fixed Assets	
C16	Net Cash from Investing Activities	
CASH FLOWS FROM FINANCING ACTIVITIES		
C17	Cash Received /(Repaid) for Short- and Long-term Borrowings	
C18	Issuance/(Repurchase) of Paid-in Capital	
C19	(Dividends Paid)	
C20	Donated Equity	
C21	Net Cash from Financing Activities	
C22	Net Cash Received/(Paid) for Non-Operating Activities	
C23	Net Change in Cash and Due from Banks	
C24	Cash and Due from Banks at the Beginning of the Period	
C25	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	
C26	Cash and Due from Banks at the End of the Period	

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A3-O6c

Indirect Method – Cash Flow Statement

Ref.	Term	
CASH FLOWS FROM OPERATING ACTIVITIES		
C27	Net Operating Income	
C28	Depreciation and Amortization	
C29	Impairment Losses on Loans	
C30	(Cash Paid for Taxes)	
C31	Value of Loans Repaid	
C32	(Value of Loans Disbursed)	
C33	(Increase)/Decrease in Trade Investments	
C34	Increase/(Decrease) in Deposits	
C35	(Increase)/Decrease in Receivables and Other Assets	
C36	Increase/(Decrease) in Payables and Other Liabilities	
C37	Net Cash from Operating Activities	

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Indirect Method – Cash Flow Statement (continued)

Ref.	Term	
CASH FLOWS FROM INVESTING ACTIVITIES		
C38	(Increase)/Decrease in Other Investments	
C39	(Increase)/Decrease in Book Value of Gross Fixed Assets	
C40	Net Cash from Investing Activities	
CASH FLOWS FROM FINANCING ACTIVITIES		
C41	Increase/(Decrease) in Short- and Long-term Borrowings	
C42	Increase/(Decrease) in Paid-in Capital	
C43	(Dividends Paid)	
C44	Donated Equity	
C45	Net Cash from Financing Activities	
C46	Net Cash Received/(Paid) for Nonoperating Activities	
C47	Net Change in Cash and Due from Banks	
C48	Cash and Due from Banks at the Beginning of the Period	
C49	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	
C50	Cash and Due from Banks at the End of the Period	

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Sample Portfolio and Activity Report

Measuring Performance SEEP Framework

Ref.	X-Ref.	Account Name	From 1/1/2004 to 12/31/2004		From 1/1/2003 to 12/31/2003	
			Number of Loans	Value of Portfolio	Number of Loans	Value of Portfolio
Portfolio Activity						
P1, P2	C9, C32	Loans Disbursed	32,148	159,603,437	26,990	121,456,864
P3, P4	B4	Loans Outstanding	14,587	56,609,309	11,183	34,701,961
Movement in Impairment Loss Allowance						
P5	B5	Impairment Loss Allowance, Beginning of Period		1,230,473		933,150
P5	B5	Impairment Loss Allowance, End of Period		1,270,673		1,230,473
P6, P7		Loans Written Off	147	448,954	0	0
P8	I14	Provision for Loan Impairment		489,154		297,368
P9, P10		Loans in Recovery or Recovered	14	49,172	53	134,506

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A3-07b

Sample Portfolio and Activity Report *(continued)*

Portfolio Aging Schedule					
		Number of Loans	Value of Portfolio	Number of Loans	Value of Portfolio
P11, P12	Current Portfolio	8,729	51,155,003	0	
P13, P14	Portfolio-at-Risk 1 to 30 days	2,110	2,224,372	10	222,437
	Portfolio-at-Risk 31 to 60 days	2,022	1,112,186	25	278,047
	Portfolio-at-Risk 61 to 90 days	927	556,093	50	278,047
	Portfolio-at-Risk 91 to 180 days	556	166,828	75	125,121
	Portfolio-at-Risk more than 180 days	204	244,681	100	244,681
	P15, P16	Renegotiated Portfolio 1 to 30 days	28	55,609	50
Renegotiated Portfolio > 30 days		11	94,536	100	94,536
P3, P4	B4 Loans Outstanding	14,587	56,609,309		1,270,673

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A3-08

Sample Nonfinancial Data Report

Measuring Performance (SEEP Framework)

Account Name		As of 12/31/2004
Operational Data		
N1	Number of Active Clients	14,658
N2	Number of New Clients during Period	7,584
N3	Number of Active Borrowers	13,472
N4	Number of Voluntary Depositors	752
N5	Number of Deposit Accounts	752
N6	Number of Savers Facilitated	13,005
N7	Number of Personnel	115
N8	Number of Loan Officers	75
Macroeconomic Data		
N9	Inflation Rate	5.6%
N10	Market Rate for Borrowing	9.5%
N11	Exchange Rate (Local Currency: U.S. Dollar, Euro, or other)	48.0
N12	Gross National Income (GNI) per capita	12,000

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Indirect Method – Cash Flow Statement (continued)

Ref.	Term	
CASH FLOWS FROM INVESTING ACTIVITIES		
C38	(Increase)/Decrease in Other Investments	
C39	(Increase)/Decrease in Book Value of Gross Fixed Assets	
C40	Net Cash from Investing Activities	
CASH FLOWS FROM FINANCING ACTIVITIES		
C41	Increase/(Decrease) in Short- and Long-term Borrowings	
C42	Increase/(Decrease) in Paid-in Capital	
C43	(Dividends Paid)	
C44	Donated Equity	
C45	Net Cash from Financing Activities	
C46	Net Cash Received/(Paid) for Nonoperating Activities	
C47	Net Change in Cash and Due from Banks	
C48	Cash and Due from Banks at the Beginning of the Period	
C49	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	
C50	Cash and Due from Banks at the End of the Period	

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Sample Portfolio and Activity Report

Measuring Performance SEEP Framework

Ref.	X-Ref.	Account Name	From 1/1/2004 to 12/31/2004		From 1/1/2003 to 12/31/2003	
			Number of Loans	Value of Portfolio	Number of Loans	Value of Portfolio
Portfolio Activity						
P1, P2	C9, C32	Loans Disbursed	32,148	159,603,437	26,990	121,456,864
P3, P4	B4	Loans Outstanding	14,587	56,609,309	11,183	34,701,961
Movement in Impairment Loss Allowance						
P5	B5	Impairment Loss Allowance, Beginning of Period		1,230,473		933,150
P5	B5	Impairment Loss Allowance, End of Period		1,270,673		1,230,473
P6, P7		Loans Written Off	147	448,954	0	0
P8	I14	Provision for Loan Impairment		489,154		297,368
P9, P10		Loans in Recovery or Recovered	14	49,172	53	134,506

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A3-O11

???So What's Different???

➤ INCOME STATEMENT

Donor funds are treated “below the line.”

Donor money is recorded after Net Operating Profit.

➤ BALANCE SHEET

There are three separate sources of equity from the Income Statement:

Retained earnings/losses – current year

Donations – current year

Other capital accounts – including net nonoperational income

This is important because it allows one to see over time the proportion of equity that is from the MFI itself versus the amounts contributed by donors.

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A3-O12

Two Ways MFIs Treat Cash Donations

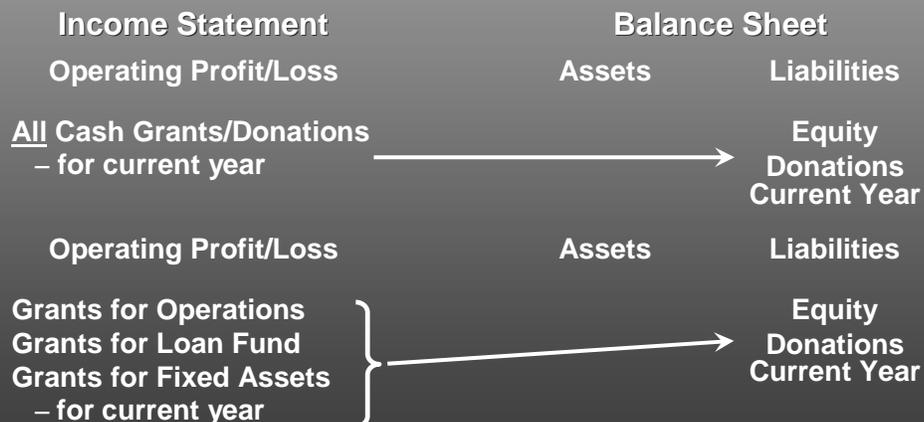
Goals: 1. Grants are separated from operating income

2. Grants are fully disclosed in equity

IAS 20 Recommends Income Approach

Considerations: Where to record them

When to record them



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Handouts

Balance Sheet

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

Effects of Transactions on the Balance Sheet – Exercise

For the following transactions, show how these affect the Balance Sheet by drawing an up arrow ↑ to show an increase in the account(s) affected and a down arrow ↓ to show a decrease.

	ASSETS								LIABILITIES				+		EQUITY	
	Cash	Gross Loan Portfolio	Loans Past Due	Other Investments	Fixed Assets	Short-term Borrowings	Demand Deposits	Long-term Borrowings	Interest Payable on Funding Liabilities							
i. Purchase land on credit																
ii. Disburse loan to client																
iii. Purchase motorcycles for staff—pay half cash; half short-term credit																
iv. Purchase office furniture on short-term credit																
v. Take loan from bank at commercial rate of interest (> 1 year)																
vi. Purchase a Treasury Bill for cash																
vii. Client withdraws savings																
viii. A current loan becomes past due																
ix. Paid-out interest earned to clients on their savings accounts																

Effects of Transactions on the Balance Sheet – Answers

For the following transactions, show how these affect the Balance Sheet by drawing an up arrow ↑ to show an increase in the account(s) affected and a down arrow ↓ to show a decrease.

	ASSETS								LIABILITIES				+		EQUITY	
	Cash	Gross Loan Portfolio	Loans Past Due	Other Investments	Fixed Assets	Short-term Borrowings	Demand Deposits	Long-term Borrowings	Interest Payable on Funding Liabilities							
i. Purchase land on credit	↓				↑								↑			
ii. Disburse loan to client	↓	↑														
iii. Purchase motorcycles for staff—pay half cash; half short-term credit	↓				↑					↑						
iv. Purchase office furniture on short-term credit					↑					↑						
v. Take loan from bank at commercial rate of interest (> 1 year)	↑												↑			
vi. Purchase a Treasury Bill for cash	↓						↑									
vii. Client withdraws savings	↓										↓					
viii. A current loan becomes past due		↓	↑													
ix. Paid-out interest earned to clients on their savings accounts	↓															↓

Source: Adapted from Joanna Ledgerwood and Kerri Moloney; Accounting: Study Guide; Calmeadow, Toronto CANADA, 1996.

Income Statement

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

Income Statement – Answers

MicroFund Inc. INCOME STATEMENT For the period ended December 31, 2007		
Financial Revenue	6,200	
Financial Revenue from Loan Portfolio		
Interest on Loan Portfolio	4,500	
Fees and Commissions on Loan Portfolio income	1,500	
Financial Revenue from investments	200	
Other Operating Revenue		
Financial Expense	620	
Financial Expense on Funding Liabilities	620	
Interest and Fee Expense on Deposits	20	
Interest and Fee Expense on Borrowings	600	
Other Financial Expenses	0	
Net Financial Income		5,580
Impairment Losses on Loans		1,000
Provisions for Loan Impairment	1,000	
Value of Loans Recovered	0	
OPERATING EXPENSES:	4,390	
Personnel Expense	2,000	
Administrative Expense	2,390	
Depreciation and Amortization Expense	110	
Other Administrative Expense	2,280	
Net Operating Income		190
Net Nonoperating Income/(Expense)		
Net Income (Before Taxes and Donations)		
Taxes		
Net Income (After Taxes and Before donations)		
Donations		2,000
Net Income (After Taxes and Donations)		2,190

Direct Method – Cash Flow Statement (SEEP Format)

Ref.	Term	
CASH FLOWS FROM OPERATING ACTIVITIES		
C1	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	
C2	Cash Received from Interest on Borrowings	
C3	Cash Received as Other Operating Revenue	
C4	Value of Loans Repaid	
C5	(Cash Paid for Financial Expenses on Funding Liabilities)	
C6	(Cash Paid for Other Financial Expenses)	
C7	(Cash Paid for Operating Expenses)	
C8	(Cash Paid for Taxes)	
C9	(Value of Loans Disbursed)	
C10	Net (Purchase)/Sale of Trade Investments	
C11	Deposits/(Withdrawals) from Clients	
C12	Cash Received/(Paid) for Other Operating Assets and Liabilities	
C13	NET CASH FROM OPERATING ACTIVITIES	
CASH FLOWS FROM INVESTING ACTIVITIES		
C14	Net (Purchase)/Sale of Other Investments	
C15	Net (Purchase)/Sale of Fixed Assets	
C16	NET CASH FROM INVESTING ACTIVITIES	
CASH FLOWS FROM FINANCING ACTIVITIES		
C17	Cash Received/(Repaid) for Short- and Long-term Borrowings	
C18	Issuance/(Repurchase) of Paid-in Capital	
C19	(Dividends Paid)	
C20	Donated Equity	
C21	NET CASH FROM FINANCING ACTIVITIES	
C22	Net Cash Received/(Paid) for Nonoperating Activities	
C23	Net Change in Cash and Due from Banks	
C24	Cash and Due from Banks at the Beginning of the Period	
C25	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	
C26	Cash and Due from Banks at the End of the Period	

Indirect Method – Cash Flow Statement

Ref.	Term	
CASH FLOWS FROM OPERATING ACTIVITIES		
C27	Net Operating Income	
C28	Depreciation and Amortization	
C29	Impairment Losses on Loans	
C30	(Cash Paid for Taxes)	
C31	Value of Loans Repaid	
C32	(Value of Loans Disbursed)	
C33	(Increase)/Decrease in Trade Investments	
C34	Increase/(Decrease) in Deposits	
C35	(Increase)/Decrease in Receivables and Other Assets	
C36	Increase/(Decrease) in Payables and Other Liabilities	
C37	NET CASH FROM OPERATING ACTIVITIES	
CASH FLOWS FROM INVESTING ACTIVITIES		
C38	(Increase)/Decrease in Other Investments	
C39	(Increase)/Decrease in Book Value of Gross Fixed Assets	
C40	NET CASH FROM INVESTING ACTIVITIES	
CASH FLOWS FROM FINANCING ACTIVITIES		
C41	Increase/(Decrease) in Short- and Long-term Borrowings	
C42	Increase/(Decrease) in Paid-in Capital	
C43	(Dividends Paid)	
C44	Donated Equity	
C45	NET CASH FROM FINANCING ACTIVITIES	
C46	Net Cash Received/(Paid) for Non-Operating Activities	
C47	Net Change in Cash and Due from Banks	
C48	Cash and Due from Banks at the Beginning of the Period	
C49	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	
C50	Cash and Due from Banks at the End of the Period	

Sample Portfolio and Activity Report SEEP Framework

Ref.	X-Ref.	Account Name	From 1/1/2004 to 12/31/2004		From 1/1/2003 to 12/31/2003	
			Number of Loans	Value of Portfolio	Number of Loans	Value of Portfolio
Portfolio Activity						
P1, P2	C9, C32	Loans Disbursed	32,148	159,603,437	26,990	121,456,864
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P13, P14		Portfolio-at-Risk 61 to 90 days	927	556,093	50	278,047
		Portfolio-at-Risk 91 to 180 days	556	166,828	75	125,121
		Portfolio-at-Risk more than 180 days	204	244,681	100	244,681
P15, P16		Renegotiated Portfolio 1 to 30 days	28	55,609	50	27,805
		Renegotiated Portfolio > 30 days	11	94,536	100	94,536
P3, P4	B4	Loans Outstanding	14,587	56,609,309		1,270,673

Why Are We Interested in Financial Statements?*

Additional information can be found in the FRAME document, pages 9–37.

Answer: Financial information, as expressed in the terminology of accounting, provides an understanding of what is going on financially in the organization. Financial statements allow managers to sort through the copious information generated by an organization, and to organize it into meaningful formats. These statements provide essential information that allow managers to choose those actions that will redirect the organization's activities to be more consistent with the mission and objectives of the business plan.

Balance Sheet: snapshot of financial position

Income Statement: revenue and expenses incurred over a specific period of time (like a movie)

Cash Flow Statement: summarizes the cash flow of the organization over a specific period of time

Portfolio Report: summary statement of loans outstanding, including an aging report of delinquent loans

The Balance Sheet is a snapshot of the organization's financial position at a specific point in time. Therefore it is "static." All amounts are cumulative since the organization began. The income statement, by comparison, portrays the events that have occurred between the dates of two balance sheets.

Why do we call this the "Balance" Sheet? What elements must balance on the Balance Sheet?

Answer: 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.

On a Balance Sheet: $\text{Assets} = \text{Liabilities} + \text{Equity}$

THE BALANCE SHEET: ASSETS

Assets represent what is owned by the organization or owed to it. Every asset (other than cash) is either an account receivable (cash owed to the organization) or is expected to be converted to cash, either directly through its sale or indirectly through the economic benefits it provides to an organization.

*Portions of this section are taken from Principles and Practices of Financial Management, Women's World Banking, New York, 1994 and from Joanna Ledgerwood and Kerri Moloney, Financial Management Training for Microfinance Organisations: Accounting Study Guide, for Calmeadow: Pact Publications, New York, 1996.

For example, a client may purchase potatoes for resale. The potatoes become her “inventory” (asset), which is sold and turned into cash.

Inventory →→→→→→→→ Cash

Suppose the client was a tailor and purchased a sewing machine. The sewing machine is an asset acquired because of the future economic benefit—clothing available for sale for cash.

Sewing Machine →→→→→→→→ Economic Benefits

In the future, the tailor may sell her sewing machine. In this case, the sewing machine is inventory that when sold is turned into cash.

Sewing Machine →→→→→→→→ Cash

Common examples of assets of an MFI are cash, outstanding loan portfolio, investments, equipment, and motorcycles.

Portfolio →→→→→→→→ Cash

Investments →→→→→→→→ Cash

Equipment →→→→→→→→ Economic Benefits

Motorcycles →→→→→→→→ Economic Benefits

General points about assets:

- Assets can be understood as **what an organization has**; that is, **the resources in which it has invested**.
- It is important to recognize that **assets, with the exception of cash, represent uses of funds**. An MFI invests a portion of its funds in assets that will contribute to its ability to carry out its activities.
- From a financial perspective, these **assets represent an investment for the generation of future receipts of cash**. For example, one lends out funds with the expectation that the funds will be repaid with interest; the loan portfolio is an investment of cash that is expected to be returned with additional interest income. Investing in a piece of equipment enables the organization to carry out its activities, which in turn generate cash. Purchasing a vehicle for credit officers allows them to evaluate, disburse, monitor, and collect loans and the related income; the assets represent an investment for the future receipt of cash.
- Assets are either **short-term or long-term**. Short-term, or current, assets are those that will be converted into cash in the normal course of business within the next 12 months, such as loans in the portfolio that will be paid back in full within a year. Long-term assets are those in which the organization must keep its funds invested for more than a year, such as equipment.
- Assets are generally **listed in order of their liquidity** —that is, how readily they can be converted to cash.

THE BALANCE SHEET: LIABILITIES AND EQUITY

Liabilities

Liabilities are what the organization owes to other parties either in the form of a loan that it received or obligations to provide goods and services at a later date. Liabilities are debts the organization has incurred that remain outstanding as of the date of the Balance Sheet. These debts usually require payment of assets (cash) or the rendering of services or delivering of products.

For example, an organization incurs a liability when it buys services or products for its operations and agrees to pay cash at a later date. This is called an Account Payable. If an organization borrows money, it incurs an obligation to repay the loan. The liability created is called a Loan Payable.

Accounts Payable	→→→→→	Pay	Cash
Loans Payable	→→→→→	Pay	Cash

An organization also incurs a liability if it receives payment for a product or service that will be delivered at a later date.

Receipt in Advance	→→→→→	Deliver	Products
Receipt in Advance	→→→→→	Provide	Services

Liabilities are generally recognized (reported) only after a transaction has taken place. The receipt of cash or other assets by the organization in exchange for a promise to pay cash or deliver products or services in the future indicates that a transaction needs to be recorded.

In the sewing machine example, assume the tailor borrowed \$1,000 to purchase the machine. Once she received the funds, she incurred a liability of \$1,000.

General points about liabilities:

- In the same way that assets represent what an organization has, liabilities are what it owes.
- Liabilities are the debts that the organization has incurred and still must pay as of the date of the balance sheet. Examples include:
 - Savings deposited by clients/members
 - Principal balances due to banks for borrowed funds and accrued interest that has not been paid
 - Salaries earned but not yet paid to employees
- Liabilities are an important source of funds for an organization. For example, an MFI will often make use of borrowed funds from another financial institution, lending this money to its clients at a higher interest rate than it has to pay on the borrowed funds. The borrowed funds are a debt to the organization, and in this sense represent a requirement, or a commitment, for future cash disbursements. Without this source of borrowed funds, the MFI would have lower assets, or less in its loan portfolio, and therefore less invested for the generation of future cash receipts. Similarly, savings collected from clients or members serve to both fund the assets of the MFI and provide a service to the clients.

Equity

Equity is equal to assets less liabilities. This difference represents the organization's net worth. It is obtained by rewriting the basic equation:

$$\begin{aligned} \text{ASSETS} &= \text{LIABILITIES} + \text{EQUITY} \\ &\text{OR} \\ \text{ASSETS} - \text{LIABILITIES} &= \text{EQUITY} \end{aligned}$$

Unlike liabilities, equity does not have to be repaid. It therefore represents the value of the organization.

Equity is comprised of three main categories: contributions from donors (either transferred from the I/S or booked directly into equity), the accumulated surplus or deficit of income over

operating expenses (also called profit/loss), and other capital accounts including net nonoperational income. See Trainers Notes on IAS 20 for much more detail on this topic!

A balance sheet shows what the overall financial position of an organization is at a particular point in time. It shows what the enterprise has—its assets—and how those assets were funded: from what it owes—its liabilities—and what it owns—its equity. It is the financial statement that is used to evaluate how well an organization manages its financial resources.

The Importance of Leverage

Leverage refers to the extent to which an MFI borrows money relative to its amount of equity. In other words, it answers the question: For every dollar of funds owned by the MFI, how many additional dollars are mobilized by borrowing or collecting savings? It is widely recognized that donor grants and subsidized loans are limited and only those MFIs able to leverage their equity will attain significant outreach. However, in order to leverage equity effectively, MFIs must be sustainable.

An MFI whose **assets have been financed largely by debt or client savings** will have high liabilities relative to its equity, thereby incurring high financing expenses. On the other hand, an MFI that has a **high amount of equity relative to its liabilities** may not be making sufficient use of available external sources of funds, such as a bank loan or savings deposits. In this case, the MFI might want to consider increasing its liabilities in order to increase its cash-generating assets.

THE INCOME STATEMENT

- Records revenue and expenses over a certain time period (like a movie)
- Shows profit or loss at end of that period (which flows to the equity section of the Balance Sheet)
- Starts at zero for each period (in contrast to the Balance Sheet, which is cumulative since the beginning the organization's operations)

The income statement reflects a dynamic picture of what is earned by or contributed to the activities of the institution, the total costs involved in carrying out those activities, and whether there is a net surplus or deficit (a profit or loss) for the period under consideration.

Revenue

- Revenue is the amount earned by an MFI, such as:
 - Interest and fees charged to clients
 - Revenue earned on investments
- Revenue is referred to as operating income.
- Amounts received as grants from funders in support of the MFI's activities are not recorded as operating income and are thus included “below the line” at the bottom of the income statement. Grant revenue is deemed as unearned as it is not paid as direct compensation for services provided.

Expenses

- Expenses are broken down into various categories, such as personnel, rent, and transportation.

- Expenses are also often classified as direct or indirect. Direct expenses are those that relate to a particular activity. For example, salaries for credit officers are direct expenses of the credit department or the branches, just as space rental for a training seminar is a direct expense of the training program.
- Indirect expenses, also referred to as overhead, are those expenses that cannot be traced exclusively to a single department. They are generally expenses incurred in the head office. For example, the executive director's salary and the office rent are not directly related to one particular program, but are incurred as part of the overhead required to support all departments.
- It is important to note that certain items are recorded as expenses even though they are noncash items. For example, depreciation of fixed assets is recorded on the income statement, as is the provision for loan impairment.

CASH FLOW STATEMENT

The main objective of the Cash Flow Statement is to show where an institution's cash is coming from and how it is being used over a period of time.

Many MFIs include this statement as an integral part of their standard financial statements. The Cash Flow Statement has gone by many different names in the past, including the Statement of Changes in Financial Position and the Sources and Uses of Funds. Now it is internationally accepted as being called the Cash Flow Statement.

Though the name and the **format will differ from country to country**—and sometimes, in fact, **from accountant to accountant** within the same country—this report **shows the changes in cash position from one balance sheet to the next**.

For an analysis of an organization's financial health, the statement of cash flows **can be even more important than the balance sheet or the income statement**.

- The balance sheet and income statement are **accounting reports**. Their figures can be **influenced by management's choices** regarding accounting policies, such as how quickly assets are depreciated, when loans are written off, or how inventory is valued.
- A **statement of cash flows cannot be changed by any accounting policy**. It reflects **the ability of the enterprise to generate cash**. Bills cannot be paid, nor loans disbursed, from profits or accumulated surplus: cash is cash. Thus, an organization's ability to meet its financial obligations and to carry out its activities is based fundamentally on its cash flow.

Cash Flow Statements classify the cash flows into operating, investing, and financing activities, so they provide more useful information about the types of activities that are generating and using the cash. Operating activities include providing services—the income-earning activities. Investing activities include expenditures that have been made for resources intended to generate future income and cash flows. Financing activities include obtaining resources from and returning resources to the owners, obtaining resources through borrowings (short-term or long-term), as well as donor funds.

The Direct Method

The direct method starts from cash receipts and cash payments and then shows all the major classes of cash receipts and cash payments. This method is very straightforward and recommended by IAS.

The Indirect Method

Starting with the net surplus from the income statement, the statement of cash flows adds back those expense items in the income statement that do not represent outflows of cash.

Then other sources and uses of cash—not reflected in the income statement—are factored in. These other sources and uses are determined by the differences in assets and liabilities between the opening and ending balance sheets.

In either method, the loan portfolio can be classified as either an operating or investing activity. IAS recommends financial institutions classify lending as an operating activity.

Also in either method, savings can be classified as either an operating or financing activity. IAS recommends financial institutions classify savings as an operating activity.

The net cash flow in both methods gives the net change in cash during the year. This figure should be the same as **the difference between the cash amount in the opening balance sheet and the figure for cash in the ending balance sheet.**

Key questions the cash flow answers are:

- What are the major amounts, timing, and nature of cash flows over a series of statements and how much control does the MFI have over them?
- How does the financial performance of this MFI compare with similar institutions once all the different accounting conventions, regional formats, and so forth are removed?
- How did the institution do when its cash flow projections are compared to the actual in the Cash Flow Statement? (Then, how can we use the actual cash flow to feed back into the projections?)

PORTFOLIO REPORT

What information should be included on a portfolio report?

- 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 and can give valuable insight into an MFI's sustainability.

NOTES ON IAS 7 STATEMENT OF CASH FLOWS

The objective of IAS 7 is to require the presentation of information about the historical changes in cash and cash equivalents of an enterprise by means of a statement of cash flows, which classifies cash flows during the period according to operating, investing, and financing activities.

IAS 7 sets out very clearly the information that is needed about the changes in cash and cash equivalents of an enterprise during the period and how to categorize them in order to achieve these objectives.

The statement of cash flows analyzes changes in cash and cash equivalents during a period. Cash and cash equivalents comprise cash on hand and demand deposits, together with short-term, highly liquid investments that are readily convertible to a known amount of cash, and that are subject to an insignificant risk of changes in value.

“Information about the cash flows of an enterprise is useful in providing users of financial statements with a basis to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilize those cash flows.”

PRESENTATION OF THE STATEMENT OF CASH FLOWS

Cash flows must be analyzed between operating, investing, and financing activities. [IAS 7.10]

Key principles specified by IAS 7 for the preparation of a statement of cash flows are as follows:

- **Operating activities** are the main revenue-producing activities of the enterprise that are not investing or financing activities, so operating cash flows include cash received from customers and cash paid to suppliers and employees. [IAS 7.14]

Application to microfinance: IAS 7 is clear that the cash flows from the loan portfolio should be classified as an operating activity. This is particularly applicable to microfinance because the loans are very short-term and so are clearly part of the organization’s regular operations. (This might be seen to be in contrast to larger financial institutions that make much longer-term loans). IAS 7 Appendix 2 also shows that financial institutions should classify savings as an operating activity.

- **Investing activities** are the acquisition and disposal of long-term assets and other investments that are not considered to be cash equivalents. [IAS 7.6]

Application to microfinance: IAS 7 point 14 is clear that loans made by a financial institution are not an investing activity. As noted above, IAS 7 point 6 specifically states that lending is an operating activity for financial institutions. This would also apply to MFIs. Many financial institutions include the loan portfolio under investing. Their reason is that the loan portfolio is an asset upon which “expenditures have been made for resources intended to generate future income and cash flows.” If you look at the cash flow statements of many major international banks, the loan portfolio is an investing activity. This makes some sense for large financial institutions that have a significant percentage of their loan portfolio in longer-term loans. It is more difficult to make this argument for microfinance institutions making small short-term loans, but some still do so.

- **Financing activities** are activities that alter the equity capital and borrowing structure of the enterprise. [IAS 7.6]

Application to microfinance: Financing activities include obtaining resources from and returning resources to the owners and also includes obtaining resources through borrowings (short-term or long-term) and repayments of the amounts borrowed.

One of the major sources of financing for an MFI is donor funds. Even though they are not mentioned specifically in IAS 7, donor funds result in changes in the size and composition of the MFI's equity and so are always included under financing activities.

- Interest and dividends received and paid may be classified as operating, investing, or financing cash flows, provided that they are classified consistently from period to period. [IAS 7.31]
- Cash flows arising from taxes on income are normally classified as operating, unless they can be specifically identified with financing or investing activities. [IAS 7.35]
- For operating cash flows, the direct method of presentation is encouraged, but the indirect method is acceptable. [IAS 7.18]

HOW DO YOU REPORT CASH FLOWS?

IAS 7 point 18 states:

An enterprise should report cash flows from operating activities using either:

- (a) the direct method, whereby major classes of gross cash receipts and gross cash payments are disclosed; or**
- (b) the indirect method, whereby net profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows.**

Enterprises are encouraged to report cash flows from operating activities using the direct method. The direct method provides information that may be useful in estimating future cash flows and that is not available under the indirect method.

The **direct method** shows the items that affected cash flow and the magnitude of those cash flows. Cash received from, and cash paid to, specific sources (such as customers and suppliers) are presented.

An important advantage of the direct method is that it permits the user to better comprehend the relationships between the company's net income (or loss) and its cash flows. For example, payments of expenses are shown as cash disbursements and are deducted from cash receipts. In this way, the user is able to recognize the cash receipts and cash payments for the period. (If you need to find formulas for conversion of various income statement amounts from the accrual basis to cash basis for direct method presentation, they are available in Epstein and Mirza, IAS 2001 Interpretation and Application.)

The **indirect method** (sometimes referred to as the reconciliation method) is the most widely used means of presentation of cash from operating activities, primarily because it is easier to prepare. It focuses on the differences between net operating results and cash flows. The indirect format begins with net income (or loss), which can be obtained directly from the income statement. It then adds or deducts revenue and expense items that do not affect cash to work backwards and arrive at net cash provided by operating activities. For example,

depreciation and amortization are added back because these expenses reduce net income without affecting cash.

The statement of cash flows prepared using the indirect method emphasizes changes in the components of most current asset and current liability accounts. Changes in inventory, accounts receivable, and other current accounts are used to determine the cash flow from operating activities. Although most of these adjustments are obvious (most preparers simply relate each current asset or current liability on the balance sheet to a single caption in the income statement), some changes require more careful analysis. For example, it is important to compute cash collected from sales by relating sales revenue to both the change in accounts receivable and the change in the related bad debt allowance account.

The drawback to the indirect method involves the user's difficulty in comprehending the information presented. This method does not show from where the cash was received or to where the cash was paid. Only adjustments to accrual-basis net income are shown. In some cases the adjustments can be confusing. For instance, the sale of equipment resulting in an accrual-basis loss would require that the loss be added to net income to arrive at net cash from operating activities. (The loss was deducted in the computation of net income, but because the sale will be shown as an investing activity, the loss must be added back to net income.)

Although the indirect method is more commonly used in practice, the IAS encourages enterprises to use the direct method. As pointed out by IAS 7, a distinct advantage of the direct method is that it provides information that may be useful in estimating or projecting future cash flows, a benefit that is clearly not achieved when the indirect method is utilized instead.

Application to microfinance: Most microfinance institutions that prepare cash flow statements use the national standards. In the Accounting course, both the direct and indirect methods are presented. This will allow MFIs to choose the format that is most helpful for them for internal management decision making.

Net Reporting by Financial Institutions

The emphasis in the statement of cash flows is on gross cash receipts and cash payments. For instance, reporting the net change in bonds payable would obscure the financing activities of the entity by not disclosing separately cash flows from issuing bonds and cash outflows from retiring bonds.

IAS 7 points 22–24: cash flows from investing and financing activities should be reported gross by major class of cash receipts and major class of cash payments except for the following cases, which may be reported on a net basis. [IAS 7.22-24] **These include:**

- Cash receipts and payments on behalf of customers (for example, receipt and repayment of demand deposits by banks, and receipts collected on behalf of and paid over to the owner of a property)
- Cash receipts and payments for items for which the turnover is quick, the amounts are large, and the maturities are short, generally less than three months (for example, charges and collections from credit card customers, and purchase and sale of investments)
- Cash receipts and payments relating to fixed maturity deposits
- Cash advances and loans made to customers and repayments thereof

Application to microfinance: Rather than follow this point of IAS 7, some MFIs record all loan disbursements and loan payment receipts separately in their cash flow statement. This is not wrong, although it is not necessary. To effectively compare the cash flows of MFIs that provide the gross cash flows with either an MFI that provides the net cash flow from the loan portfolio or even with another MFI that provides the gross cash flows, the reader needs to be aware of two key points. Any MFI that chooses to show the gross cash flows will show huge cash flows because cash is the business of microfinance. An MFI's business is to lend cash and be paid back! It is not the MFI's unique ability to generate cash, it is the nature of the business. The term of the loans will directly affect the size of the cash flows: the shorter the term, the greater the cash flows.

Assessing the Cash Flow Statement

One purpose of the Cash Flow Statement is to show readers what judgment calls and financial decisions the business's managers made during the period. Of course, management decisions are always subject to second-guessing and criticizing, and financial statements do not reveal the pressures faced by the managers during the period. Maybe they made the best decisions possible, given the circumstances. Maybe not.

Application to microfinance: Four of the questions that the cash flow helps answer (as outlined above) are:

1. What are the major amounts, timing, and nature of cash flows over a series of statements and how much control does the institution have over them?
2. How does the present value of this institution's cash flow compare to similar institutions?
3. How does the financial performance of this institution compare with similar institutions once all the different accounting conventions, regional formats, and so forth are removed?
4. How did the institution do when its cash flow projections are compared to the actual in the Cash Flow Statement? (Then, how can we use the actual cash flow to feedback into the projections?)

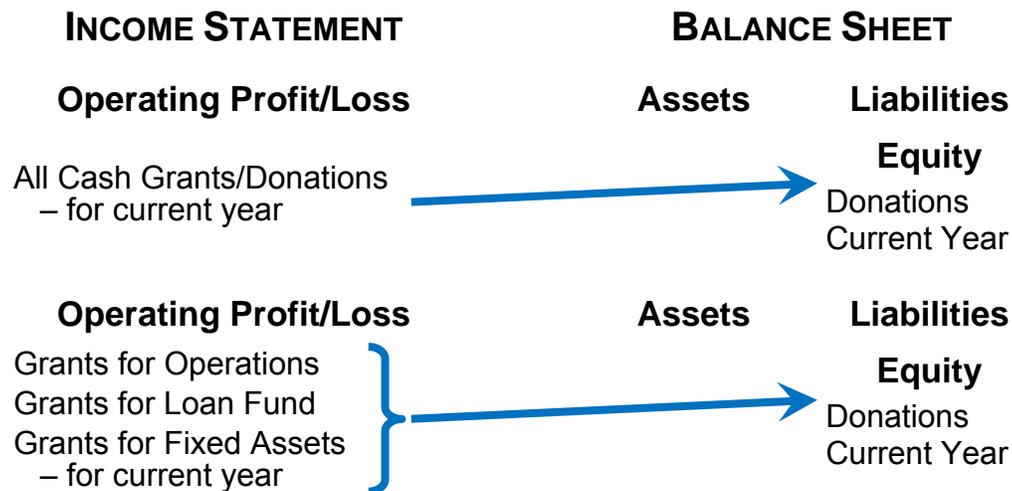
Answering these questions for MFIs is a good place to start. For example, one of the ways that some analysts find it useful to begin to answer question (a) is to do a percentage distribution of the cash flows (like the balance sheet percentage distribution in the Financial Analysis course). Another question some analysts ask is: Does this MFI have enough cash to operate with? You can't answer that question by just examining the Cash Flow Statement, or any one of the financial statements, for that matter. Every MFI, like every business, needs cash to protect against unexpected developments and to take advantage of unexpected opportunities. If you were the manager of an MFI, how much working cash balance would you want? Not an easy question to answer! You need to look at all three primary financial statements—the income statement and the balance sheet as well as the Cash Flow Statement—to get the big picture of a business's financial health.

Two Ways 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



Detailed Explanation of How the Two Ways MFIs Treat Grants and Donations (shown above) May or May Not Comply with IAS 20

- A. All of that year's grants and donations are first recorded in the Income Statement below the Operating Profit/Loss. (This would include the total amount of unrestricted grants and the portion of restricted grants or donations for which the conditions had been met that year.) These grants and donations are then transferred as one amount on the Balance Sheet, separate from the Operating Profit/Loss.**

This treatment is consistent with the income approach recommended in IAS 20.

- B. All of that year's grants and donations are first recorded in the Income Statement, below the Operating Profit/Loss, but the restricted grants or donations for which the conditions had been met are divided according to purpose: for example, Operations, Loan Fund, or Fixed Assets. The grants and donations are then transferred according to their purposes on the Balance Sheet, separated from the Operating Profit/Loss.**

This treatment is consistent with the income approach recommended in IAS 20.

A word of warning on both A and B: If an MFI includes multiyear grants, all of a restricted grant, or all of a grant for fixed assets in the income statement for the current year, then they would **no longer** comply with IAS 20:

- **For multiyear grants**, only the portion of the grant for the current year should be recognized this year. The portion of the grant for subsequent years should be recorded in the liability account—deferred income.
- **For restricted grants**, only that amount of the grant for which the MFI had met the conditions (for example, loans to one region) should be recognized that year. The remaining amount should be recorded in the liability account—deferred income.
- **Grants for fixed assets** should be recorded as deferred income and only recognized as grant income on a systematic basis over the useful life of the asset.

SESSION 4: RECORDING TRANSACTIONS

Session Summary

OBJECTIVES: By the end of this session, participants will be able to:

- Record transactions of an MFI's credit operations
- Use double-entry accounting principles recording "debits" and "credits"
- Design and use a Chart of Accounts
- Make journal entries for both Balance Sheet accounts (assets, liabilities, and equity) and Income Statement accounts (revenue and expenses)
- Create a General Journal

TIME: 190 minutes (There is an extra hour in the schedule for this session for slower groups. If you do not need extra time, move so your group will benefit from more time on session 7 and the Game.)

SUPPLIES: LED projector
Flipchart

TRAINER MATERIALS

A4-M1 Technical Notes – Recording Transactions

PARTICIPANT MATERIALS

OVERHEADS: A4-O1 The Accounting Cycle
A4-O2a–b Example of Double Entry Accounting
A4-O3 Guide for Accounting Transactions
A4-O4 Journal Entries
A4-O5 Journal Entries – Computer Equipment
A4-O6a–b Journal Entries – Motorcycles
A4-O7a–b Journal Entries – Disbursing Loans and Receiving Loan Payments
A4-O8 Journal Entries – Board Meeting
A4-O9 Journal Entries – Short-term Deposit
A4-O10 Journal Entries – Prepaid Expenses
A4-O11a–g General Journal

HANDOUTS: A4-H1 The Accounting Cycle
A4-H2 What Is a Chart of Accounts?
A4-H3 SAFE Chart of Accounts
A4-H4 Guide for Accounting Transactions

Trainer Instructions

A4-H5	Blank General Journal Form (<i>multiple copies needed</i>)
A4-H6a	Balance Sheet Transactions Worksheet – Motorcycles
A4-H6b	Balance Sheet Transactions Worksheet – Motorcycles (<i>Answers</i>)
A4-H7a	Receiving Loan Payments and Disbursing Loans Transactions Worksheet
A4-H7b	Receiving Loan Payments and Disbursing Loans Transactions Worksheet (<i>Answers</i>)
A4-H8a	Income Statement Transactions Worksheet – Short-term Deposits
A4-H8b	Income Statement Transactions Worksheet – Short-term Deposits (<i>Answers</i>)
A4-H9	General Journal – July–September 2007
A4-H10	General Journal – October–December 2007
A4-H11	Technical Notes – Recording Transactions

CASE STUDY: SAFE—“Our clients are SAFE with us” (*If desired, all case handouts may be copied onto colored paper to assist participants.*)

Session 4: Recording Transactions

INTRODUCTION

1. (5 minutes) Explain to the group that the next three sessions describe the steps required to account for an economic transaction from the time it occurs until it is ultimately reflected on the financial statements. This will enable participants to see how accounting decisions can affect financial performance.

Show A4-O1 and hand out A4-H1, The Accounting Cycle, and briefly give an overview of each of the eight steps, telling the group that each point will be explained in further detail during the next two days. Consider noting that point 8, “Closing the books,” means the end of all adjustments for that accounting year and sets the opening balances for the following year, continuing the cycle. Even though it is important to have an annual external audit, it is not included here because it is not a part of an MFI’s internal accounting cycle, and also it may occur at any time.

2. (2 minutes) Introduce the SAFE Case Study. Explain that this will form the basis of the accounting entries participants will be making, noting that the first three months—July, August, and September—will be used as examples and that they will account for October, November, and December through exercises.
3. (10–15 minutes) Pass out the SAFE Case Study, and allow time for participants to read and digest the case.
4. (4 minutes) Ask for questions on the case. Refer participants to the pages in the case that describe the transactions, and tell them that before they can enter any of these transactions, some background information should be in place.
5. (5 minutes) Tell the group that they must understand how SAFE classifies these transactions. Ask participants for suggestions, probing until a **Chart of Accounts** (or **accounting codes**) is mentioned. State that this classification system underlies all accounting entries and impacts the financial statements. It is the framework for financial analysis and managerial decision making.
6. (5 minutes) Lead a discussion on the Chart of Accounts by using the following questions. Briefly discuss major points.
 - What is a Chart of Accounts?
 - What is its purpose?
 - What is included?
 - What factors influence how the Chart of Accounts is set up?
 - Why is it important?

Possible answers from the CGAP MIS Handbook for MFIs follow:

- What is a Chart of Accounts?
Provides the foundation for recording and reporting of all financial transactions for the institution. It provides the structure for accountants to post transactions to different accounts. It also determines what financial transactions can be tracked for managerial purposes and reported in the financial statements. All the portfolio's financial transactions need to be classified in the chart of accounts, but it does not track the portfolio quality data such as the portfolio-at-risk.
- What is its purpose?
To classify financial information so the MFI can use it later in financial statements and managerial reports, and for financial analysis purposes.
- What is included?
Typically describes each account by:
 - **Account number:** the number used to identify the account, for example, 1024
 - **Account description:** succinct explanations of the account, for example, accrued salaries, HQ staff
 - **Type of account:** accounts are generally categorized as asset, liability, equity, income, or expense
- What factors influence how the chart of accounts is set up?
The structure and level of detail established will determine the type of information management will be able to access and analyze in the future. A sketchy chart of accounts will not provide precise enough information to generate the type of indicators needed for financial analysis (for example, not separating donor grants from operating income). On the other hand, there is a common danger of attempting to track too much detail, creating too many accounts, overwhelming the accounting department with work, and ending up with information that is too delayed in preparation to be of use in decision making or so disaggregated that management cannot identify and interpret trends properly.
There may also be specific legislation that dictates what is included in the Chart of Accounts. MFIs must adhere to these regulations where mandated. Also, there may be common practices about how these Charts of Accounts are used. MFIs should follow these to the extent possible.
- Why is it important?
Nearly all financial information indicators used in management reports are based at least in part on information recorded according to the Chart of Accounts. Management should therefore determine what indicators they intend to follow and ensure that the chart of accounts supports those indicators. (*Source:* MIS for MFI, A Handbook, CGAP 1998) In other

words, it is a critical foundation for being able to move your MFI to sustainability.

Do not forget to highlight the importance of the Chart of Accounts to telling the sustainability story. Refer back to flipchart on the flow from financial information to sustainability.

Pass out A4-H2, “What Is a Chart of Accounts?”

7. (10 minutes) Refer participants to Chart of Accounts for SAFE. (Hand out A4-H3.) Review and answer questions as necessary. Use the SAFE case to highlight:
- The structure and level of detail in the Chart of Accounts will determine the type of information for managerial purposes—SAFE’s Chart of Accounts is not very detailed but shows the basics.
 - It is important to separate out donor funds from other income—SAFE clearly separates it out but, again, could be more detailed.
 - Different end users of financial information will affect what is needed in the Chart of Accounts. Some data are required by legislation—SAFE apparently has no such requirements.
 - This is not a “best practice” Chart of Accounts—just a real example! Each MFI must develop its own.
8. (5 minutes) Ask participants what they know (or should know) about the kind of accounting SAFE uses. (Answers: accrual/cash and double-entry accounting—refer to session 2.) Recall the previous discussion on cash versus accrual accounting and ask which SAFE uses as its accounting system. Explain that SAFE uses a mix as follows:
- Accrual – interest expense on liabilities
 - Accrual – interest income on investments
 - Cash – interest income on loan portfolio. Even though it realizes that accrual is the recommended method, SAFE has decided that this is most prudent for them at this point in time, given that the income is uncertain and its systems are not quite reliable yet.
9. (10 minutes) Work through an illustration of how a transaction affects the Balance Sheet, using the motorcycle example (A4-O2). Remind participants that SAFE follows the standard procedures of double-entry accounting. Briefly explain debits and credits in preparation for reviewing A4-O3, Guide to Accounting Transactions, and A4-H5.

It may be helpful to put a flipchart on either side of the front desk. On the right side:

CREDIT BALANCE ACCOUNTS

Liabilities
Equity
Revenues

left side:

DEBIT BALANCE ACCOUNTS	
Assets	
Expenses	

Some participants find this approach easier to remember than what is in the Guide.

JOURNALIZING

10. (5 minutes) Tell participants that they now have enough information to begin work on SAFE's transactions. The first step in creating accounting records is to record debits and credits for each transaction. Begin by asking participants: How does this happen? What are Journal Entries? What is a General Journal? (Tell participants it may be helpful to think of the General Journal as a daily diary of transactions.) How are they made? Lead a brief discussion on the topic, including T-accounts, and use A4-O4 to summarize.
11. (10 minutes) Briefly talk about recording transactions and normal balances. Discuss both T-accounts and the General Journal for Balance Sheet and Income Statement entries. (Use A4-M1 and A4-O3 again (for normal balances).) Add that when managers understand how financial transactions are recorded, they will be able to see how these accounting decisions affect the financial statements.
12. (5 minutes) Demonstrate how transactions are recorded in a journal. Pass out A4-H5, Blank Journal Forms. Using A4-O5, Computer Equipment, to illustrate the point, explain the overhead and ask for questions. Remind participants to enter the purchase of computers into their journals as the first entry, and that this information will be used for all the next steps in the Accounting Cycle, so they should be neat!
13. (10 minutes) Hand out worksheet A4-H6a, with the exercises on motorcycles and savings, for participants to complete the two examples individually. If necessary, explain how to complete the analysis. Distribute the A4-H6b and review answers using A4-O6a–b.
14. (10 minutes) Assign participants to work in pairs and complete the exercise on A4-H7, Loans Transactions. Remind participants of the accounting principles they will be using—conservatism and so forth.
15. (5 minutes or more) Review the loan transaction entries using A4-O7a–b and A4-H7b.

If there are questions, try using examples of accounting for interest from A2-H2 and A2-M1. Tell the group that this is a particularly important transaction for managers, because how interest income is recorded affects the sustainability indicators of the MFI. For example, if interest is collected up front and recorded as revenue when the loan is disbursed, this will overstate the income of the MFI and violates the conservatism and realization principles.

16. (5 minutes) Demonstrate by using A4-O8's problems on board meeting expenses. Show journal entries and remind participants to complete the journal entry for the board meeting in their journals.
17. (10 minutes) Hand out A4-H8, Short-term Deposit, and ask participants to complete the problem individually. It might be a good idea to emphasize that this cash transaction could be inconsistent with SAFE's policy of accruing income on investments. If this question arises or if participants are at a level where they would enjoy thinking more deeply, ask: If SAFE had recognized this income when it was earned (not when it was received in cash as it appears here) what would the transactions have been? Use A4-M2 to answer.
18. (5 minutes) Pass out A4-H8b and review answers using A4-O9.
19. (10 minutes) Lead a brief discussion on prepaid expenses. Mention that when expenses are prepaid, an asset account is debited (such as prepaid rent) and an asset account is credited (such as cash), or a liability account is credited (such as short-term debt). When the prepaid expense is incurred (for example, rent comes due) the asset account (prepaid rent) is credited and the expense account is debited (rent). This means that no expense is recorded (even though it has been paid) until the expense is incurred. Walk the group through the example, using A4-O10, and ask participants to enter the transaction into their journals.

Note that this transaction of \$2,000 prepaid rent appears to be inconsistent with SAFE's regular rent payments. See A4-M1 for an explanation—and how trainers may use this as a training opportunity if desired.

ENERGIZER BREAK

20. (5 minutes) Refer participants back to the SAFE case and explain that the examples used in this session have come from the case for transactions that occurred in the months of July and August. Briefly review the material and corresponding journal entries to date. Show A4-O11.
21. (5 minutes) Hand out A4-H9, the completed General Journal for July, August, and September. Review the journal entries and solicit questions before starting the exercise. Summarize the main points.
22. (1 minute) Tell participants that they now will be responsible for creating the General Journal for October, November, and December. Remind participants that an internal or external auditor might want to come and check their work. Therefore, each transaction needs to be carefully recorded. Anyone should be able to follow what they have done, and why!
23. (30 minutes) Divide the group into preassigned subgroups of three to four people and ask them to complete the journal. Pass out additional A4-H5 blank General Journals as needed. Circulate among the groups and assist as needed. (For fun, one trainer could be assigned as an internal auditor, if desired.) Be sure to note

Trainer Instructions

common areas of difficulty or questions participants are asking. These points can be brought up later in the exercise review.

24. *(10 minutes)* Hand out answer A4-H10 and allow time for participants to verify their answers.
25. *(10 minutes)* Take questions on any transactions that were a problem for participants. Be ready to explain that A4-M1 includes the T-accounts for the sale of fixed assets, if that question arises. A4-H11 and A4-M1 also include notes on fund accounting, if that is an issue for participants.
26. *(10 minutes)* Give the group a few minutes to think about the main points they have learned and how this will help them as managers. Close the session by asking participants to summarize the main points they have learnt as managers. Trainer should also make the connection that now they know how each transaction is recorded and the accounting decisions that will affect the financial reports of their MFI.

Bridge to the next session on ledgers and trial balances. Hand out A4-H11, Technical Notes.

Technical Notes – Recording Transactions

DOUBLE-ENTRY ACCOUNTING

Double-entry accounting means that there is an equal and opposite reaction to each event or transaction, either increasing or decreasing asset, liability, or equity items. Any given transaction or event will affect a minimum of two accounts on the Balance Sheet (or Income Statement). It is important to mention here that revenue or expense items can be, and usually are, affected when a transaction occurs. 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, ensuring that the Balance Sheet balances.

Example: Assume that an MFI buys a motorcycle for \$10,500, thus adding a new asset. From an accounting perspective, does another asset decrease or does a liability or equity item increase? There are only three possible outcomes:

- (1) If the MFI pays cash for the motorcycle, another asset decreases:

A	=	L	+	E
---	---	---	---	---

↑ Asset	10,500	Motorcycle
↓ Asset	10,500	Cash

- (2) If the MFI borrows money to pay for the motorcycle, a liability increases:

A	=	L	+	E
---	---	---	---	---

↑ Asset	10,500	Motorcycle
↑ Liabilities	10,500	Short-term Borrowings

- (3) If the MFI borrows \$8,000 and uses \$2,500 cash to pay for the motorcycle, an asset account decreases and a liability account increases:

A	=	L	+	E
---	---	---	---	---

↑ Asset	10,500	Motorcycle
↓ Asset	2,500	Cash
↑ Liability	8,000	Short-term Borrowings

Net Effect:

↑ Asset	8,000 (10,500 – 2,500)
↑ Liability	8,000

If the accounting equation is to remain in balance, any change in the **left side (assets)** must be accompanied by an equal but opposite change in the **left side (assets)** or by an **equal** change in the **right side (either liabilities or equity)**.

This system is called **double-entry accounting**, referring to the need for both a left-hand and a right-hand entry to record every transaction.

CHART OF ACCOUNTS

Accounting systems include a separate record for each item listed on the financial statements. For example, a separate record is kept for the asset “Cash,” showing each increase and decrease in cash that occurred during the period as a result of transactions

involving cash. Similar records are kept for all other asset, liability, equity, revenue, and expense accounts.

The format used to record increases and decreases in the Balance Sheet or Income Statement items is called a **Ledger Account**. Examples of ledger accounts are Cash, Gross Loan Portfolio, Equipment, Accounts Payable, Rent, Interest Expense, Interest Revenue, and so forth. The entire group of accounts is called the **Chart of Accounts**.

LEDGER ACCOUNTS

A ledger account represents the accumulation of all information about changes in an asset, liability, equity, revenue, or expense item in one place. For example, a ledger account for the asset cash would record each cash disbursement the organization made in a period, as well as all cash that was received by the organization. By recording all cash that goes into and out of the organization, the ledger account provides a record of how much cash the organization has at any given time.

Each ledger account is identified by its account name and its account number. The accounts are numbered based on whether they are an asset, liability, equity, revenue, or expense account.

The design of the chart of accounts greatly affects an MFI's reporting capabilities. The structure and level of detail determine the type of information that management can access and analyze. Too sketchy a chart of accounts will not provide information precise enough to generate the sophisticated indicators needed to adequately track performance. Attempting to track too much detail generally means creating too many accounts—overwhelming the accounting department and resulting in information too delayed to be of use in decision making, or so disaggregated that management cannot properly identify and interpret trends.¹

VOUCHER PREPARATION

Each time a transaction occurs, documentation must be maintained. Voucher preparation refers to the recording of economic transactions in a way relevant to their accounting treatment. Vouchers are supported by invoices and check stubs or cash requests and generally include the following:

- Number and nature of voucher
- Name of department
- Date prepared
- Account name and number
- Amount of money
- Source and description of transaction
- Authorized signature
- Attachment of original bills and cash requests

Every organization has specific means of preparing vouchers. The important aspect to remember is that vouchers result in a paper trail for each transaction, enabling an organization to have adequate internal control over its record-keeping and ensure that its assets are safeguarded. IT MAY BE HELPFUL TO SHOW A REAL EXAMPLE.

¹ Waterfield and Ramsing. *Management Information Systems for Microfinance Institutions*. CGAP, January 1998.

JOURNAL ENTRIES

All economic transactions are entered in to the accounting system by means of a journal entry. A journal entry records how each transaction affects either an asset, liability, equity, revenue, and/or expense account. Journal entries are made to the General Journal, which is a listing of all economic transactions in chronological order. Journals entries are made on a two-column journal sheet with the name of the organization and “General Journal” written on top. The left-hand column is headed “Debit” and the right-hand column is headed “Credit.”

What are debits and credits? Accountants use these words to describe the left and right sides of a ledger account. An amount recorded on the **left side** of the account is called a **debit**, whereas an amount recorded on the **right side** is called a **credit**.

Individuals who are unfamiliar with the “language” of accounting often have incorrect notions about the meaning of the words “debit” and “credit.” For example, they may have the idea that the word “credit” is more favorable than the word “debit” (for example, “credit where credit is due”). However, in the accounting vocabulary this is not true. In accounting, the words “debit” and “credit” simply refer to entries on the left and right side, respectively, for increases or decreases in accounts.

The first step in creating accounting records is to record debits and credits. This is done by preparing journal entries for each transaction.

RECORDING ASSETS, LIABILITIES, AND EQUITY TRANSACTIONS

According to the debit and credit rules, increases in the left side of the equation (assets) are recorded by debits while increases in the right side (liabilities or equity) are recorded by credits.

Prior to making a journal entry, it is helpful to look at the accounts affected by a transaction in their simplest form to determine if a debit or a credit should be recorded. A journal entry, as shown below, has three elements: a title, which is the name of the asset, liability, equity, revenue, or expense account; a left side, which is called the **debit** side; a right side, which is called the **credit** side. When a journal entry is in this form, it resembles the letter “T” and is therefore often referred to as a **T-Account**.

For example:

Title	
Debit (left side)	Credit (right side)

Below are examples of how transactions are recorded (journal entries):

Purchase computer equipment for \$4,000 in cash (July 1):

ANALYSIS	RULE	ENTRY
Asset equipment was increased	Increases in assets are recorded by debits	Debit: Gross Fixed Assets \$4,000
Asset cash was decreased	Decreases in assets are recorded by credits	Credit: Cash \$4,000

Gross Fixed Assets	
4,000	

Cash	
4,000	

Normal Balances

Increases in **asset** accounts are recorded by **debit** entries and **decreases** in these accounts are recorded by **credit** entries. The fact that assets are located on the **left side** of the Balance Sheet is an easy way of remembering the rule that an increase in an asset is recorded on the left (or debit) side of the account. Therefore, asset accounts *normally* have a **debit** (left-hand) balance.

To illustrate:

Any Asset Account	
Debit (increase)	Credit (decrease)

Increases in **liability** and **equity** accounts are recorded by **credit** entries and **decreases** in these accounts are recorded by **debit** entries. Liability and equity accounts are located on the **right side** of the Balance Sheet. An increase in a liability or an equity account is recorded on the right (or credit) side of the account; therefore liability and equity accounts *normally* have **credit** (right-hand) balances.

Any Liability or Equity Account	
Debit (decrease)	Credit (increase)

To summarize increases and decreases in Balance Sheet accounts:

Asset Accounts	Liability & Equity Accounts
<ul style="list-style-type: none"> • INCREASES are recorded by DEBITS • decreases are recorded by credits 	<ul style="list-style-type: none"> • INCREASES are recorded by CREDITS • decreases are recorded by debits

RECORDING REVENUE AND EXPENSE TRANSACTIONS

Revenue is what an organization receives for what it does. Earning revenue causes an increase in an organization's equity. For example, the sale of a product or a service (such as loans) usually results in the receipt of cash or an account receivable for the organization. This inflow of cash or accounts receivable increases the total assets of the organization. From our previous discussions we know that the Accounting Equation states that Assets = Liabilities + Equity. When assets are increased there must also be an increase in either liabilities or equity. When a product or service is sold for cash or accounts receivable, the liabilities of the organization are unchanged. Therefore its equity must increase. As we learned earlier, increases in equity are recorded by credits. Since revenues are increases in equity they are recorded by **credits**. Similarly, an expense causes a decrease in equity. We know that decreases in equity are recorded by debits. Since **expenses** are decreases in equity they are recorded by **debits**.

Just as the accounting system includes a separate account for each item on the Balance Sheet, a separate account is kept for each major type of revenue and expense. For example, separate accounts are kept for salary expense, rent expense, travel expense, and so on.

Examples of how to record revenue and expense transactions:

Incurred board meeting expenses of \$3,100, paid in cash (August 1):

ANALYSIS	RULE	ENTRY
The cost of meeting is an expense	Expenses decrease equity and are recorded by debits	Debit: Board Meeting Expenses \$3,100
The asset cash was decreased	Decreases in assets are recorded by credits	Credit: Cash \$3,100

Board Meeting Expenses	
\$3,100	
Cash	
	\$3,100

To summarize increases and decreases in Income Statement accounts:

Expense Accounts	Revenue Accounts
<ul style="list-style-type: none"> • INCREASES are recorded by DEBITS • decreases are recorded by credits 	<ul style="list-style-type: none"> • INCREASES are recorded by CREDITS • decreases are recorded by debits

Note that each transaction shown above that affects an Income Statement account also affects a Balance Sheet account. This is consistent with our previous discussion of revenue and expenses. When recording revenue transactions, we debit the assets received and credit a revenue account. When recording expenses, we debit an expense account and credit the asset cash, or a liability account if the payment is to be made at a later date.

PREPAID EXPENSES

In some cases, MFIs will prepay expenses such as rent. When using the accrual system of accounting, this transaction is recorded on the balance sheet only. Only when expenses are actually incurred are they recorded on the income statement. This relates to the matching principle in that revenue earned and expenses incurred must be matched to the same accounting period. A prepaid expense is an asset for the MFI.

For example:

Pay \$2,000 cash for rent in advance (August 9):

ANALYSIS	RULE	ENTRY
Prepaid rent is an asset and increased	Increases in assets are recorded by debits	Debit: Other Current Assets \$2,000
The asset cash was decreased	Decreases in assets are recorded by credits	Credit: Cash \$2,000

Other Current Assets	
2,000	
	Cash
	2,000

The above example affects only the Balance Sheet since no expense was incurred, just cash paid out.

GENERAL JOURNAL

As mentioned previously, the General Journal is a listing of all economic transactions in chronological order. It is standard practice to keep a General Journal because it provides a complete listing of all transactions (debits and credits) that were entered into the accounting system.

STANDARD ACCOUNTING T-ACCOUNTS FOR THE DISPOSAL OF FIXED ASSETS

(Countries under UMOA rules in West Africa follow the same logic but have slightly different transactions.)

Assume Current Position: Fixed Assets of 1,000
 Accumulated Depreciation of 200
 Sale Price of 500

1. Create an Income Statement Account through which all your transactions will pass.

Disposal of Fixed Assets	

2. Record Sale of the Fixed Assets.

Cash	Disposal of Fixed Assets
500	500

3. Write off the Accumulated Depreciation.

Accumulated Depreciation	Disposal of Fixed Assets
200	200

4. Remove the Fixed Assets from the F.A. Account.

Fixed Assets	Disposal of Fixed Assets
1,000	1,000

5. Disposal of Fixed Asset account is closed out to the P & L account at the end of the year.

Disposal of Fixed Assets	Profit and Loss Account
	500
	200
1,000	
	300
0	0

In this case there is a debit of 300 in the P & L account, which means the MFI effectively has an additional expense of 300 from the disposal of Fixed Assets.

In the case where the Fixed Asset was sold for 1200, there would be a credit of 400 in the P & L, which means the MFI earned an additional 400 in income from the disposal of Fixed Assets.

TRANSACTIONS FOR SAFE'S ACCRUAL BASIS RECOGNITION OF INTEREST INCOME ON INVESTMENTS

If SAFE had accrued its interest income on its investment, then the interest would probably have been recognized before the maturity date:

Interest Receivable	Interest on Investments
400	400

When the cash was received, the interest receivable account would have been credited. Thus, when the investment was withdrawn on August 7, the Journal Entry would have been:

Cash	Interest Receivable
400	400

ADDRESSING THE PREPAID RENT DILEMMA

A4-O10 shows Prepaid Rent of 2,000 and participants enter it into their journals. However, the monthly rent is actually 10,000. If we assume that both rent payments refer to rent for office space, the prepaid rent of 2,000 is puzzling. Is this for the month of August only, or for several months? If we examine the Balance Sheet account movements, it looks like this prepaid rent is for at least a six-month period! The balance sheet, as of June 30, 2007, has a balance of 36,415 in the Accounts Receivable and Other Assets account (the prepaid expense is under this account). The balance of this account, as of December 30, 2007, is 38,415, and the increase is due to the addition of the 2,000 prepaid rent. This means, then, that the prepaid rent has not been expensed at all within the six-month period.

If participants notice this inconsistency or the trainer would like to use it as an additional training opportunity, ask: If you were the new finance manager of SAFE and noticed the apparent inconsistency with this transaction, what would you do?

Answer: Ask to see the vouchers—this would show whether it was a correct entry or not. If it was/was not correct, ask: What instructions would you then give?

Answer (*something to the effect*): If it was a correct transaction, then the prepaid rent needs to be expenses the next time rent falls due. If it was incorrect, then the finance manager needs to find out why and where the 2,000 went!

WHAT IS FUND ACCOUNTING?

Fund accounting is peculiar to not-for-profit institutions. Most readers of commercial financial statements are not familiar with this type of accounting. (Not for Profit GAAP, 1998.)

In accounting, a fund is an accounting entity with a self-balancing set of accounts. These accounts record the assets, liabilities, equity, and transactions of the fund alone. They are separated from the other activities of the business in accordance with specific instructions. In microfinance institutions these specific instructions are usually given by the donor of the fund.

How is it different from other accounting?

The purpose of fund accounting is to enable the donor of the fund to understand whether the funds are being used solely for the purpose for which they were given.

What are the drawbacks of fund accounting?

The problem for microfinance institutions is that a separate set of accounting records needs to be maintained for each fund. For institutions that have many different funds, consolidated financial statements need to be prepared in order for the MFI to understand its overall financial position. In this situation, fund accounting adds greatly to the administrative workload and to operating costs.

In the CGAP MIS Manual, pages 15–16, techniques are described to reduce this workload. However, the manual goes on to note:

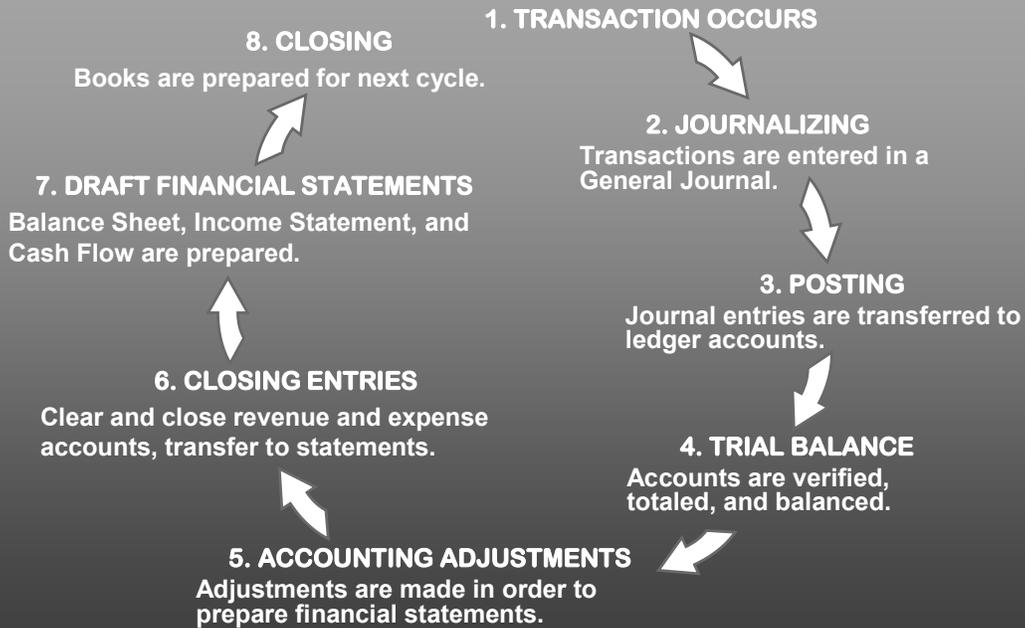
“To reduce this burden, some microfinance institutions have reached agreements with their donors to pool all donor resources and track them as a single fund. Greater use of such arrangements should be explored by both donors and microfinance institutions.”

Overheads

OVERHEADS FOR SESSION 4 ARE CONTAINED IN POWERPOINT FILE ENTITLED "CGAP ACCOUNTING OVERHEADS 1."

The Accounting Cycle

A4-01



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Example of Double Entry Accounting

A4-02a

SAFE buys a motorcycle for 10,500, thus adding a new asset. This transaction can be conducted and recorded in any of the three following ways.

(a) SAFE pays cash for the motorcycle

A = L + E			
↑	Asset	10,500	Motorcycle
↓	Asset	10,500	Cash

(b) SAFE borrows money to pay for the motorcycle

A = L + E			
↑	Asset	10,500	Motorcycle
↑	Liability	10,500	Short-term Borrowings

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Example of Double Entry Accounting *(continued)*

(c) SAFE borrows 8,000 and uses 2,500 cash to pay for the motorcycle:

$A = L + E$

↑	Asset	10,500	Motorcycle
↓	Asset	2,500	Cash
↑	Liability	8,000	Short-term Borrowings

Net Effect

↑	Asset	8,000	(10,500 – 2,500)
↑	Liability	8,000	

Guide for Accounting Transactions

ASSETS		LIABILITIES AND EQUITY	
↑	Debit INCREASE Normal Balance	↓	Debit DECREASE
			Credit INCREASE Normal Balance
		↑	

REVENUES		EXPENSES	
↓	Debit DECREASE	↑	Debit INCREASE Normal Balance
			Credit DECREASE
		↓	

Journal Entries

A4-O4

General Journal

- A listing of all transactions in chronological order
= Book of original entry
- A record of debits and credits entered in columns,
the left column for recording debits
the right column for recording credits

Date	Account Title and Explanation	Ref Num	Debit	Credit

T-account

Account Title	
Debit	Credit

Journal Entry

How transactions are entered into the accounting system

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A4-O5

Journal Entries – Computer Equipment

1. Purchase computer equipment for 4,000 in cash (July 1):

Gross Fixed Assets	Cash
4,000	4,000

GENERAL JOURNAL

Date	Account Title and Explanation	Ref Num	Debit	Credit
July 1	Gross Fixed Assets – Computer	150	4,000	
	Cash (purchased equipment)	101		4,000

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Journal Entries – Motorcycles

1. Purchased motorcycles for use by credit officers—paid 15,000—4,000 cash and 11,000 on short-term credit (July 3):

<u>Gross Fixed Assets</u>		<u>Cash</u>
15,000		4,000
<u>Short-term Liability</u>		
11,000		

2. Collected savings of 51,000 (July 31):

<u>Cash</u>		<u>Demand Deposits</u>
51,000		51,000

Journal Entries – Motorcycles (continued)

GENERAL JOURNAL

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

Journal Entries – Disbursing Loans and Receiving Loan Payments

A4-O7a

1. Received loan payments 226,200, including 174,000 principal and 52,200 interest (July 31):

<u>Cash</u>	<u>Gross Loan Portfolio</u>
226,200	174,000
<u>Interest on Loan Portfolio</u>	
52,200	

2. Disbursed 2,344 loans totaling 290,000 with 30 percent flat annual interest on disbursed amount and a 2 percent up-front fee (July 31):

<u>Gross Loan Portfolio</u>	<u>Cash</u>
290,000	290,000
<u>Cash</u>	<u>Fees on Loan Portfolio</u>
5,800	5,800

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Journal Entries – Disbursing Loans and Receiving Loan Payments (continued)

A4-O7b

GENERAL JOURNAL

Date	Account Title and Explanation	Ref Num	Debit	Credit
July 31	Cash	101	226,200	
	Gross Loan Portfolio	120		174,000
	Interest on Loan Portfolio (July loan repayments)	410		52,200
31	Gross Loan Portfolio	120	290,000	
	Cash	101		290,000
	Cash	101	5,800	
	Fees on Loan Portfolio (July loan disbursements)	415		5,800

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Journal Entries – Board Meeting

1. Incurred board meeting expenses of 3,100, paid in cash (August 1)

Board Meeting Expenses	Cash
3,100	3,100

GENERAL JOURNAL

Date	Account Title and Explanation	Ref Num	Debit	Credit
Aug 1	Board Meeting Expenses	574	3,100	
	Cash (semiannual board meeting)	101		3,100

Journal Entries – Short-term Deposit

1. Short-term trade investment of 10,000 matures—collected 400 in interest (August 7):

Cash		Trade Investments
10,400	Financial Revenue from Investments	10,000
	400	

GENERAL JOURNAL

Date	Account Title and Explanation	Ref Num	Debit	Credit
Aug 7	Cash	101	10,400	
	Trade Investments	110		10,000
	Financial Revenue from Investments (short-term deposit matures)	420		400

A4-O10

Journal Entries – Prepaid Expenses

1. Pay 2,000 cash for rent in advance (August 9):

Other Assets	Cash
2,000	2,000

GENERAL JOURNAL

Date	Account Title and Explanation	Ref Num	Debit	Credit
Aug 9	Other Assets	135	2,000	
	Cash (prepaid rent)	101		2,000

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A4-O11a

General Journal

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

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A4-O11b

General Journal *(continued)*

Date	Account Title and Explanation	Ref Num	Debit	Credit
July 31	Cash	101	226,200	
	Gross Loan Portfolio	120		174,000
	Interest on Loan Portfolio (July loan repayments)	410		52,200
31	Gross Loan Portfolio	120	290,000	
	Cash	101		290,000
	Cash	101	5,800	
	Fees on Loan Portfolio (July loan disbursements)	415		5,800

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A4-O11c

General Journal *(continued)*

Date	Account Title and Explanation	Ref Num	Debit	Credit
Aug 1	Board Meeting Expenses	574	3,100	
	Cash (semiannual board meeting)	101		3,100
7	Cash	101	10,400	
	Trade Investments	110		10,000
	Financial Revenue from Investments (short-term deposit matures)	420		400
9	Other Assets	135	2,000	
	Cash (prepaid rent)	101		2,000

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A4-O11d

General Journal *(continued)*

Date	Account Title and Explanation	Ref Num	Debit	Credit
Aug 31	Cash	101	57,000	
	Demand Deposits (collect savings)	201		57,000
31	Cash	101	222,300	
	Gross Loan Portfolio	120		171,000
	Interest on Loan Portfolio (August loan repayments)	410		51,300
31	Gross Loan Portfolio	120	304,000	
	Cash	101		304,000
	Cash	101	6,080	
	Fees and Commissions on Loan Portfolio (August loan disbursements)	415		6,080

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A4-O11e

General Journal *(continued)*

Date	Account Title and Explanation	Ref Num	Debit	Credit
Sep 3	Other short-term liabilities	225	8,000	
	Interest and fee expense on borrowings	515	1,200	
	Cash (paid short-term loan)	101		9,200
6	Professional development/ study tours	565	5,000	
	Cash	101		1,500
	Other short-term liabilities (study tour)	225		3,500
30	Cash	101	63,000	
	Demand Deposits (collect savings)	201		63,000

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General Journal *(continued)*

Date	Account Title and Explanation	Ref Num	Debit	Credit
Sep 30	Cash	101	343,200	
	Gross Loan Portfolio	120		264,000
30	Interest on Loan Portfolio (September loan repayments)	410		79,200
	Gross Loan Portfolio	120	341,000	
	Cash	101		341,000
30	Cash	101	6,820	
	Fees and Commissions on Loan Portfolio (September loan disbursements)	415		6,820
	Other (Long-term) Investments	140	40,000	
	Cash (purchase of term deposit)	101		40,000

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General Journal *(continued)*

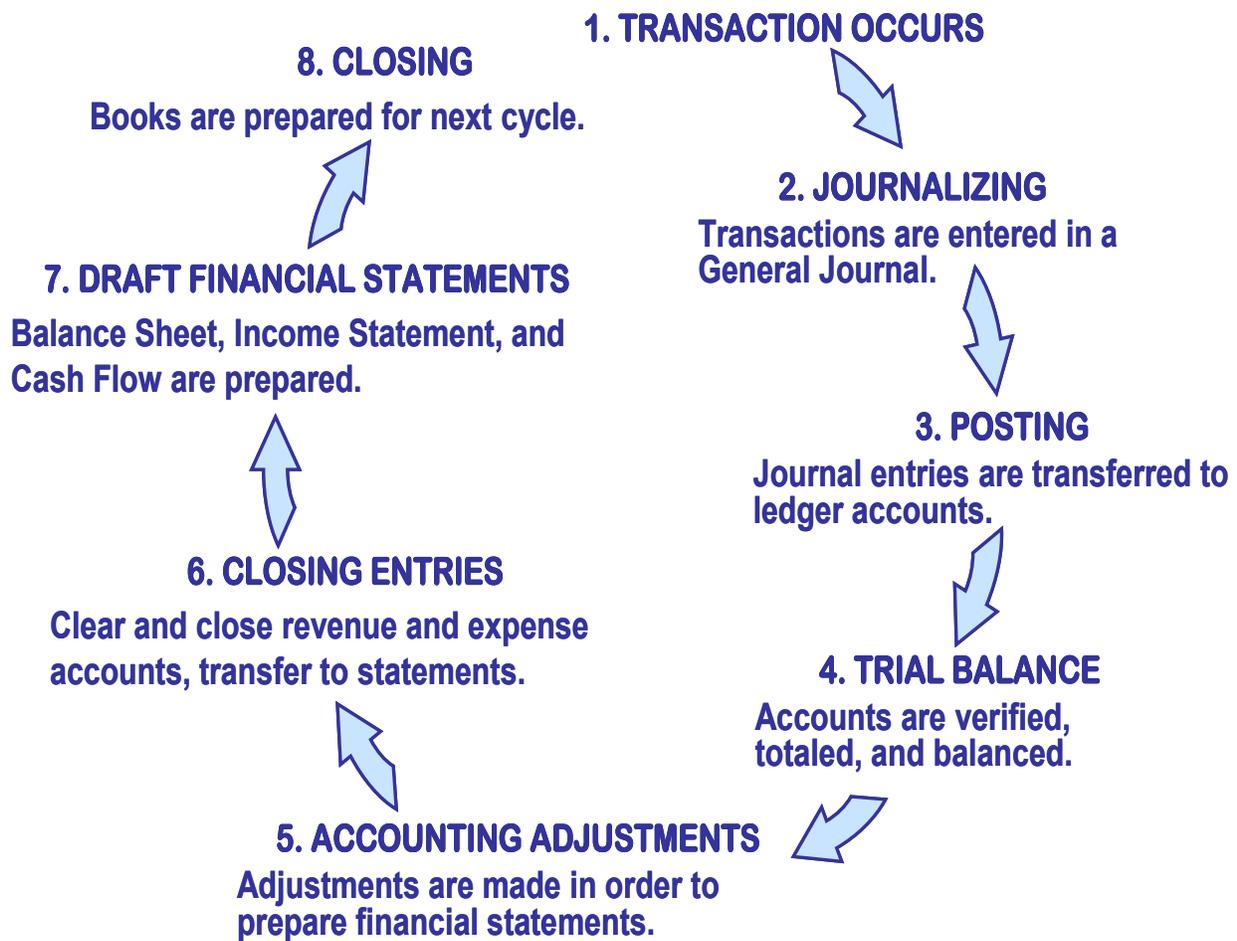
Date	Account Title and Explanation	Ref Num	Debit	Credit
	Summary of Monthly Expenses (July to September)			
	Salaries (\$32,000 * 3)	545	96,000	
	Travel and transport (\$12,400 * 3)	572	37,200	
	Rent (\$10,000 * 3)	566	30,000	
	Printing and materials (\$4,700 * 3)	570	14,100	
	Repair and maintenance (\$3,000 * 3)	571	9,000	
	Telephone (\$3,000 * 3)	567	9,000	
	Courier and delivery (\$1,000 * 3)	567	3,000	
	Utilities (\$700 * 3)	566	2,100	
	Bank Fees (\$1,300 * 3)	568	3,900	
	Cash	101		204,300

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Handouts

The Accounting Cycle



What Is a Chart of Accounts?

It provides the foundation for recording and reporting of transactions for the institution.

It provides the structure for accountants to post transactions to different accounts and ledgers.

It determines what can be tracked for managerial purposes and reported in the financial statements.

WHAT IS ITS PURPOSE?

To classify financial information so one can use it later in financial statements and managerial reports.

WHAT IS INCLUDED?

Typically describes each account by:

- Account number: the number used to identify the account (for example, 1024)
- Description: succinct explanations of the account (for example, accrued salaries, HQ staff)
- Type of account: accounts are generally categorized as asset, liability, equity, income, or expense

WHAT FACTORS INFLUENCE HOW THE CHART OF ACCOUNTS IS SET UP?

The structure and level of detail established will determine the type of information management will be able to access and analyze in the future, so management must be clear about what it needs. A sketchy chart of accounts will not provide precise enough information to generate the type of sophisticated indicators needed for financial analysis (for example, not separating donor grants from other income sources). On the other hand, there is a common danger of attempting to track too much detail, creating too many accounts, thus overwhelming the accounting department with work and ending up with information that is too delayed in preparation to be of use in decision making or so disaggregated that management cannot identify and interpret trends properly

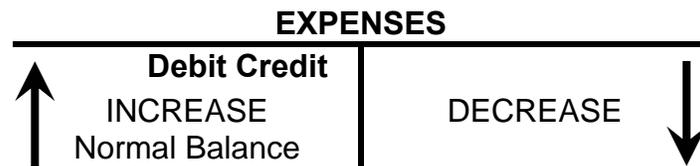
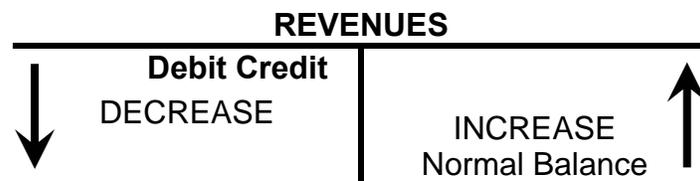
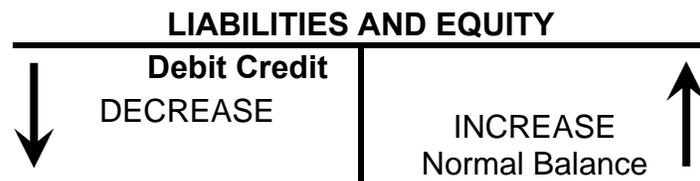
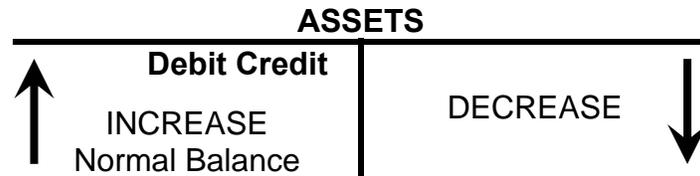
WHY IS IT IMPORTANT?

Nearly all financial information indicators used in management reports generated by the MIS are based on information that will be extracted at least in part from the Chart of Accounts. The Chart of Accounts, therefore, is the foundation upon which an MFI's financial information is based. It is important for managers to understand and have input into how their MFI's Chart of Accounts is structured to ensure that the MFI is able to track its progress to sustainability.

SAFE Chart of Accounts

ASSETS	LIABILITIES	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	240 Other Long-term Liabilities	335 Reserves																																																		
145 Net Fixed Assets		340 Other Equity Accounts																																																		
150 Gross Fixed Assets		345 Adjustments to Equity																																																		
155 Accumulated Depreciation and Amortization																																																				
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Guide for Accounting Transactions



Balance Sheet Transactions Worksheet – Motorcycles

1. Purchased motorcycles for use by credit officers—paid \$15,000—\$4,000 cash and \$11,000 on short-term credit (July 3):

ANALYSIS	RULE	ENTRY

2. Collected savings of \$51,000 (July 31):

ANALYSIS	RULE	ENTRY

3. Complete General Journal entries for above transactions.

Balance Sheet Transactions Worksheet – Motorcycles

1. Purchased motorcycles for use by credit officers—paid \$15,000—\$4,000 cash and \$11,000 on short-term credit (July 3):

ANALYSIS	RULE	ENTRY
Asset “gross fixed assets” was increased	Increases in assets are recorded by debits	Debit: Gross Fixed Assets \$15,000
Asset cash was decreased	Decreases in assets are recorded by credits	Credit: Cash \$4,000
Liability accounts payable was increased	Increases in liabilities are recorded by credits	Credit: Accounts Payable and Short-term Liability \$11,000

Gross Fixed Assets	Accounts Payable and Short-term Liability	
15,000		11,000
Cash		
	4,000	

2. Collected savings of \$51,000 (July 31):

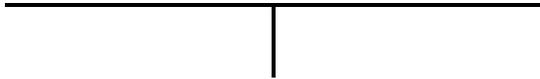
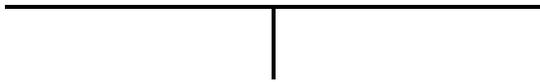
ANALYSIS	RULE	ENTRY
Asset cash was increased	Increases in assets are recorded by debits	Debit: Cash \$51,000
Liabilities were increased	Increases in liabilities are recorded by credits	Credit: Demand Deposits \$51,000

Cash	
51,000	
Demand Deposits	
	51,000

Receiving Loan Payments and Disbursing Loans Transactions Worksheet

1. Received loan payments \$226,200—\$174,000 principal and \$52,200 interest (July 31):

ANALYSIS	RULE	ENTRY



2. Disbursed 2,344 loans totaling \$290,000 with 30 percent flat annual interest on disbursed amount and a 2 percent up-front fee (July 31):

ANALYSIS	RULE	ENTRY

3. Complete General Journal entries for above transactions.

Receiving Loan Payments and Disbursing Loans Transactions Worksheet

1. Received loan payments \$226,200—\$174,000 principal and \$52,200 interest (July 31):

ANALYSIS	RULE	ENTRY
The asset cash was increased	Increases in assets are recorded by debits	Debit: Cash \$226,200
The asset gross loan portfolio was decreased	Decreases in assets are recorded by credits	Credit: Gross Loan Portfolio \$174,000
Revenue was earned	Revenue increases equity and is recorded by a credit	Credit: Interest on Loan Portfolio \$52,200

Cash	Interest on Loan Portfolio
226,200	52,200
Gross Loan Portfolio	
174,000	

2. Disbursed 2,344 loans totaling \$290,000 with 30 percent flat annual interest on disbursed amount and a 2 percent up-front fee (July 31):

ANALYSIS	RULE	ENTRY
Asset gross loan portfolio was increased	Increases in assets are recorded by debits	Debit: Gross Loan Portfolio \$290,000
The asset cash was decreased	Decreases in assets are recorded by credits	Credit: Cash \$290,000
The asset cash was increased	Increases in assets are recorded by debits	Debit: Cash \$5,800
Fee revenue was earned	Revenue increases equity and is recorded by a credit	Credit: Fees on Loan Portfolio \$5,800

Gross Loan Portfolio	Cash
290,000	5,800
Cash	Fees on Loan Portfolio
290,000	5,800

Income Statement Transactions Worksheet – Short-term Deposits

1. Short-term investment of \$10,000 matures—collected \$400 in interest (August 7):

ANALYSIS	RULE	ENTRY

2. Complete General Journal entries for above transactions.

Income Statement Transactions Worksheet – Short-term Deposits

1. Short-term investment of \$10,000 matures—collected \$400 in interest (August 7):

ANALYSIS	RULE	ENTRY
The asset cash was increased	Increases in assets are recorded by debits	Debit: Cash \$10,400
The asset trade investments was decreased	Decreases in assets are recorded by credits	Credit: Short-term Trade Investments \$10,000
Revenue was earned	Revenue increases equity and is recorded by a credit	Credit: Financial Revenue from Investments \$400

Cash		
10,400		
Short-term Trade Investments		
		10,000
Financial Revenue from Investments		
		400

General Journal – July–September 2007

Date	Account Title and Explanation	Ref	Debit	Credit
July 1	Fixed Assets – Computer	150	4,000	
	Cash	101		4,000
	(purchased computer)			
3	Fixed Assets – Motorcycles	150	15,000	
	Cash	101		4,000
	Short-term Liabilities	225		11,000
	(purchased motorcycles on cash & credit)			
31	Cash	101	51,000	
	Demand Deposits	201		51,000
	(collect savings)			
31	Cash	101	226,200	
	Gross Loan Portfolio	120		174,000
	Interest on Loans Portfolio	410		52,200
	(July loan repayments)			
31	Gross Loan Portfolio	120	290,000	
	Cash	101		290,000
	Cash	101	5,800	
	Fees and Commissions on Loan Portfolio	415		5,800
	(July loan disbursements)			
Aug 1	Board Meeting Expenses	574	3,100	
	Cash	101		3,100
	(semiannual board meeting)			
7	Cash	101	10,400	
	Trade Investments	110		10,000
	Financial Revenue from Investments	420		400
	(short-term deposit matures)			
9	Accounts Receivable and Other Assets	135	2,000	
	Cash	101		2,000
	(prepaid rent)			
31	Cash	101	57,000	
	Demand Deposits	201		57,000
	(collect savings)			
31	Cash	101	222,300	
	Gross Loan Portfolio	120		171,000
	Interest on Loan Portfolio	410		51,300
	(August loan repayments)			
31	Gross Loan Portfolio	120	304,000	
	Cash	101		304,000
	Cash	101	6,080	
	Fees and Commissions on Loan Portfolio	415		6,080
	(August loan disbursements)			
Sept 3	Other short-term liabilities	225	8,000	
	Interest and fee expense on borrowings	515	1,200	
	Cash	101		9,200
	(paid short-term loan)			

Date	Account Title and Explanation	Ref	Debit	Credit
Sept 6	Professional development/study tours	565	5,000	
	Cash	101		1,500
	Other short-term liabilities (study tour)	225		3,500
30	Cash	101	63,000	
	Demand Deposits (collect savings)	201		63,000
30	Cash	101	343,200	
	Gross Loan Portfolio	120		264,000
	Interest on Loan Portfolio (September loan repayments)	410		79,200
30	Gross Loan Portfolio	120	341,000	
	Cash	101		341,000
	Cash	101	6,820	
	Fees and Commissions on Loan Portfolio (September loan disbursements)	415		6,820
30	Other (Long-term) investment	140	40,000	
	Cash	101		40,000
	Summary of Monthly Expenses (July to September)			
	Salaries (\$32,000 * 3)	545	96,000	
	Travel and Transport (\$12,400 * 3)	572	37,200	
	Rent (\$10,000 * 3)	566	30,000	
	Printing and Materials (\$4,700 * 3)	570	14,100	
	Repair and Maintenance (\$3,000 * 3)	571	9,000	
	Telephone (\$3,000 * 3)	567	9,000	
	Courier and Delivery (\$1,000 * 3)	567	3,000	
	Utilities (\$700 * 3)	566	2,100	
	Bank Fees (\$1,300 * 3)	568	3,900	
	Cash	101		204,300

General Journal – October–December 2007

Date	Account Title and Explanation	Ref	Debit	Credit
Oct 8	Cash	101	25,000	
	Donations (received donation for operation)	440		25,000
10	Training	565	500	
	Cash (attend financial management training)	101		500
31	Cash	101	61,000	
	Demand Deposits (collect savings)	201		61,000
31	Cash	101	330,200	
	Gross Loan Portfolio	120		254,000
	Interest on Loan Portfolio (October loan repayments)	410		76,200
31	Gross Loan Portfolio	120	343,000	
	Cash	101		343,000
	Cash	101	6,860	
	Fees and Commissions on Loan Portfolio (October loan disbursements)	415		6,860
Nov 4	Professional development/study tours	565	1,000	
	Cash (conference)	101		1,000
19	Insurance	569	700	
	Cash (pay insurance bill)	101		700
30	Cash	101	64,000	
	Demand Deposits (collect savings)	201		64,000
30	Cash	101	369,200	
	Gross Loan Portfolio	120		284,000
	Interest on Loan Portfolio (November loan repayments)	410		85,200
30	Gross Loan Portfolio	120	374,000	
	Cash	101		374,000
	Cash	101	7,480	
	Fees and Commissions on Loan Portfolio (November loan disbursements)	415		7,480
Dec 11	Miscellaneous	575	775	
	Cash (promotional breakfast)	101		775
31	Other Short-term Liabilities	225	14,000	
	Interest and Fee Expense on Borrowings	515	2,000	
31	Cash	101		16,000
	(repaid short-term loan)			
31	Cash	101	59,000	
	Demand Deposits (collect savings)	201		59,000

Date	Account Title and Explanation	Ref	Debit	Credit
Dec 31	Cash	101	392,600	
	Gross Loan Portfolio	120		302,000
	Interest on Loan Portfolio (December loan repayments)	410		90,600
31	Gross Loan Portfolio	120	401,000	
	Cash	101		401,000
	Cash	101	8,020	
	Fees and Commission on Loan Portfolio (December loan disbursements)	415		8,020
31	Cash	101	40,000	
	Donation (receive donation)	440		40,000
	Summary Monthly Expenses (October to December)			
	Salaries (\$32,000 * 3)	545	96,000	
	Travel and Transport (\$12,400 * 3)	572	37,200	
	Rent (\$10,000 * 3)	566	30,000	
	Printing and Materials (\$4,700 * 3)	570	14,100	
	Repair and Maintenance (\$3,000 * 3)	571	9,000	
	Telephone (\$3,000 * 3)	567	9,000	
	Courier and Delivery (\$1,000 * 3)	567	3,000	
	Utilities (\$700 * 3)	566	2,100	
	Bank Fees (\$1,300 * 3)	568	3,900	
	Cash	101		204,300

Technical Notes – Recording Transactions

DOUBLE-ENTRY ACCOUNTING

Double-entry accounting means that there is an equal and opposite reaction to each event or transaction, either increasing or decreasing asset, liability, or equity items. Any given transaction or event will affect a minimum of two accounts on the Balance Sheet (or Income Statement). It is important to mention here that revenue or expense items can be, and usually are, affected when a transaction occurs. 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, ensuring that the Balance Sheet balances.

Example: Assume that an MFI buys a motorcycle for \$10,500, thus adding a new asset. From an accounting perspective, does another asset decrease or does a liability or equity item increase? There are only three possible outcomes:

- (1) If the MFI pays cash for the motorcycle, another asset decreases:

A	=	L	+	E
---	---	---	---	---

↑ Asset	10,500	Motorcycle
↓ Asset	10,500	Cash

- (2) If the MFI borrows money to pay for the motorcycle, a liability increases:

A	=	L	+	E
---	---	---	---	---

↑ Asset	10,500	Motorcycle
↑ Liabilities	10,500	Short-term Borrowings

- (3) If the MFI borrows \$8,000 and uses \$2,500 cash to pay for the motorcycle, an asset account decreases and a liability account increases:

A	=	L	+	E
---	---	---	---	---

↑ Asset	10,500	Motorcycle
↓ Asset	2,500	Cash
↑ Liability	8,000	Short-term Borrowings

Net Effect:

↑ Asset	8,000 (10,500 – 2,500)
↑ Liability	8,000

If the accounting equation is to remain in balance, any change in the **left side (assets)** must be accompanied by an equal but opposite change in the **left side (as sets)** or by an **equal** change in the **right side (either liabilities or equity)**.

This system is called **double-entry accounting**, referring to the need for both a left-hand and a right-hand entry to record every transaction.

CHART OF ACCOUNTS

Accounting systems include a separate record for each item listed on the financial statements. For example, a separate record is kept for the asset “Cash,” showing each increase and decrease in cash that occurred during the period as a result of transactions

involving cash. Similar records are kept for all other asset, liability, equity, revenue, and expense accounts.

The format used to record increases and decreases in the Balance Sheet or Income Statement items is called a **Ledger Account**. Examples of ledger accounts are Cash, Gross Loan Portfolio, Equipment, Accounts Payable, Rent, Interest Expense, Interest Revenue, and so forth. The entire group of accounts is called the **Chart of Accounts**.

LEDGER ACCOUNTS

A ledger account represents the accumulation of all information about changes in an asset, liability, equity, revenue, or expense item in one place. For example, a ledger account for the asset cash would record each cash disbursement the organization made in a period, as well as all cash that was received by the organization. By recording all cash that goes into and out of the organization, the ledger account provides a record of how much cash the organization has at any given time.

Each ledger account is identified by its account name and its account number. The accounts are numbered based on whether they are an asset, liability, equity, revenue, or expense account.

The design of the chart of accounts greatly affects an MFI's reporting capabilities. The structure and level of detail determine the type of information that management can access and analyze. Too sketchy a chart of accounts will not provide information precise enough to generate the sophisticated indicators needed to adequately track performance. Attempting to track too much detail generally means creating too many accounts—overwhelming the accounting department and resulting in information too delayed to be of use in decision making, or so disaggregated that management cannot properly identify and interpret trends.¹

VOUCHER PREPARATION

Each time a transaction occurs, documentation must be maintained. Voucher preparation refers to the recording of economic transactions in a way relevant to their accounting treatment. Vouchers are supported by invoices and check stubs or cash requests and generally include the following:

- Number and nature of voucher
- Name of department
- Date prepared
- Account name and number
- Amount of money
- Source and description of transaction
- Authorized signature
- Attachment of original bills and cash requests

Every organization has specific means of preparing vouchers. The important aspect to remember is that vouchers result in a paper trail for each transaction, enabling an organization to have adequate internal control over its record-keeping and ensure that its assets are safeguarded.

¹ Waterfield and Ramsing. *Management Information Systems for Microfinance Institutions*. CGAP, January 1998.

JOURNAL ENTRIES

All economic transactions are entered in to the accounting system by means of a journal entry. A journal entry records how each transaction affects either an asset, liability, equity, revenue, and/or expense account. Journal entries are made to the General Journal, which is a listing of all economic transactions in chronological order. Journals entries are made on a two-column journal sheet with the name of the organization and “General Journal” written on top. The left-hand column is headed “Debit” and the right-hand column is headed “Credit.”

What are debits and credits? Accountants use these words to describe the left and right sides of a ledger account. An amount recorded on the **left side** of the account is called a **debit**, whereas an amount recorded on the **right side** is called a **credit**.

Individuals who are unfamiliar with the “language” of accounting often have incorrect notions about the meaning of the words “debit” and “credit.” For example, they may have the idea that the word “credit” is more favorable than the word “debit” (for example, “credit where credit is due”). However, in the accounting vocabulary this is not true. In accounting, the words “debit” and “credit” simply refer to entries on the left and right side, respectively, for increases or decreases in accounts.

The first step in creating accounting records is to record debits and credits. This is done by preparing journal entries for each transaction.

RECORDING ASSETS, LIABILITIES, AND EQUITY TRANSACTIONS

According to the debit and credit rules, increases in the left side of the equation (assets) are recorded by debits while increases in the right side (liabilities or equity) are recorded by credits.

Prior to making a journal entry, it is helpful to look at the accounts affected by a transaction in their simplest form to determine if a debit or a credit should be recorded. A journal entry, as shown below, has three elements: a title, which is the name of the asset, liability, equity, revenue, or expense account; a left side, which is called the **debit** side; a right side, which is called the **credit** side. When a journal entry is in this form, it resembles the letter “T” and is therefore often referred to as a **T-Account**.

For example:

Title	
Debit (left side)	Credit (right side)

Below are examples of how transactions are recorded (journal entries):

Purchase computer equipment for \$4,000 in cash (July 1):

ANALYSIS	RULE	ENTRY
Asset equipment was increased	Increases in assets are recorded by debits	Debit: Gross Fixed Assets \$4,000
Asset cash was decreased	Decreases in assets are recorded by credits	Credit: Cash \$4,000

Gross Fixed Assets	
4,000	

Cash	
	4,000

Normal Balances

Increases in **asset** accounts are recorded by **debit** entries and **decreases** in these accounts are recorded by **credit** entries. The fact that assets are located on the **left side** of the Balance Sheet is an easy way of remembering the rule that an increase in an asset is recorded on the left (or debit) side of the account. Therefore, asset accounts *normally* have a **debit** (left-hand) balance.

To illustrate:

Any Asset Account	
Debit (increase)	Credit (decrease)

Increases in **liability** and **equity** accounts are recorded by **credit** entries and **decreases** in these accounts are recorded by **debit** entries. Liability and equity accounts are located on the **right side** of the Balance Sheet. An increase in a liability or an equity account is recorded on the right (or credit) side of the account; therefore liability and equity accounts *normally* have **credit** (right-hand) balances.

Any Liability or Equity Account	
Debit (decrease)	Credit (increase)

To summarize increases and decreases in Balance Sheet accounts:

Asset Accounts	Liability & Equity Accounts
<ul style="list-style-type: none"> • INCREASES are recorded by DEBITS • decreases are recorded by credits 	<ul style="list-style-type: none"> • INCREASES are recorded by CREDITS • decreases are recorded by debits

RECORDING REVENUE AND EXPENSE TRANSACTIONS

Revenue is what an organization receives for what it does. Earning revenue causes an increase in an organization’s equity. For example, the sale of a product or a service (such as loans) usually results in the receipt of cash or an account receivable for the organization. This inflow of cash or accounts receivable increases the total assets of the organization. From our previous discussions we know that the Accounting Equation states that Assets = Liabilities + Equity. When assets are increased there must also be an increase in either liabilities or equity. When a product or service is sold for cash or accounts receivable, the liabilities of the organization are unchanged. Therefore its equity must increase. As we learned earlier, increases in equity are recorded by credits. Since revenues are increases in equity they are recorded by **credits**. Similarly, an expense causes a decrease in equity. We know that decreases in equity are recorded by debits. Since **expenses** are decreases in equity they are recorded by **debits**.

Just as the accounting system includes a separate account for each item on the Balance Sheet, a separate account is kept for each major type of revenue and expense. For example, separate accounts are kept for salary expense, rent expense, travel expense, and so on.

Examples of how to record revenue and expense transactions:

Incurred board meeting expenses of \$3,100, paid in cash (August 1):

ANALYSIS	RULE	ENTRY
The cost of meeting is an expense	Expenses decrease equity and are recorded by debits	Debit: Board Meeting Expenses \$3,100
The asset cash was decreased	Decreases in assets are recorded by credits	Credit: Cash \$3,100

Board Meeting Expenses	
\$3,100	
Cash	
	\$3,100

To summarize increases and decreases in Income Statement accounts:

Expense Accounts	Revenue Accounts
<ul style="list-style-type: none"> • INCREASES are recorded by DEBITS • decreases are recorded by credits 	<ul style="list-style-type: none"> • INCREASES are recorded by CREDITS • decreases are recorded by debits

Note that each transaction shown above that affects an Income Statement account also affects a Balance Sheet account. This is consistent with our previous discussion of revenue and expenses. When recording revenue transactions, we debit the assets received and credit a revenue account. When recording expenses, we debit an expense account and credit the asset cash, or a liability account if the payment is to be made at a later date.

PREPAID EXPENSES

In some cases, MFIs will prepay expenses such as rent. When using the accrual system of accounting, this transaction is recorded on the balance sheet only. Only when expenses are actually incurred are they recorded on the income statement. This relates to the matching principle in that revenue earned and expenses incurred must be matched to the same accounting period. A prepaid expense is an asset for the MFI.

For example:

Pay \$2,000 cash for rent in advance (August 9):

ANALYSIS	RULE	ENTRY
Prepaid rent is an asset and increased	Increases in assets are recorded by debits	Debit: Other Current Assets \$2,000
The asset cash was decreased	Decreases in assets are recorded by credits	Credit: Cash \$2,000

Other Current Assets	
2,000	
Cash	
	2,000

The above example affects only the Balance Sheet since no expense was incurred, just cash paid out.

GENERAL JOURNAL

As mentioned previously, the General Journal is a listing of all economic transactions in chronological order. It is standard practice to keep a General Journal because it provides a complete listing of all transactions (debits and credits) that were entered into the accounting system.

WHAT IS FUND ACCOUNTING?

Fund accounting is peculiar to not-for-profit institutions. Most readers of commercial financial statements are not familiar with this type of accounting. (Not for Profit GAAP, 1998.)

In accounting, a fund is an accounting entity with a self-balancing set of accounts. These accounts record the assets, liabilities, equity, and transactions of the fund alone. They are separated from the other activities of the business in accordance with specific instructions. In microfinance institutions these specific instructions are usually given by the donor of the fund.

How is it different from other accounting?

The purpose of fund accounting is to enable the donor of the fund to understand whether the funds are being used solely for the purpose for which they were given.

What are the drawbacks of fund accounting?

The problem for microfinance institutions is that a separate set of accounting records needs to be maintained for each fund. For institutions that have many different funds, consolidated financial statements need to be prepared in order for the MFI to understand its overall financial position. In this situation, fund accounting adds greatly to the administrative workload and to operating costs.

In the CGAP MIS Manual, pages 15–16, techniques are described to reduce this workload. However, the manual goes on to note:

“To reduce this burden, some microfinance institutions have reached agreements with their donors to pool all donor resources and track them as a single fund. Greater use of such arrangements should be explored by both donors and microfinance institutions.”

SESSION 5: SUMMARIZING ENTRIES

Session Summary

OBJECTIVES: By the end of this session, participants will be able to:

- Post entries to the general ledger and the cash ledger
- Reconcile bank accounts and the cash ledger
- Create a trial balance
- Make the necessary accounting adjustments

TIME: 250 minutes (There is an extra 50 minutes in the schedule to allow for slower groups. If you do not need it, move on; your group will benefit from session 7 and the game.)

SUPPLIES: LED projector

TRAINER MATERIALS

A5-M1 Technical Notes

A5-M2 Optional Loan Loss Overheads

PARTICIPANT MATERIALS

OVERHEADS: A4-O1 The Accounting Cycle
A4-O3 Guide for Accounting Transactions
A5-O1a–b The General Ledger and The General Journal (*definitions*)
A5-O2 Ledger Accounts
A5-O3 Cash Ledger – Account 101
A5-O4 Posting (*definition*)
A5-O5 General Ledger form
A5-O6a–f General Ledger – September 2007
A5-O7a–e General Ledger – December 2007
A5-O8 Cash Account and Bank Reconciliation
A5-O9a–b Trial Balance form
A5-O10a–b Trial Balance – September 2007
A5-O11a–b Trial Balance – December 2007

A5-O12	Provisions for Loan Impairment	
A5-O13	Effect of Impairment Allowances and Losses on Balance Sheet	Optional

A5-O14a–b Loan Loss Worksheet
A5-O15 Depreciation
A5-O16a–b Adjusting for Accruals
A5-O17 General Journal – Adjusting Entries
A5-O18a–f General Ledger Adjusted – December 2007
A5-O19a–b Trial Balance Adjusted – December 2007

Trainer Instructions

HANDOUTS:	A4-H3	SAFE Chart of Accounts
	A4-H9	SAFE General Journal – July–September 2007
	A4-H10	SAFE General Journal – October–December 2007
	A5-H1	General Ledger form (<i>multiple copies needed</i>)
	A5-H2	General Ledger – September 2007
	A5-H3	General Ledger – December 2007
	A5-H4	Trial Balance – 30 September 2007
	A5-H5	Trial Balance form
	A5-H6	Trial Balance – 31 December 2007
	A5-H7a	Loan Loss Worksheet
	A5-H7b	Loan Loss Worksheet – Answers
	A5-H8a	Depreciation Worksheet
	A5-H8b	Depreciation Worksheet – Answers
	A5-H9a	Adjusting for Accruals Worksheet
	A5-H9b	Adjusting for Accruals Worksheet – Answers
	A5-H10	General Journal – Adjusting Entries
	A5-H11	Trial Balance Adjusted Worksheet – 31 December 2007
	A5-H12	General Ledger Adjusted – December 2007
	A5-H13	Trial Balance Adjusted – 31 December 2007 (<i>Answers</i>)
	A5-H14	Technical Notes

CASE STUDY: SAFE—“Our clients are SAFE with us” (*If desired, all case handouts may be copied onto colored paper to assist participants.*)

Session 5: Summarizing Entries

INTRODUCTION

1. (1 minute) Remind participants to have the necessary handouts readily available.
2. (5 minutes) Introduce the session by asking participants to briefly recap what was covered under journal entries. Fill in any points missed, then ask participants what they think happens next. Recap by using A4-O1, The Accounting Cycle, and referring to relevant points to introduce the session.
3. (3 minutes) Explain to the group that the next thing to do is to create a General Ledger. Ask: “What is a General Ledger?” Take a few answers and show the definition by uncovering the top half of A5-O1. Then ask: “What is the difference between a General Journal and a General Ledger? Why do you have both a General Journal and General Ledger?” Take answers and then use A5-O1 to summarize.
4. (3 minutes) Lead a brief discussion on ledger accounts—the components of the General Ledger. Discussion questions should include (use A5-M1 and A5-O2):
 - What is a ledger account?
 - How does it relate to the Chart of Accounts? (Refer the group to the Case Study and use notes in A4-M1. The General Ledger contains all the account categories in the Chart of Accounts).
 - How does it relate to other accounting operations?
5. (3 minutes) Ask participants which ledger account they think is most important for an MFI and why. What would be the implications for managers without an accurate and timely record of the cash balance? Take a few answers and lead to a summary discussion, using A5-O3, Cash Ledger Account.
6. (5 minutes) Have participants explain the process of transferring entries from the General Journal to the ledger accounts. Ask: What is this process called? (Answer: Posting.) Summarize by showing A5-O4 and explain posting and account balances as per A5-M1.

Explain to the group that **balance sheet** accounts have opening balances carried over from the previous accounting period, as in A5-O3, because the balance sheet is a cumulative record of the MFI’s financial position. The opening balances must be recorded on the General Ledger or the accounts will not balance. Any accounts that have an opening balance must be included in the General Ledger, whether or not there have been transactions during the period.

Income statement accounts do not have opening balances because they are closed out at the end of each year.

Tell the group that in the SAFE case, however, it is not the end of the year—it is an unusual situation for this exercise. SAFE already has a summary income statement for the first half of 2007, so to complete the year income statement, accounts start with summary balances for the period January 1–June 30, 2007. Explain that SAFE’s books were not closed midyear for any account, and the amounts in the SAFE midyear Income Statement will need to be added to July 1–December 31, 2007, figures to obtain the SAFE Income Statement ending December 31, 2007.

Further explain that the Income Statement summary balances must be recorded on the General Ledger (re-emphasize that this is for the case study only) or the accounts will not reconcile. All new transactions must be added to these summary balances and all accounts with summary balances must also be posted to the General Ledger.

Note that since the Income Statement accounts were not closed midyear, the Balance Sheet accounts for donated equity – current year and current year profit/loss accounts technically have zero balances for the purpose of this exercise. Therefore, opening balances on the General Ledger for these accounts should be zero despite the balances noted in the SAFE case study Balance Sheet.

Any other accounts that have an opening balance must be included in the ledger. (It may be useful to **remind** (do not re-teach) participants of normal balances, using A4-O3 and A4-H3 and notes in A4-M1).

7. (10 minutes) Demonstrate a posting to the cash account. Use A5-O5, the General Ledger form, and set it up for the cash account. Point out the use of the opening balance. Then ask participants to find the first cash entry for the ledger and record it on the empty overhead. Repeat the process for the month of July, transferring all cash transactions from the General Journal to the cash ledger.

Optional—insert step 13 on Cash Account/Bank Reconciliation here.

8. (10–15 minutes) Ask participants to post entries from the General Journal to each ledger account. Pass out A5-H1, General Ledger forms. Assign each individual one account to focus on, perhaps by simply going around the room pointing at a participant and saying, “please report on account #x.” (Be sure that accounts 150 and 155 are assigned to participants who are comfortable working with depreciation, accumulated depreciation, fixed assets, and net fixed assets.) If the group is strong, consider having participants draw account numbers from a hat. If there are more participants than accounts, then more than one person can be given account numbers 120, 201, 225, 410, or 420. The remainder of the cash account may also be assigned to two individuals—one to complete August, and one for September.

Remind participants to find and use opening balances where needed from the Balance Sheet and summary balances from the Income Statement.

9. (15 minutes) Call for the group's attention and ask each individual to give an answer when his or her account number is called. Use A5-O6, Completed Ledgers for September 2007, and reveal the answer when it is suggested by the participant. Then pass out A5-H2, Completed General Ledger September 2007 with answers.
10. (30 minutes) Have participants assemble into preassigned groups of three to complete the General Ledger for December. Remind participants that they will need to add the current quarter's transactions to the September ledger balances as in A5-H2. (Pass out more General Ledger forms (A5- H1) as needed.) Have participants leave enough space between ledger accounts to add additional transactions.
11. (5 minutes) Hand out A5-H3, Completed General Ledger December 2007, and ask participants to check their ledgers, noting areas that presented problems for a later discussion.

Review the General Ledger, using A5-O7, and take any questions.

12. (5 minutes) Summarize this section by asking the group to consider the following: Why do they organize transactions in this way? Why do they need to know this, when computers often do posting now? How does it help them manage their MFI better? What do these accounts tell them about SAFE? Is there a sustainability story here?

Ensure that the concept of posting is fully grasped before moving on to bank reconciliation and trial balances.

CASH ACCOUNT AND BANK RECONCILIATION

13. (5–10 minutes) Explain that even though they will not actually be reconciling the bank account with the cash ledger account in their case study, managers need to be aware of this important function of the accounting department, and thus it should be briefly mentioned. Reconciling the bank account with the cash ledger is important to ensure that all transactions that show up on the bank account statement are the same as those recorded in the cash ledger account.

Go through A5-O8, explaining to the group how to reconcile the bank statement. (Note the \$150 bank charges.) One common exclusion might be bank charges that are paid directly out of the bank account, so they often must be recorded during the process of the bank statement reconciliation. (When recording bank charges, debit expense account and credit cash.) Bank statement reconciliation should occur at least once a month when the bank statement is received.

Take a moment to emphasize the management importance of bank reconciliation for checking accuracy, possible fraud, and so on.

Break, Stretch, Energize

14. (5–10 minutes) Introduce **trial balances**. Ask the group what is meant by “creating a trial balance.” Take answers and give a brief overview on creating trial balances, using A5-M1.
15. (10–15 minutes) Demonstrate how to create a trial balance for January–September 2007. Begin with A5-O9, the Trial Balance form, and ask participants for the balance of each account. Record each correct answer. Hand out A5-H4, Completed Trial Balance. Review the trial balance for September 2007 using A5-O10, and take any questions.
16. (15 minutes) Then pass out A5-H5, the Trial Balance forms, and ask participants to create a trial balance for December 2007 using the December 2007 General Ledger, A5-H3. Participants should work in pairs with someone they have not yet worked with.

Make sure that participants get up (leave their seats) and find a new partner to work with. Participants will need to move **again** at this point!

17. (10 minutes) Review the trial balance (January 1–December 30, 2007) using A5-O11. Take questions and hand out A5-H6.

Ask participants to comment on the usefulness of a trial balance. Why do they construct trial balances? How does understanding how to create and read a trial balance help them manage their MFI better? Also ask participants to tell the group how SAFE can use this document, or how any MFI could use it.

ADJUSTMENTS

18. (5 minutes) Ask participants which accounting transactions are **not** yet included in the trial balance, and why they are needed.

Once the trial balance is completed, accounting adjustments are made to record transactions that have not previously been recorded. Lead a brief discussion on accounting adjustments in general and the types to be discussed in the remainder of the session.

Explain that accounting adjustments must be made to adequately reflect revenue and expenses that are noncash-based and thus may not have been recorded previously.

Accounting adjustments include:

- Making a provision for loan impairment on the income statement to ensure an adequate impairment loss allowance on the balance sheet
- Recording a depreciation expense on the income statement to reflect the appropriate value of fixed assets on the balance sheet
- Accruing for revenue or expenses that have been earned or incurred, respectively, but not yet recorded (that is, interest revenue on term deposits or interest expenses on loans to the MFI and on client deposits)
- Unearned/deferred income or prepayments/prepaid expenses

Be sure to assess whether the participants need these explained further or not.

Explain that these accounting adjustments should be done periodically; at a minimum, they should be done annually. (Generally adjustments are made for the full year; adjustments for the SAFE case will be calculated for the full year 2007.)

(Optional: Consider noting that some MFIs may also want to/need to revalue their investments or fixed assets. This should be done in accordance with IAS 40 and IAS 16. It is not covered in the course because fixed assets are not a major component of an MFI's Balance Sheet.)

19. (5–10 minutes) Building on the previous discussion, ask participants why it is essential for MFIs to account for possible and actual loan losses. Have them describe how they account for loan losses.
20. (10 minutes) Give a brief overview of loan impairment and losses using A5-M1 and A5-M2 and optional overheads (A5-O12 and A5-O13) as necessary. Increase the time allotted, depending on previous experience and knowledge of the group. Discuss briefly the implications of loan loss for sustainability and for an accurate picture of the MFI's financial position. Ensure participants understand why MFIs *must* write off. Highlight that these are managerial decisions they *need* to make.
21. (15 minutes) Hand out A5-H7, Loan Impairment Worksheet, and ask participants to complete it in small groups. Review using A5-O14 and handout A5-H7 answers, take questions and summarize. (Consider noting that PARMEC laws in West Africa require an additional transaction for write-offs.)

Ask participants to comment on the impact of the loan impairment adjustment for SAFE.
22. (10 minutes) Repeat the process in steps 19–21 for depreciation. Using A5-H8 and A5-O15 and the answer sheet for A5-H8, highlight how decisions like depreciation schedule can affect an MFI's sustainability.
23. (10 minutes) Repeat the same process for accrued revenues and expenses. Using A5-H9 and A5-O16 and the answer sheet for A5-H9, highlight why this is important for managers to understand.
24. (10 minutes) Show the corresponding journal entry adjustments using A5-O17 and A5-H10. It may be worth noting that the Adjusting entries for depreciation are usually separated out by category of fixed assets—for example, vehicles, furniture, and equipment. It is not done here because that information is not available. Ask the group for any questions or comments on the process.
25. (15 minutes) Direct participants to adjust the accounts first in their ledger and then in their trial balances, using A5-H1. Review using A5-O18 and A5-O19, respectively. Distribute A5-H12 and A5-H13, Adjusted Ledgers and Trial Balance.

Trainer Instructions

26. (10 minutes) Have group members summarize the session, and then take any questions. Once again ask for comments on the management importance of the procedures and documents kept and produced, with a focus on how they enable managers to improve their institution's sustainability. Pass out A5-H14, Technical Notes. Close the session and tell the group that they are now ready to create statements.

Technical Notes

THE GENERAL LEDGER

An MFI typically has many accounting transactions each day, such as the disbursement of loans, the payment of employee salaries, and the receipt of loan payments. It would not be practical to prepare financial statements after each transaction. Instead, as we discussed in the last session, individual transactions are recorded in the General Journal.

From the General Journal, the information is consolidated and entered into ledger accounts that make up the General Ledger. (Note: A General Ledger summarizes the transactions of an organization in order of account number whereas the General Journal lists the transactions in chronological order.) This is the next step in the process of creating financial statements. This session covers the steps from the General Journal to the General Ledger, the trial balance, and accounting adjustments. The session following will discuss the creation of the Balance Sheet and the Income Statement.

LEDGER ACCOUNTS

A ledger account represents the accumulation of all information about changes in an asset, liability, equity, revenue, or expense item in one place. For example, a ledger account for the asset cash would record each cash disbursement the organization made in a period as well as all cash that was received by the organization. By recording all cash that goes into and out of the organization, the ledger account provides a record of how much cash the organization has at any given time.

Its account name and its account number identify each ledger account. The accounts are numbered based on whether they are an asset, liability, equity, revenue, or expense account.

The design of the chart of accounts greatly affects an MFI's reporting capabilities. The structure and level of detail determine the type of information that management can access and analyze. Too sketchy a chart of accounts will not provide information precise enough to generate the sophisticated indicators needed to adequately track performance. Attempting to track too much detail generally means creating too many accounts—overwhelming the accounting department and resulting in information too delayed to be of use in decision making, or so disaggregated that management cannot properly identify and interpret trends.¹

ACCOUNT BALANCES

Once journal entries have been made and the General Journal completed, the Account Balances for each ledger account must be determined. This is done by listing all of the debits and credits by ledger account into the General Ledger. The process of copying journal entry information from the General Journal to the General Ledger is called **posting**. In the posting process, journal debits become ledger account debits, and likewise, journal credits become ledger account credits. An account balance can be determined at any point in this process by tallying the debits and credits listed in the ledger account.

Balance Sheet accounts are a summary of the organization's assets, liabilities, and equity since the beginning of the MFI's operations. Therefore, these accounts will have ongoing balances that are carried forward from period to period. These are referred to as opening

¹ Waterfield and Ramsing. *Management Information Systems for Microfinance Institutions*. CGAP, January 1998.

balances. For example, if a Balance Sheet dated December 31, 2004, showed a cash balance of \$28,500, this balance would be carried over as the opening balance on January 1, 2005.

In contrast, Income Statement accounts reflect revenue and expenses over a specified period of time and therefore are not carried over from accounting period to accounting period. For example, an Income Statement for the 12-month period ending December 31, 2004, shows that an MFI earned \$5,000 interest revenue that period. When the next accounting period begins on January 1, 2005, the interest revenue account will begin with a zero balance since it will be measuring the interest revenue earned from January 1, 2005, to December 31, 2005. All Balance Sheet accounts have opening balances; all income statement accounts do not (unless updating general ledger in the middle of an accounting period).

CREATING THE GENERAL LEDGER

We now take all of the entries from the General Journal and create a General Ledger. The General Ledger includes all accounts that have either opening balances (Balance Sheet accounts) or where transactions have occurred. The General Ledger differs from the General Journal in that all of the transactions are listed by account number (rather than chronologically as in the General Journal). The first ledger account, and one of the most important, is the cash ledger (in our sample chart of accounts, cash is account #101).

CASH ACCOUNT

One of the most important ledger accounts is the *cash account*. The cash account (or bank account) is used to record all cash and bank transactions. Like all other accounts in the chart of accounts, transactions that affect the cash account are recorded in the General Journal. When transferring (or posting) to the General Ledger, all cash transactions are listed together. Many MFIs maintain a separate cash ledger (this is simply a repeat of the cash account entries in the General Ledger but kept separately for ease of use). This is helpful when reconciling the bank statement, and for creating the cash flow statement. It is important to mention the cash account as it relates to the accounting process and proper financial management for an MFI. The cash account is important for the following reasons:

- The number of cash transactions is large in most MFIs. Examples are loan disbursement, loan repayment, payment of salaries and other expenses, and so on.
- The chances of fraud being committed regarding cash are higher as compared to other assets. Strict control is therefore required. A properly maintained cashbook helps to achieve control.
- Timely payments to an organization's creditors increase the reputation of the business. Similarly, timely payments from those who owe the organization money improve the financial position of the business.

The following example includes a number of journal entries that affected the cash account. In this example, the account balance is recorded after each journal entry and the opening account balance of \$358,196 has been carried over from the previous period.

(Note: this example shows only one side (asset – cash) of the accounting entry for each transaction. In double-entry accounting, an equal entry must be made in another account(s).)

Cash and Due from Banks		Account No. 101		
Date	Explanation	Debit	Credit	Balance
				404,901
July 1	Purchased computer		4,000	400,901
3	Purchased motorcycles		4,000	396,901
31	Collected savings	51,000		447,901
31	July loan repayments	226,200		674,101
31	July loan disbursements		290,000	384,101
31	July loan fees	5,800		389,901
Aug 1	Semiannual board meeting		3,100	386,801
7	Short-term deposit matures	10,400		397,201
9	Prepaid rent		2,000	395,201

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 (for example, August 9) is the **account balance** for that date. The account balance is equal to the difference between the total debits and the total credits in the account.

All asset accounts normally have debit balances. Likewise, all expense accounts normally have debit balances. Liability, equity, and revenue accounts normally have credit balances. In the cash account example, increases were recorded on the left or debit side of the account while decreases in cash were recorded on the right or credit side (assets increase with debits; assets decrease with credits).

It is important to keep close track of the cash account since MFIs particularly need to have cash on hand at all times to continue operations. If it looks as though the cash balance is getting too low, management will have to determine how they will access more cash (borrow, line of credit, overdraft) or reduce some of their cash outlays (loan disbursements, expense payments) keeping in mind the needs of borrowers and the risk the MFI runs of appearing insecure to borrowers and savers.

In addition, too much cash can be expensive. Cash that sits idle does not earn any income and consequently affects profitability. If an MFI has excess cash, it is losing the interest revenue that it could be earning if that cash were in the hands of borrowers. If the funds are borrowed, then the MFI is not only foregoing revenue but also incurring a cost for that money.

CASH ACCOUNT AND BANK RECONCILIATION

On a periodic basis (usually monthly) the bank account statement should be reconciled with the accounting records. This is done by taking the closing cash balance reported on the bank statement and subtracting any outstanding checks and adding any outstanding deposits.

In addition, all bank charges and credits not previously recorded in the accounting records must be recorded (in the example below, \$150 was incurred in bank charges which must be recorded into the General Journal when the bank statement is received and then the General Ledger). The new balance of the cash account must then equal the adjusted bank balance. For example:

Bank Balance, August 31, 2005	40,000
less outstanding checks:	
#1 147	
#2 53	
(200)	
plus outstanding deposits:	
#1 400	
200	
Adjusted Bank Balance	40,200
Cash Account Balance (prior to reconciliation)	40,350
record bank charges	(150)
Adjusted Cash Account	40,200

TRIAL BALANCE

At the end of an accounting period (usually monthly), once all journal entries have been made and posted in the General Ledger, it is necessary to verify that the debits and credits are in balance. This procedure is referred to as preparing the **trial balance**.

The trial balance is prepared by taking the account balances from the General Ledger and listing the accounts having debit balances in one column and those having credit balances in the other column. Next, the debit balances are totaled and the credit balances are totaled. Finally, the sum of the debit balances is compared with the sum of the credit balances. The sums should be equal in order for the ledger accounts to be in balance.

If the trial balance does not balance, the General Ledger should be checked to ensure that every account balance is correct and has been transferred properly.

ADJUSTMENTS

Once the trial balance is completed (and balanced), adjustments are made to record transactions that have not previously been recorded, such as bank charges, depreciation, provisions for loan impairment, and so forth.

For example, after an adequate impairment loss allowance has been determined, an entry must be made to record a provision for loan impairment expense. This is done periodically, either monthly, bimonthly, or annually.

LOAN LOSS

An impairment loss allowance represents the amount of outstanding principal that is not expected to be recovered by the MFI—that is, it is the amount set aside to cover losses on the loan portfolio. This amount is not set aside in cash and thus does not affect the cash flow of the MFI (delinquent loans affect the cash flow). The longer a loan is in arrears, the lower is the chance of receiving payment. The amount of the impairment loss allowance should be based on a rate based on historical information regarding loan default and the aging analysis. Aging of the portfolio-at-risk creates the information necessary to establish the adequacy of the impairment loss allowance.

The impairment loss allowance is on the Balance Sheet and thus has an opening balance, unless no allowance has ever been created. If this is the case, when the allowance is created, a loan loss expense (referred to as the provision for loan impairment) is recorded on the Income Statement as an expense. The amount of provision for loan impairment is then recorded on the Balance Sheet as a *negative* asset—impairment loss allowance—reducing the net outstanding loan balance (or as a liability). Future increases to the impairment loss allowance are made the same way—by recording a provision for loan impairment on the Income Statement.

Provision for Loan Impairment. Based on the historical default rate and the current outstanding impairment loss allowance, the provision for loan impairment is the amount expensed in a period to increase the impairment loss allowance to an adequate level to cover expected defaults of the loan portfolio. Although the provision for loan impairment is a noncash expense, it is treated as a direct expense for an MFI. It is helpful to separate the provision for loan impairment as a separate cost as an indicator of portfolio quality.

Actual loan losses, or write-offs, are reflected on the Balance Sheet only (and not on the Income Statement) as a reduction of the impairment loss allowance and the gross loan portfolio. The resulting effect is to leave the net portfolio on the Balance Sheet unchanged since the allowance has already been made (and expensed as a provision for loan impairment). If the impairment loss allowance is too low relative to the value of loans to be written off, then the impairment loss allowance needs to be increased through making a provision for loan impairment expense on the Income Statement. (The impairment loss allowance is sometimes treated as a liability and is reduced when loans are written off.)

Accounting for Loan Loss Impairment and Write-Offs

An *Impairment Loss Allowance* records the possibility that an asset in the Balance Sheet is not 100 percent 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 and Expense 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 impairment allowances and provisions, loan losses are written off against the impairment loss allowance and are also removed from the outstanding 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 and expense statement as Value of Loans Recovered, which reduces the Provision amount.

An Impairment Loss Allowance

- Is an account that represents the amount of outstanding principal that is not expected to be recovered by a microfinance organization
- Is a negative asset on the Balance Sheet that reduces the outstanding portfolio (an alternative presentation is to show it as a liability)

A Provision for Loan Impairment

- Is the amount expensed on the Income and Expenses Statement



It increases the *Impairment Loss Allowance*

Loan Losses or Write-Offs

- Occur only as an accounting entry—they do not mean that loan recovery should not continue to be pursued



They decrease the *Impairment Loss Allowance* **and** the outstanding portfolio

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 year (or accounting period) and is referred to as an **adjustment**. For example:

Refer to the “Adjusting Entries” at the end of the SAFE case: Purchase computer equipment on July 1.

Fixed Assets	
4,000	

Cash	
4,000	

Record depreciation (50 percent) for one year.

Depreciation	
2,000	

Accumulated Depreciation	
2,000	

SAFE bought motorcycles on July 3—paid \$15,000.

Gross Fixed Asset	
15,000	
Cash	
4,000	
Short-term Borrowings	
11,000	

At end of year, record depreciation (33.33 percent) for one year:

ANALYSIS	RULE	ENTRY
Expense "Depreciation" was increased	Increases in expenses are recorded by debits	Debit: Depreciation \$5,000
The contra asset "Accumulated Depreciation" was increased	Increases in contra assets are recorded by a credit	Credit: Accumulated Depreciation \$5,000

Depreciation	
5,000	
Accumulated Depreciation	
5,000	

Depreciate fixed assets purchased before July 1, 2007 (that is, on the opening balance sheet) by \$72,544:

Depreciation	
72,544	
Accumulated Depreciation	
72,544	

Total depreciation expense is therefore \$79,544.

ADJUSTING FOR ACCRUALS

Accruing revenue refers to recording revenue that has not yet been received. For example, when a loan is past due, some MFIs **accrue** or **capitalize** interest revenue (record as an

asset) even though it has not actually been received. *Note that IAS recommends accrual accounting and (as previously discussed) an MFI must be extremely prudent when accruing such revenue from the loan portfolio. Accruing revenue on term deposits or an investment that is sure to pay interest revenue, or accruing revenue for the period from the last interest payment to the end of the period are acceptable.* When accruing revenue an asset account is debited (such as accrued interest or interest receivable) and a revenue account is credited (such as interest). When the revenue that has been accrued is actually received, the income statement is not affected. Rather, the asset account (such as interest receivable) is credited and cash is debited.

If an expense account is debited and a liability account credited, this refers to **accrued** expenses. This means that the expense has been recorded but not paid—it has been accrued. When the expense is paid, cash is credited and the liability account debited. (Note that some organizations may choose to follow cash accounting rules and not accrual accounting rules and will record transactions only when the revenue has been received or the expense incurred.)

If a transaction has been accrued, when the actual cash is received (in the case of accrued interest revenue) or paid out (in the case of an accrued expense – account payable) the corresponding entries do not affect the Income Statement but affect accounts that are on the Balance Sheet only.

Record accrued interest revenue on term deposits.

Assume for simplicity’s sake, that the end of the year amount is the same for all year. To discover how much SAFE has in interest-bearing investments at the end of the year, look on trial balance and add “short-term investments”—\$38,270—and “long-term investments”—\$40,000—for a total of \$78,270.

To determine how much interest to accrue (record interest that has not been received but has been earned) multiply \$78,270 by 7 percent for a total accrued interest revenue of \$5,479.

ANALYSIS	RULE	ENTRY
The asset “Other Current Assets” was increased	Increases in assets are recorded by debits	Debit: Other Current Assets \$5,479
The revenue account “Interest on Investments” was increased	Increases in revenue are recorded by credits	Credit: Interest on Investments \$5,479

Other Current Assets		
<table style="border-collapse: collapse; margin: 0 auto;"> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black; width: 100px; text-align: center;">5,479</td> <td style="border-left: 1px solid black; border-right: 1px solid black; width: 100px;"></td> </tr> </table>	5,479	
5,479		
Interest on Investments		
<table style="border-collapse: collapse; margin: 0 auto;"> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black; width: 100px; text-align: center;">5,479</td> <td style="border-left: 1px solid black; border-right: 1px solid black; width: 100px;"></td> </tr> </table>	5,479	
5,479		

Record accrued interest expense on short-term borrowings. For simplicity’s sake, assume the amount at end-of-year was held all year (that is, ignore changes throughout the year).

From the trial balance SAFE has short-term borrowings equal to \$12,014. To determine how much interest to accrue (record interest that has been incurred but not paid) multiply \$12,014 by 15 percent for a total accrued interest expense of \$1,802.

ANALYSIS	RULE	ENTRY
The expense "Interest Expense on Borrowings" was increased	Increases in expenses are recorded by debits	Debit: Interest Expense on Borrowings \$1,802
The liability account "Interest Payable on Funding Liabilities" was increased	Increases in liabilities are recorded by credits	Credit: Interest Payable on Funding Liabilities \$1,802

Interest Expense on Borrowings		
<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 50px; text-align: center;">1,802</td> <td style="width: 50px;"></td> </tr> </table>	1,802	
1,802		
Interest Payable on Funding Liabilities		
<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 50px; text-align: center;">1,802</td> <td style="width: 50px;"></td> </tr> </table>	1,802	
1,802		

Should SAFE accrue any expense for client savings?

Refer to the case study and remember that in accounting, one should always err on the conservative side, and therefore should accrue future expenses. However, it is difficult to estimate exactly how much to accrue in this case since SAFE pays interest when someone leaves or at year end. However, SAFE should be planning for these expenses and to be prudent should probably accrue based on historical data of the MFI clients exiting.

From the trial balance SAFE has deposits equal to 950,517.

To determine how much interest to accrue (record interest that is owed to clients but not paid) multiply 950,517 by 5 percent for a total accrued interest expense of 47,526.

Interest Expense on Deposits		
<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 50px; text-align: center;">47,526</td> <td style="width: 50px;"></td> </tr> </table>	47,526	
47,526		
Interest Payable on Funding Liabilities		
<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 50px; text-align: center;">47,526</td> <td style="width: 50px;"></td> </tr> </table>	47,526	
47,526		

Once it has been determined what adjustments are required, journal entries must be made in the General Journal (all transactions must be recorded in the General Journal to maintain appropriate records) and transferred to the ledger accounts. After all the adjustments have been made, and final account balances have been calculated, the financial statements can be prepared.

Optional Loan Loss Overheads

This course assumes previous experience in provisions for loan impairment and establishing a loan impairment allowance. If the level of the group and previous knowledge of provisions for loan impairment is low, the trainer should prepare a lecturette to cover the topic and insert during step 20 in the Trainer's Notes. Overheads A5-O12 and A5-O13 can be used to illustrate the discussion.

The trainer should refer to the topic as covered in A5-M1 and can also refer to sessions in the Delinquency Management and Financial Analysis courses for full treatment of the topic.

A5-O12

Provisions for Loan Impairment

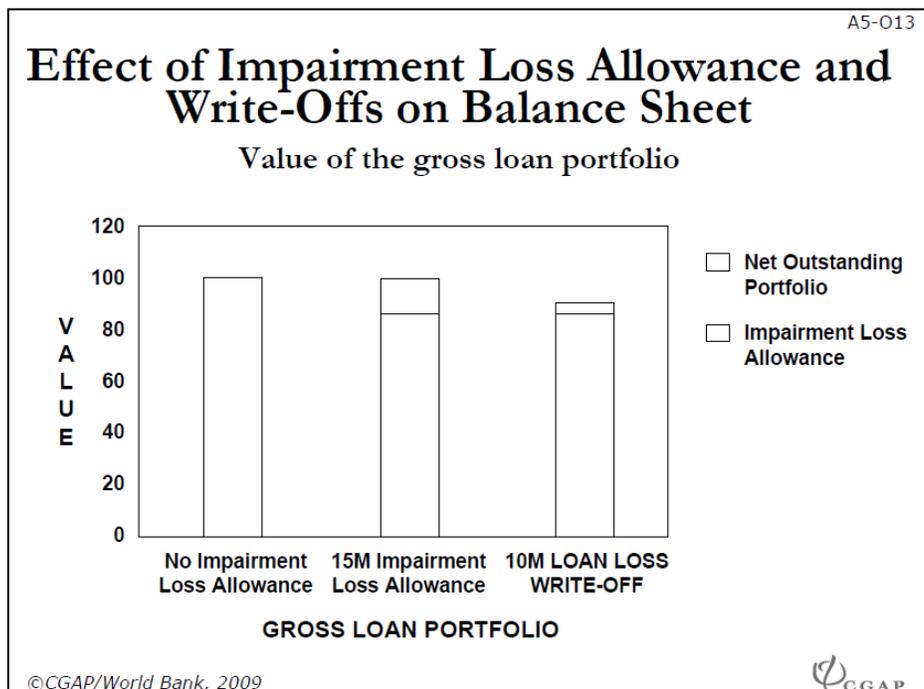
- **An Impairment Loss Allowance is an account that represents the amount of outstanding principal that is not expected to be recovered by a microfinance organization.**

It is a negative asset on the Balance Sheet that reduces the outstanding portfolio.
- **A Provision for Loan Impairment is the amount expensed on the Income and Expenses Statement.**

↑ It increases the loan loss reserve.
- **Loan Losses or Write-Offs occur only as an accounting entry. They do not mean that loan recovery should not continue to be pursued.**

↓ They decrease the impairment loss allowance and the gross loan portfolio.

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Overheads

OVERHEADS FOR SESSION 5 ARE CONTAINED IN 3 SEPARATE POWERPOINT FILES ENTITLED "CGAP ACCOUNTING OVERHEADS_2a-2c."

(Don't forget session 4 overheads—A4-O1 and A4-O3)

A5-O1a

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	
July 1	Purchased computer		4,000	404,901	
3	Purchased motorcycles		4,000	400,901	
31	Collected savings	51,000		396,901	
				447,901	

Gross Fixed Assets			Account No. 150		
Date	Explanation	Debit	Credit	Balance	
July 1	Purchased computer	4,000		230,504	
3	Purchased motorcycles	15,000		234,504	
				249,504	

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A5-O1b

The General Journal

is a chronological record of transactions

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

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Ledger Accounts

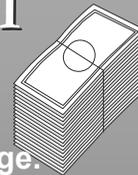
- Represents the accumulation of all information about changes in an asset, liability, equity, revenue, or expense item in one place.
- Each Ledger account is identified by its account name and number as stated on the Chart of Accounts.

Gross 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

Cash Ledger – Account 101



Most Important



- The number of Cash transactions in most MFIs is large.
- The chances of committing fraud are higher than with other assets.
- Importance of timely payments to reputation and financial position

Cash		Account No. 101		
Date	Explanation	Debit	Credit	Balance
				404,901
July 1	Purchased computer		4,000	400,901
3	Purchased motorcycles		4,000	396,901
31	Collected savings	51,000		447,901
31	July loan repayments	226,200		674,101
31	July loan disbursements		290,000	384,101
31	July loan fees	5,800		389,901

General Ledger

September 2007

A5-O6a

Date	Explanation	REF	Debit	Credit	Balance
	CASH AND DUE FROM BANKS	101			404,901
July 1	Purchased computer			4,000	400,901
3	Purchased motorcycles			4,000	396,901
31	Collected savings		51,000		447,901
31	July loan repayments		226,200		674,101
31	July loan disbursements			290,000	384,101
31	July loan fees		5,800		389,901
Aug 1	Semiannual board meeting			3,100	386,801
7	Short-term deposit matures		10,400		397,201
9	Prepaid rent			2,000	395,201
31	Collected savings		57,000		452,201
31	August loan repayments		222,300		674,501
31	August loan disbursements			304,000	370,501
31	August loan fees		6,080		376,581
Sept 3	Paid short-term loan			9,200	367,381
6	Study tour			1,500	365,881
30	Collected savings		63,000		428,881
30	September loan repayments		343,200		772,081
30	September loan disbursements			341,000	431,081
30	September loan fees		6,820		437,901
30	Long-term investment			40,000	397,901
	Monthly Expenses			204,300	193,601

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General Ledger

September 2007 (continued)

A5-O6b

Date	Explanation	REF	Debit	Credit	Balance
	TRADE INVESTMENTS	110			48,270
Aug 7	Short-term deposit matures			10,000	38,270
	GROSS LOAN PORTFOLIO	120			956,406
July 31	July loan repayments			174,000	782,406
31	July loan disbursements		290,000		1,072,406
Aug 31	August loan repayments			171,000	901,406
31	August loan disbursements		304,000		1,205,406
Sept 30	September loan repayments			264,000	941,406
30	September loan disbursements		341,000		1,282,406
	IMPAIRMENT LOSS ALLOWANCE	125			(19,128)
	ACCOUNTS RECEIVABLE AND OTHER ASSETS	135			36,415
Aug 9	Prepaid rent		2,000		38,415
	OTHER LONG-TERM INVESTMENTS	140			-
Sept 31	Purchased term-deposit		40,000		40,000
	GROSS FIXED ASSETS	150			230,504
July 1	Purchased computer		4,000		234,504
July 3	Purchased motorcycles		15,000		249,504
	ACC. DEPRECIATION	155			(100,353)

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General Ledger

September 2007 (continued)

A5-O6c

Date	Explanation	REF	Debit	Credit	Balance
	DEMAND DEPOSITS	201			595,517
July 31	July savings collected			51,000	646,517
Aug 31	August savings collected			57,000	703,517
Sept 30	September savings collected			63,000	766,517
	SHORT-TERM BORROWINGS	215			19,514
July 3	Purchased motorcycles			11,000	30,514
Sept 3	Paid short-term loan		8,000		22,514
Sept 6	Study tour			3,500	26,014
	PAID-IN CAPITAL	301			50,000
	DONATED EQUITY – PRIOR	310			1,389,241
	PRIOR YEAR'S P/L	325			(778,735)
	RESERVES	335			50,000
	INTEREST ON LOANS	410			233,910
July 31	July loan repayments			52,200	286,110
Aug 31	August loan repayments			51,300	337,410
Sept 30	September loan repayments			79,200	416,610

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General Ledger

September 2007 (continued)

A5-O6d

Date	Explanation	REF	Debit	Credit	Balance
	LOAN FEES/SERVICE CHARGE	415			24,399
July 31	July loan disbursements			5,800	30,199
Aug 31	August loan disbursements			6,080	36,279
Sept 30	September loan disbursements			6,820	43,099
	INTEREST ON INVESTMENTS	420			-
Aug 7	Short-term deposit matures			400	400
	DONATIONS	440			442,031
	INTEREST PAID ON ST DEBT	515			1,030
Sept 3	Paid interest on short-term loan		1,200		2,230
	PROVISION FOR LOAN IMPAIRMENT	530			19,128
	PERSONNEL	545			197,940
July 31	Salaries		32,000		229,940
Aug 31	Salaries		32,000		261,940
Sept 30	Salaries		32,000		293,940
	TRAINING AND DEVELOPMENT	565			24,379
Sept 6	Study tour		5,000		29,379

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General Ledger

September 2007 (continued)

A5-O6e

Date	Explanation	REF	Debit	Credit	Balance
	RENT AND UTILITIES	566			64,256
July 31	Rent and utilities		10,700		74,956
Aug 31	Rent and utilities		10,700		85,656
Sept 30	Rent and utilities		10,700		96,356
	COMMUNICATIONS	567			24,659
July 31	Phone, courier, etc.		4,000		28,659
Aug 31	Phone, courier, etc.		4,000		32,659
Sept 30	Phone, courier, etc.		4,000		36,659
	BANK FEES	568			7,694
July 31	Bank fees		1,300		8,994
Aug 31	Bank fees		1,300		10,294
Sept 30	Bank fees		1,300		11,594
	INSURANCE	569			33
	PRINTING AND MATERIALS	570			29,102
July 31	Printing and materials		4,700		33,802
Aug 31	Printing and materials		4,700		38,502
Sept 30	Printing and materials		4,700		43,202

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General Ledger

September 2007 (continued)

A5-O6f

Date	Explanation	REF	Debit	Credit	Balance
	REPAIR AND MAINTENANCE	571			18,119
July 31	Repair and maintenance		3,000		21,119
Aug 31	Repair and maintenance		3,000		24,119
Sept 30	Repair and maintenance		3,000		27,119
	TRAVEL AND TRANSPORT	572			74,400
July 31	Travel and transport		12,400		86,800
Aug 31	Travel and transport		12,400		99,200
Sept 30	Travel and transport		12,400		111,600
	LEGAL AND AUDIT FEES	573			1,942
	BOARD MEETING EXPENSES	574			3,522
Aug 1	Semiannual board meeting		3,100		6,622
	OTHER ADMIN/MISC EXPENSES	575			2,658

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General Ledger

December 2007

A5-O7a

Date	Explanation	REF	Debit	Credit	Balance
	CASH AND DUE FROM BANKS	101			193,601
Oct 8	Received donation		25,000		218,601
10	Attend training course			500	218,101
31	Collected savings		61,000		279,101
31	Oct loan repayments		330,200		609,301
31	Oct loan disbursements			343,000	266,301
31	Oct loan fees		6,860		273,161
Nov 4	Attend conference			1,000	272,161
19	Pay insurance			700	271,461
30	Collected savings		64,000		335,461
30	Nov loan repayments		369,200		704,661
30	Nov loan disbursements			374,000	330,661
30	Nov loan fees		7,480		338,141
Dec 11	Promotional breakfast			775	337,366
31	Repaid short-term loan			16,000	321,366
31	Collected savings		59,000		380,366
31	September loan repayments		392,600		772,966
31	September loan disbursements			401,000	371,966
31	September loan fees		8,020		379,986
31	Receive equity donation		40,000		419,986
	Monthly Expenses			204,300	215,686

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General Ledger

December 2007 (continued)

A5-O7b

Date	Explanation	REF	Debit	Credit	Balance
	TRADE INVESTMENTS	110			38,270
	GROSS LOAN PORTFOLIO	120			1,282,406
Oct 31	October loan repayments			254,000	1,028,406
31	October loan disbursements		343,000		1,371,406
Nov 30	November loan repayments			284,000	1,087,406
30	November loan disbursements		374,000		1,461,406
Dec 31	December loan repayments			302,000	1,159,406
31	December loan disbursements		401,000		1,560,406
	IMPAIRMENT LOSS ALLOWANCE	125			(19,128)
	ACCT REC & CURRENT ASSETS	135			38,415
	OTHER (LT) INVESTMENTS	140			40,000
	FIXED ASSETS	150			249,504
	ACC. DEPRECIATION	155			(100,353)
	DEMAND DEPOSITS	201			766,517
Oct 31	October savings collected			61,000	827,517
Nov 31	November savings collected			64,000	891,517
Dec 30	December savings collected			59,000	950,517

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General Ledger

December 2007 (continued)

A5-O7c

Date	Explanation	REF	Debit	Credit	Balance
	SHORT-TERM BORROWINGS	215			26,014
Dec 31	Repaid short-term loan		14,000		12,014
	PAID-IN CAPITAL	301			50,000
	DONATED EQUITY PRIOR YEARS	310			1,389,241
	PRIOR YEARS RETAINED EARN	325			(778,735)
	INTEREST ON LOAN PORTFOLIO	410			416,610
Oct 31	October loan repayments			76,200	492,810
Nov 30	November loan repayments			85,200	578,010
Dec 31	December loan repayments			90,600	668,610
	FEES ON LOAN PORTFOLIO	415			43,099
Oct 31	October loan disbursements			6,860	49,959
Nov 30	November loan disbursements			7,480	57,439
Dec 31	December loan disbursements			8,020	65,459
	FINANCIAL REVENUE INVESTMENTS	420			400
	DONATIONS 44	0			442,031
Oct 8	Donations for operations			25,000	467,031
Dec 31	Donations			40,000	507,031
Dec 31	Repaid short-term loan		14,000		493,031

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General Ledger

December 2007 (continued)

A5-O7d

Date	Explanation	REF	Debit	Credit	Balance
	INTEREST PAID ON ST DEBT	515			2,230
Dec 31	Paid interest on repaid short-term loan		2,000		4,230
	PROVISION FOR LOAN IMPAIRMENT	530			19,128
	PERSONNEL	545			293,940
Oct 3 1	Salaries		32,000		325,940
Nov 30	Salaries		32,000		357,940
Dec 31	Salaries		32,000		389,940
	TRAINING AND DEVELOPMENT	565			29,379
Oct 10	Financial Management Training		500		29,879
Nov 4	Executive Director Conference		1,000		30,879
	RENT AND UTILITIES	566			96,356
Oct 31	Rent and utilities		10,700		
Nov 30	Rent and utilities		10,700		
Dec 31	Rent and utilities		10,700		128,456
	COMMUNICATION	567			36,659
Oct 31	Phone, courier, etc.		4,000		
Nov 30	Phone, courier, etc.		4,000		
Dec 31	Phone, courier, etc.		4,000		48,659

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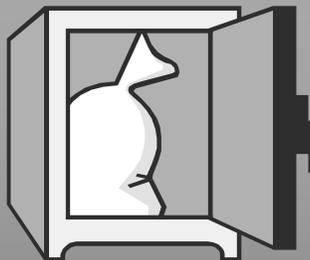
General Ledger

December 2007 (continued)

A5-07e

Date	Explanation	REF	Debit	Credit	Balance
	BANK FEES	568			11,594
Oct 31	Bank fees		1,300		12,894
Nov 30	Bank fees		1,300		14,194
Dec 31	Bank fees		1,300		15,494
	INSURANCE	569			33
Nov 19	Paid insurance		700		733
	PRINTING AND MATERIALS	570			43,202
Oct 31	Printing and materials		4,700		47,902
Nov 30	Printing and materials		4,700		52,602
Dec 31	Printing and materials		4,700		57,302
	REPAIR AND MAINTENANCE	571			27,119
Oct 31	Repair and maintenance		3,000		30,119
Nov 30	Repair and maintenance		3,000		33,119
Dec 31	Repair and maintenance		3,000		36,119
	TRAVEL AND TRANSPORT	572			111,600
Oct 31	Travel and transport		12,400		124,000
Nov 30	Travel and transport		12,400		136,400
Dec 31	Travel and transport		12,400		148,800
	LEGAL AND AUDIT FEES	573			1,942
	BOARD MEETING EXPENSES	574			6,622
	OTHER ADMIN/MISC EXPENSES	575			2,658
Dec 11	Promotional breakfast		775		3,433

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A5-08

Cash Account and Bank Reconciliation

Bank Balance, August 31, 2005		40,000
less outstanding checks:	#1 147	
	#2 <u>53</u>	
	(200)	
plus outstanding deposits:	#1 400	
		200
Adjusted Bank Balance		40,200
Cash Account Balance (prior to reconciliation)		40,350
record bank charges		<u>(150)</u>
Adjusted Cash Account		40,200

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Trial Balance

A5-O9a

Ledger Accounts	Ref	Debit	Credit
Cash and Due from Banks	101		
Trade investments	110		
Gross Loan Portfolio	120		
Impairment Loss Allowance	125		
Acct Receivable & Other Assets	135		
Other (Long-Term) Investments	140		
Gross Fixed Assets	150		
Accumulated Depreciation & Amort	155		
Demand Deposits	201		
Short-Term Borrowings	215		
Paid in Capital	301		
Donated Equity Prior Years	310		
Retained Earnings Prior Years	325		
Reserves	335		
Interest on Loan Portfolio	410		
Fees & Commissions on Loan Portfolio	415		
Financial Revenue from Investment	420		
Donations	440		

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Trial Balance *(continued)*

A5-O9b

Ledger Accounts	Ref	Debit	Credit
Interest & Fee Expense on Borrowings	515		
Provision for Loan Impairment	530		
Personnel Expense	545		
Training and Professional Development	565		
Rent and Utilities	566		
Communications (phone, postage, courier)	567		
Bank Charges	568		
Insurance	569		
Printing Materials Supplies	570		
Repair and Maintenance	571		
Travel and Transport	572		
Legal and Audit Fees	573		
Board Meeting Expenses	574		
Miscellaneous	575		
Totals			

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Trial Balance

30 Sep 07 (continued)

A5-O10a

Ledger Accounts	Ref	Debit	Credit
Cash and Due from Banks	101	193,601	
Trade investments	110	38,270	
Gross Loan Portfolio	120	1,282,406	
Impairment Loss Allowance	125		19,128
Acct Receivable & Other Assets	135	38,415	
Other (Long-Term) Investments	140	40,000	
Gross Fixed Assets	150	249,504	
Accumulated Depreciation & Amort	155		100,353
Demand Deposits	201		766,517
Short-Term Borrowings	215		26,014
Paid in Capital	301		50,000
Donated Equity Prior Years	310		1,389,241
Retained Earnings Prior Years	325	778,735	
Reserves	335		50,000
Interest on Loan Portfolio	410		416,610
Fees & Commissions on Loan Portfolio	415		43,099
Financial Revenue from Investment	420		400
Donations	440		442,031

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Trial Balance

30 Sep 07 (continued)

A5-O10b

Ledger Accounts	Ref	Debit	Credit
Interest & Fee Expense on Borrowings	515	2,230	
Provision for Loan Impairment	530	19,128	
Personnel Expense	545	293,940	
Training and Professional Development	565	29,379	
Rent and Utilities	566	96,356	
Communications (phone, postage, courier)	567	36,659	
Bank Charges	568	11,594	
Insurance	569	33	
Printing Materials Supplies	570	43,202	
Repair and Maintenance	571	27,119	
Travel and Transport	572	111,600	
Legal and Audit Fees	573	1,942	
Board Meeting Expenses	574	6,622	
Miscellaneous	575	2,658	
Totals		3,303,393	3,303,393

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Trial Balance

31 Dec 07

A5-O11a

Cash and Due from Banks	101	215,686	
Trade investments	110	38,270	
Gross Loan Portfolio	120	1,560,406	
Impairment Loss Allowance	125		19,128
Acct Receivable & Other Assets	135	38,415	
Other (Long-Term) Investments	140	40,000	
Gross Fixed Assets	150	249,504	
Accumulated Depreciation & Amort	155		100,353
Demand Deposits	201		950,517
Short-Term Borrowings	215		12,014
Paid In Capital	301		50,000
Donated Equity Prior Years	310		1,389,241
Retained Earnings Prior Years	325	778,735	
Reserves	335		50,000
Interest on Loan Portfolio	410		668,610
Fees & Commissions on Loan Portfolio	415		65,459
Financial Revenue from Investment	420		400
Donations	440		507,031

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Trial Balance

30 Dec 07 (continued)

A5-O11b

Ledger Accounts	Ref	Debit	Credit
Interest & Fee Expense on Borrowings	515	4,230	
Provision for Loan Impairment	530	19,128	
Personnel Expense	545	389,940	
Training and Professional Development	565	30,879	
Rent and Utilities	566	128,456	
Communications (phone, postage, courier)	567	48,659	
Bank Charges	568	15,494	
Insurance	569	733	
Printing Materials Supplies	570	57,302	
Repair and Maintenance	571	36,119	
Travel and Transport	572	148,800	
Legal and Audit Fees	573	1,942	
Board Meeting Expenses	574	6,622	
Miscellaneous	575	3,433	
Totals		3,812,753	3,812,753

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A5-012

Provisions for Loan Impairment

- An Impairment Loss Allowance is an account that represents the amount of outstanding principal that is not expected to be recovered by a microfinance organization.

It is a negative asset on the Balance Sheet that reduces the outstanding portfolio.

- A Provision for Loan Impairment is the amount expensed on the Income and Expenses Statement.



It increases the loan loss reserve.

- Loan Losses or Write-Offs occur only as an accounting entry. They do not mean that loan recovery should not continue to be pursued.



They decrease the impairment loss allowance and the gross loan portfolio.

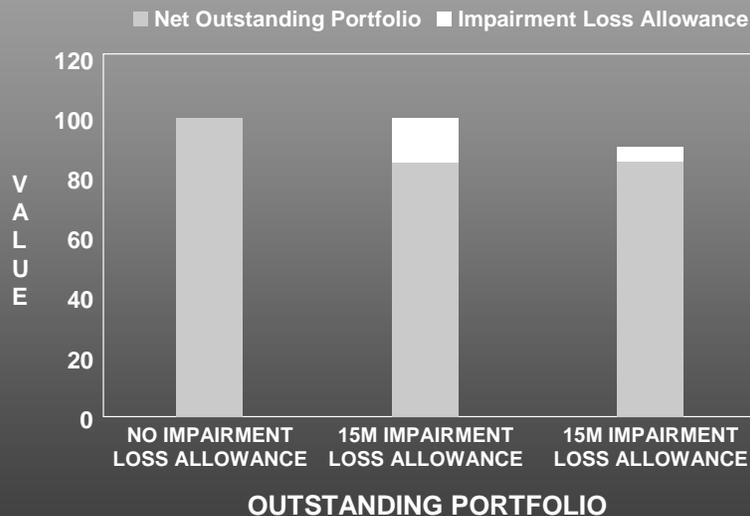
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A5-013

Effect of Impairment Allowances and Losses on Balance Sheet

Value of the Outstanding Portfolio



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Loan Loss Worksheet

Determine what the Impairment Loss Allowance should be.

Current Impairment Loss Allowance = \$19,128.

Amount of loans outstanding = \$1,560,406

Loan loss reserve rate = 2%

The required impairment loss allowance is

$$\$1,560,406 * 2\% = \$31,208$$

A provision for loan impairment

$$(\$31,208 - \$19,128) = \$12,080.$$

Provision for Loan Impairment	Impairment Loss Allowance
12,080	12,080

Loan Loss Worksheet (continued)

Write-off of \$5,000, reducing the Impairment Loss Allowance to \$26,208. Write-Offs reduce both the Impairment Loss Allowance (negative asset) and the gross loans outstanding.

Impairment Loss Allowance	Gross Loan Portfolio
5,000	5,000

What would happen if the write-off was \$40,000?

Provision for Loan Impairment	Impairment Loss Allowance
40,000	8,792
Gross Loan Portfolio	
40,000	

Depreciation

A5-O15

1. Record depreciation (50%) for one year on SAFE's computers bought for \$4000:

<u>Depreciation</u>	<u>Accumulated Depreciation</u>
2,000	2,000

2. Depreciate SAFE motorcycles at 33.33% for one year for \$15,000:

<u>Depreciation</u>	<u>Accumulated Depreciation</u>
5,000	5,000

3. Depreciate fixed assets purchased before July 1, 2007 (i.e. on the opening balance sheet) by \$72,544:

<u>Depreciation</u>	<u>Accumulated Depreciation</u>
72,544	72,544

4. TOTAL Depreciation = 2,000 + 5,000 + 72,544
= 79,544

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Adjusting for Accruals

A5-O16a

1. Record accrued interest revenue on long- and short-term investments:

a. Amount in interest bearing accounts =
Trade (Short-term) investments + Long-term investments =
\$38,270 + \$40,000 = \$78,270

b. Accrued interest (not received but earned) =
rate x total investments
7% x \$78,270 = \$5,479

<u>Other Current Assets</u>	<u>Financial Revenue from Investments</u>
5,479	5,479

2. Short-term Borrowings equal to \$12,014:

\$12,014 x 15% = \$1,802

<u>Interest Expense on Borrowings</u>
5,479
<u>Interest Payable on Funding Liabilities</u>
5,479

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Adjusting for Accruals *(continued)*

3. Deposits equal to 950,517:

$$\$950,517 \times 5\% = \$47,526$$

<u>Interest Expense on Deposits</u>	
47,526	
<u>Interest Payable on Funding Liabilities</u>	
	47,526



General Journal – Adjusting Entries

DEC	Account Title and Explanation	Ref.	Debit	Credit
31	Provisions for Loan Impairment	530	12,080	
	Impairment Loss Allowance (increase loan loss reserve)	125		12,080
31	Depreciation Expense	555	79,544	
	Accumulated Depreciation (depreciate fixed assets)	155		79,544
31	Other Current Assets	135	5,479	
	Financial Revenue from Investments (accrue interest revenue)	420		5,479
31	Interest Expense on Borrowings	515	1,802	
	Interest Payable Short-term Borrowings (accrue interest expense)	220		1,802
31	Interest Expense on Deposits	510	47,526	



General Ledger Adjusted December 2007

A5-O18a

(Note: the accounts affected by adjusting entries are larger and colored)

Date	Explanation	Ref	Debit	Credit	Balance
	CASH AND DUE FROM BANKS	101			193,601
Oct 8	Received donation		25,000		218,601
10	Attend training course			500	218,101
31	Collected savings		61,000		279,101
31	Oct loan repayments		330,200		609,301
31	Oct loan disbursements			343,000	266,301
31	Oct loan fees		6,860		273,161
Nov 4	Attend conference			1,000	272,161
19	Pay insurance			700	271,461
30	Collected savings		64,000		335,461
30	Nov loan repayments		369,200		704,661
30	Nov loan disbursements			374,000	330,661
30	Nov loan fees		7,480		338,141
Dec 11	Promotional breakfast			775	337,366
31	Repaid short-term loan			16,000	321,366
31	Collected savings		59,000		380,366
31	September loan repayments		392,600		772,966
31	September loan disbursements			401,000	371,966
31	September loan fees		8,020		379,986
31	Receive equity donation		40,000		419,986
	Monthly Expenses			204,300	215,686

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General Ledger Adjusted December 2007 (continued)

A5-O18b

Date	Explanation	Ref	Debit	Credit	Balance
	TRADE INVESTMENTS	110			38,270
	GROSS LOAN PORTFOLIO	120			1,282,406
Oct 31	October loan repayments			254,000	1,028,406
31	October loan disbursements		343,000		1,371,406
Nov 30	November loan repayments			284,000	1,087,406
30	November loan disbursements		374,000		1,461,406
Dec 31	December loan repayments			302,000	1,159,406
31	December loan disbursements		401,000		1,560,406
	IMPAIRMENT LOSS ALLOWANCE	125			(19,128)
Dec 31	Increase Allowance			12,080	(31,208)
	ACCT REC & CURRENT ASSETS	135			38,415
Dec 31	Accrue interest revenue		5,479		43,894
	OTHER (LT) INVESTMENTS	140			40,000
	FIXED ASSETS	150			249,504
	ACC. DEPRECIATION	155			(100,353)
Dec 31	Depreciate fixed assets			79,544	(179,897)

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General Ledger Adjusted December 2007 (continued)

A5-O18c

Date	Explanation	Ref	Debit	Credit	Balance
	DEMAND DEPOSITS	201			766,517
Oct 31	October savings collected			61,000	827,517
Nov 31	November savings collected			64,000	891,517
Dec 30	December savings collected			59,000	950,517
	SHORT-TERM BORROWINGS	215			26,014
Dec 31	Repaid short-term loan		14,000		12,014
	INTEREST PAYABLE ON FUNDING LIABILITIES	220			-
Dec 31	Accrue interest expense			1,802	1,802
	Accrue interest expense			47,526	49,328
	PAID-IN CAPITAL	301			50,000
	DONATED EQUITY PRIOR YEARS	310			1,389,241
	PRIOR YEARS RETAINED EARN	325			(778,735)
	INTEREST ON LOAN PORTFOLIO	410			416,610
Oct 31	October loan repayments			76,200	492,810
Nov 30	November loan repayments			85,200	578,010
Dec 31	December loan repayments			90,600	668,610

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General Ledger Adjusted December 2007 (continued)

A5-O18d

Date	Explanation	Ref	Debit	Credit	Balance
	FEES ON LOAN PORTFOLIO	415			43,099
Oct 31	October loan disbursements			6,860	49,959
Nov 30	November loan disbursements			7,480	57,439
Dec 31	December loan disbursements			8,020	65,459
	FINANCIAL REVENUE INVESTMENTS	420			400
Dec 31	Accrue interest on investments			5,479	5,879
	DONATIONS 44	0			442,031
Oct 8	Donations for operations			25,000	467,031
Dec 31	Donations			40,000	507,031
	INTEREST/FEE EXPENSE ON DEPOSITS	510			-
Dec 31	Accrue interest expense		47,526		47,526
	INTEREST/FEE EXPENSE ON ST BORROWING	515			2,230
Dec 31	Paid interest on repaid short term loan		2,000		4,230
Dec 31	Accrue interest expense		1,802		6,032
	PROVISION FOR LOAN IMPAIRMENT	530			19,128
Dec 31	Provision expense		12,080		31,208
	PERSONNEL	545			293,940
Oct 31	Salaries		32,000		325,940
Nov 30	Salaries		32,000		357,940
Dec 31	Salaries		32,000		389,940

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General Ledger Adjusted

December 2007 (continued)

A5-O18e

Date	Explanation	Ref	Debit	Credit	Balance
	DEPRECIATION 5	55			-
Dec 31	Depreciation expense		79,544		79,544
	TRAINING AND DEVELOPMENT	565			29,379
Oct 14	Financial Management Training		500		29,879
Nov 4	Executive Director Conference		1,000		30,879
	RENT AND UTILITIES	566			96,356
Oct 31	Rent and utilities		10,700		
Nov 30	Rent and utilities		10,700		
Dec 31	Rent and utilities		10,700		128,456
	COMMUNICATION	567			36,659
Oct 31	Phone, courier, etc.		4,000		
Nov 30	Phone, courier, etc.		4,000		
Dec 31	Phone, courier, etc.		4,000		48,659
	BANK FEES	568			11,594
Oct 31	Bank fees		1,300		12,894
Nov 30	Bank fees		1,300		14,194
Dec 31	Bank fees		1,300		15,494
	INSURANCE	569			33
Nov 19	Paid insurance		700		733

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General Ledger Adjusted

December 2007 (continued)

A5-O18f

Date	Explanation	Ref	Debit	Credit	Balance
	PRINTING AND MATERIALS	570			43,202
Oct 31	Printing and materials		4,700		47,902
Nov 30	Printing and materials		4,700		52,602
Dec 31	Printing and materials		4,700		57,302
	REPAIR AND MAINTENANCE	571			27,119
Oct 31	Repair and maintenance		3,000		30,119
Nov 30	Repair and maintenance		3,000		33,119
Dec 31	Repair and maintenance		3,000		36,119
	TRAVEL AND TRANSPORT	572			111,600
Oct 31	Travel and transport		12,400		124,000
Nov 30	Travel and transport		12,400		136,400
Dec 31	Travel and transport		12,400		148,800
	LEGAL AND AUDIT FEES	573			1,942
	BOARD MEETING EXPENSES	574			6,622
	OTHER ADMIN/MISC EXPENSES	575			2,658
Dec 11	Promotional breakfast		775		3,433

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Trial Balance Adjusted

31 Dec 2007

A5-O19a

Ledger Accounts	Ref	Debit	Credit
Cash and Due from Banks	101	215,686	
Trade investments	110	38,270	
Gross Loan Portfolio	120	1,560,406	
Impairment Loss Allowance	125		31,208
Acct Receivable & Other Assets	135	43,894	
Other (Long-Term) Investments	140	40,000	
Gross Fixed Assets	150	249,504	
Accumulated Depreciation & Amort	155		179,897
Demand Deposits	201		950,517
Short-Term Borrowings	215		12,014
Interest Payable on Funding Liabilites	220		49,328
Paid in Capital	301		50,000
Donated Equity Prior Years	310		1,389,241
Retained Earnings Prior Years	325	778,735	
Reserves			50,000
Interest on Loan Portfolio	410		668,610
Fees & Commissions on Loan Portfolio	415		65,459
Financial Revenue from Investment	420		5,879

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Trial Balance Adjusted

31 Dec 2007 (continued)

A5-O19b

Ledger Accounts	Ref	Debit	Credit
Donations	440		507,031
Interest & Fee Expense on Depositss	510	47,526	
Interest & Fee Expense on Borrowings	515	6,032	
Provision for Loan Impairment	530	31,208	
Personnel Expense	545	389,940	
Depreciation Expense	555	79,544	
Training and Professional Development	565	30,879	
Rent and Utilities	566	128,456	
Communications (phone, postage, courier)	567	48,659	
Bank Charges	568	15,494	
Insurance	569	733	
Printing Materials Supplies	570	57,302	
Repair and Maintenance	571	36,119	
Travel and Transport	572	148,800	
Legal and Audit Fees	573	1,942	
Board Meeting Expenses	574	6,622	
Miscellaneous	575	3,433	
Totals		3,959,184	3,959,184

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Handouts

General Ledger

September 2007

Date	Explanation	REF	Debit	Credit	Balance
	CASH AND DUE FROM BANKS	101			404,901
July 1	Purchased computer			4,000	400,901
3	Purchased motorcycles			4,000	396,901
31	Collected savings		51,000		447,901
31	July loan repayments		226,200		674,101
31	July loan disbursements			290,000	384,101
31	July loan fees		5,800		389,901
Aug 1	Semiannual board meeting			3,100	386,801
7	Short-term deposit matures		10,400		397,201
9	Prepaid rent			2,000	395,201
31	Collected savings		57,000		452,201
31	August loan repayments		222,300		674,501
31	August loan disbursements			304,000	370,501
31	August loan fees		6,080		376,581
Sept 3	Paid short-term loan			9,200	367,381
6	Study tour			1,500	365,881
30	Collected savings		63,000		428,881
30	September loan repayments		343,200		772,081
30	September loan disbursements			341,000	431,081
30	September loan fees		6,820		437,901
30	Long-term investment			40,000	397,901
	Monthly Expenses			204,300	193,601
	TRADE INVESTMENTS	110			48,270
Aug 7	Short-term deposit matures			10,000	38,270
	GROSS LOAN PORTFOLIO	120			956,406
July 31	July loan repayments			174,000	782,406
31	July loan disbursements		290,000		1,072,406
Aug 31	August loan repayments			171,000	901,406
31	August loan disbursements		304,000		1,205,406
Sept 30	September loan repayments			264,000	941,406
30	September loan disbursements		341,000		1,282,406
	IMPAIRMENT LOSS ALLOWANCE	125			(19,128)
	ACCOUNTS RECEIVABLE AND OTHER ASSETS	135			36,415
Aug 9	Prepaid rent		2,000		38,415
	OTHER LONG-TERM INVESTMENTS	140			-
Sept 31	Purchased term-deposit		40,000		40,000

Date	Explanation	REF	Debit	Credit	Balance
	GROSS FIXED ASSETS	150			230,504
July 1	Purchased computer		4,000		234,504
July 3	Purchased motorcycles		15,000		249,504
	ACC. DEPRECIATION	155			(100,353)
	DEMAND DEPOSITS	201			595,517
July 31	July savings collected			51,000	646,517
Aug 31	August savings collected			57,000	703,517
Sept 30	September savings collected			63,000	766,517
	SHORT-TERM BORROWINGS	215			19,514
July 3	Purchased motorcycles			11,000	30,514
Sept 3	Paid short-term loan		8,000		22,514
Sept 6	Study tour			3,500	26,014
	PAID-IN CAPITAL	301			50,000
	DONATED EQUITY – PRIOR	310			1,389,241
	PRIOR YEAR'S P/L	325			(778,735)
	RESERVES	335			50,000
	INTEREST ON LOANS	410			233,910
July 31	July loan repayments			52,200	286,110
Aug 31	August loan repayments			51,300	337,410
Sept 30	September loan repayments			79,200	416,610
	LOAN FEES/SERVICE CHARGE	415			24,399
July 31	July loan disbursements			5,800	30,199
Aug 31	August loan disbursements			6,080	36,279
Sept 30	September loan disbursements			6,820	43,099
	INTEREST ON INVESTMENTS	420			-
Aug 7	Short-term deposit matures			400	400
	DONATIONS	440			442,031
	INTEREST PAID ON ST DEBT	515			1,030
Sept 3	Paid interest on short-term loan		1,200		2,230
	PROVISION FOR LOAN IMPAIRMENT	530			19,128
	PERSONNEL	545			197,940
July 31	Salaries		32,000		229,940
Aug 31	Salaries		32,000		261,940
Sept 30	Salaries		32,000		293,940

Date	Explanation	REF	Debit	Credit	Balance
	TRAINING AND DEVELOPMENT	565			24,379
Sept 6	Study tour		5,000		29,379
	RENT AND UTILITIES	566			64,256
July 31	Rent and utilities		10,700		74,956
Aug 31	Rent and utilities		10,700		85,656
Sept 30	Rent and utilities		10,700		96,356
	COMMUNICATIONS	567			24,659
July 31	Phone, courier, etc.		4,000		28,659
Aug 31	Phone, courier, etc		4,000		32,659
Sept 30	Phone, courier, etc		4,000		36,659
	BANK FEES	568			7,694
July 31	Bank fees		1,300		8,994
Aug 31	Bank fees		1,300		10,294
Sept 30	Bank fees		1,300		11,594
	INSURANCE	569			33
	PRINTING AND MATERIALS	570			29,102
July 31	Printing and materials		4,700		33,802
Aug 31	Printing and materials		4,700		38,502
Sept 30	Printing and materials		4,700		43,202
	REPAIR AND MAINTENANCE	571			18,119
July 31	Repair and maintenance		3,000		21,119
Aug 31	Repair and maintenance		3,000		24,119
Sept 30	Repair and maintenance		3,000		27,119
	TRAVEL AND TRANSPORT	572			74,400
July 31	Travel and transport		12,400		86,800
Aug 31	Travel and transport		12,400		99,200
Sept 30	Travel and transport		12,400		111,600
	LEGAL AND AUDIT FEES	573			1,942
	BOARD MEETING EXPENSES	574			3,522
Aug 1	Semiannual board meeting		3,100		6,622
	OTHER ADMIN/MISC EXPENSES	575			2,658

General Ledger

December 2007

Date	Explanation	REF	Debit	Credit	Balance
	CASH AND DUE FROM BANKS	101			193,601
Oct 8	Received donation		25,000		218,601
10	Attend training course			500	218,101
31	Collected savings		61,000		279,101
31	Oct loan repayments		330,200		609,301
31	Oct loan disbursements			343,000	266,301
31	Oct loan fees		6,860		273,161
Nov 4	Attend conference			1,000	272,161
19	Pay insurance			700	271,461
30	Collected savings		64,000		335,461
30	Nov loan repayments		369,200		704,661
30	Nov loan disbursements			374,000	330,661
30	Nov loan fees		7,480		338,141
Dec 11	Promotional breakfast			775	337,366
31	Repaid short-term loan			16,000	321,366
31	Collected savings		59,000		380,366
31	September loan repayments		392,600		772,966
31	September loan disbursements			401,000	371,966
31	September loan fees		8,020		379,986
31	Receive equity donation		40,000		419,986
	Monthly Expenses			204,300	215,686
	TRADE INVESTMENTS	110			38,270
	GROSS LOAN PORTFOLIO	120			1,282,406
Oct 31	October loan repayments			254,000	1,028,406
31	October loan disbursements		343,000		1,371,406
Nov 30	November loan repayments			284,000	1,087,406
30	November loan disbursements		374,000		1,461,406
Dec 31	December loan repayments			302,000	1,159,406
31	December loan disbursements		401,000		1,560,406
	IMPAIRMENT LOSS ALLOWANCE	125			(19,128)
	ACCT REC & CURRENT ASSETS	135			38,415
	OTHER (LT) INVESTMENTS	140			40,000
	FIXED ASSETS	150			249,504
	ACC. DEPRECIATION	155			(100,353)

Date	Explanation	REF	Debit	Credit	Balance
	DEMAND DEPOSITS	201			766,517
Oct 31	October savings collected			61,000	827,517
Nov 31	November savings collected			64,000	891,517
Dec 30	December savings collected			59,000	950,517
	SHORT-TERM BORROWINGS	215			26,014
Dec 31	Repaid short-term loan		14,000		12,014
	PAID-IN CAPITAL	301			50,000
	DONATED EQUITY PRIOR YEARS	310			1,389,241
	PRIOR YEARS RETAINED EARN	325			(778,735)
	INTEREST ON LOAN PORTFOLIO	410			416,610
Oct 31	October loan repayments			76,200	492,810
Nov 30	November loan repayments			85,200	578,010
Dec 31	December loan repayments			90,600	668,610
	FEES ON LOAN PORTFOLIO	415			43,099
Oct 31	October loan disbursements			6,860	49,959
Nov 30	November loan disbursements			7,480	57,439
Dec 31	December loan disbursements			8,020	65,459
	FINANCIAL REVENUE INVESTMENTS	420			400
	DONATIONS	440			442,031
Oct 8	Donations for operations			25,000	467,031
Dec 31	Donations			40,000	507,031
Dec 31	Repaid short-term loan		14,000		493,031
	INTEREST PAID ON ST DEBT	515			2,230
Dec 31	Paid interest on repaid short-term loan		2,000		4,230
	PROVISION FOR LOAN IMPAIRMENT	530			19,128
	PERSONNEL	545			293,940
Oct 31	Salaries		32,000		325,940
Nov 30	Salaries		32,000		357,940
Dec 31	Salaries		32,000		389,940
	TRAINING AND DEVELOPMENT	565			29,379
Oct 10	Financial Management Training		500		29,879
Nov 4	Executive Director Conference		1,000		30,879

Date	Explanation	REF	Debit	Credit	Balance
	RENT AND UTILITIES	566			96,356
Oct 31	Rent and utilities		10,700		
Nov 30	Rent and utilities		10,700		
Dec 31	Rent and utilities		10,700		128,456
	COMMUNICATION	567			36,659
Oct 31	Phone, courier, etc.		4,000		
Nov 30	Phone, courier, etc.		4,000		
Dec 31	Phone, courier, etc.		4,000		48,659
	BANK FEES	568			11,594
Oct 31	Bank fees		1,300		12,894
Nov 30	Bank fees		1,300		14,194
Dec 31	Bank fees		1,300		15,494
	INSURANCE	569			33
Nov 19	Paid insurance		700		733
	PRINTING AND MATERIALS	570			43,202
Oct 31	Printing and materials		4,700		47,902
Nov 30	Printing and materials		4,700		52,602
Dec 31	Printing and materials		4,700		57,302
	REPAIR AND MAINTENANCE	571			27,119
Oct 31	Repair and maintenance		3,000		30,119
Nov 30	Repair and maintenance		3,000		33,119
Dec 31	Repair and maintenance		3,000		36,119
	TRAVEL AND TRANSPORT	572			111,600
Oct 31	Travel and transport		12,400		124,000
Nov 30	Travel and transport		12,400		136,400
Dec 31	Travel and transport		12,400		148,800
	LEGAL AND AUDIT FEES	573			1,942
	BOARD MEETING EXPENSES	574			6,622
	OTHER ADMIN/MISC EXPENSES	575			2,658
Dec 11	Promotional breakfast		775		3,433

Trial Balance

30 September 2007

Ledger Accounts	Ref	Debit	Credit
Cash and Due from Banks	101	193,601	
Trade investments	110	38,270	
Gross Loan Portfolio	120	1,282,406	
Impairment Loss Allowance	125		19,128
Acct Receivable & Other Assets	135	38,415	
Other (Long-Term) Investments	140	40,000	
Gross Fixed Assets	150	249,504	
Accumulated Depreciation & Amort	155		100,353
Demand Deposits	201		766,517
Short-Term Borrowings	215		26,014
Paid in Capital	301		50,000
Donated Equity Prior Years	310		1,389,241
Retained Earnings Prior Years	325	778,735	
Reserves	335		50,000
Interest on Loan Portfolio	410		416,610
Fees & Commissions on Loan Portfolio	415		43,099
Financial Revenue from Investment	420		400
Donations	440		442,031
Interest & Fee Expense on Borrowings	515	2,230	
Provision for Loan Impairment	530	19,128	
Personnel Expense	545	293,940	
Training and Professional Development	565	29,379	
Rent and Utilities	566	96,356	
Communications (phone, postage, courier)	567	36,659	
Bank Charges	568	11,594	
Insurance	569	33	
Printing Materials Supplies	570	43,202	
Repair and Maintenance	571	27,119	
Travel and Transport	572	111,600	
Legal and Audit Fees	573	1,942	
Board Meeting Expenses	574	6,622	
Miscellaneous	575	2,658	
Totals		3,303,393	3,303,393

Trial Balance

Ledger Accounts	Ref	Debit	Credit
Cash and Due from Banks	101		
Trade investments	110		
Gross Loan Portfolio	120		
Impairment Loss Allowance	125		
Acct Receivable & Other Assets	135		
Other (Long-Term) Investments	140		
Gross Fixed Assets	150		
Accumulated Depreciation & Amort	155		
Demand Deposits	201		
Short-Term Borrowings	215		
Paid in Capital	301		
Donated Equity Prior Years	310		
Retained Earnings Prior Years	325		
Reserves	335		
Interest on Loan Portfolio	410		
Fees & Commissions on Loan Portfolio	415		
Financial Revenue from Investment	420		
Donations	440		
Interest & Fee Expense on Borrowings	515		
Provision for Loan Impairment	530		
Personnel Expense	545		
Training and Professional Development	565		
Rent and Utilities	566		
Communications (phone, postage, courier)	567		
Bank Charges	568		
Insurance	569		
Printing Materials Supplies	570		
Repair and Maintenance	571		
Travel and Transport	572		
Legal and Audit Fees	573		
Board Meeting Expenses	574		
Miscellaneous	575		
Totals			

Trial Balance

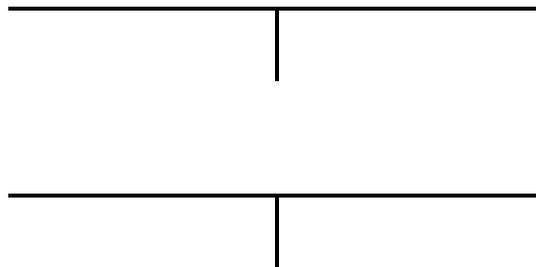
31 December 2007

Ledger Accounts	Ref	Debit	Credit
Cash and Due from Banks	101	215,686	
Trade investments	110	38,270	
Gross Loan Portfolio	120	1,560,406	
Impairment Loss Allowance	125		19,128
Acct Receivable & Other Assets	135	38,415	
Other (Long-Term) Investments	140	40,000	
Gross Fixed Assets	150	249,504	
Accumulated Depreciation & Amort	155		100,353
Demand Deposits	201		950,517
Short-Term Borrowings	215		12,014
Paid In Capital	301		50,000
Donated Equity Prior Years	310		1,389,241
Retained Earnings Prior Years	325	778,735	
Reserves	335		50,000
Interest on Loan Portfolio	410		668,610
Fees & Commissions on Loan Portfolio	415		65,459
Financial Revenue from Investment	420		400
Donations	440		507,031
Interest & Fee Expense on Borrowings	515	4,230	
Provision for Loan Impairment	530	19,128	
Personnel Expense	545	389,940	
Training and Professional Development	565	30,879	
Rent and Utilities	566	128,456	
Communications (phone, postage, courier)	567	48,659	
Bank Charges	568	15,494	
Insurance	569	733	
Printing Materials Supplies	570	57,302	
Repair and Maintenance	571	36,119	
Travel and Transport	572	148,800	
Legal and Audit Fees	573	1,942	
Board Meeting Expenses	574	6,622	
Miscellaneous	575	3,433	
Totals		3,812,753	3,812,753

Loan Loss Worksheet

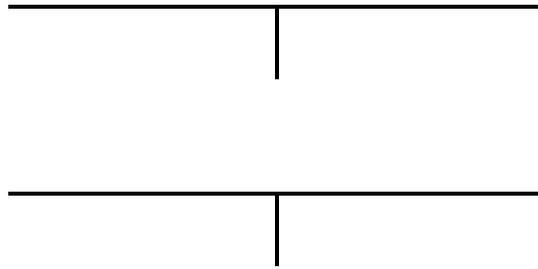
1. Determine what the provision for loan impairment and impairment loss allowance should be.

ANALYSIS	RULE	ENTRY



2. Write-off of \$5,000

ANALYSIS	RULE	ENTRY



3. What would happen if the write-off was \$40,000?

Loan Loss Worksheet – Answers

1. Determine what the impairment loss allowance should be.

Current Impairment Loss Allowance = \$19,128

Gross Loan Portfolio = \$1,560,406

Loan loss reserve rate = 2%

The required impairment loss allowance is

$$\mathbf{\$1,560,406 * 2\% = \$31,208}$$

A provision for loan impairment

$$\mathbf{(\$31,208 - \$19,128) = \$12,080}$$

ANALYSIS	RULE	ENTRY
The expense "Provision for Loan Impairment" was increased	Increases in expenses are recorded by debits	Debit: Provision for Loan Impairment \$12,080
The asset gross loan portfolio was decreased by increasing the "Impairment Loss Allowance"	Decreases in assets are recorded by a credit (or increases in negative assets)	Credit: Impairment Loss Allowance \$12,080

Provision for Loan Impairment		
<table border="1" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">12,080</td> <td style="width: 50%;"></td> </tr> </table>	12,080	
12,080		

Impairment Loss Allowance		
<table border="1" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">12,080</td> <td style="width: 50%;"></td> </tr> </table>	12,080	
12,080		

2. Write-off of \$5,000, reducing the impairment loss allowance to \$26,208. Write-offs reduce both the impairment loss allowance (negative asset) and the gross loan portfolio.

ANALYSIS	RULE	ENTRY
The negative assets "Impairment Loss Allowance" was decreased	Decreases in negative assets are recorded by debits	Debit: Impairment Loss Allowance \$5,000
The asset "Gross Loan Portfolio" was decreased	Decreases in assets are recorded by credits	Credit: Gross Loan Portfolio \$5,000

Impairment Loss Allowance		
<table border="1" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">5,000</td> <td style="width: 50%;"></td> </tr> </table>	5,000	
5,000		

Gross Loan Portfolio
5,000

(Please note: This is typical in most regions but PARMEC laws in West Africa require an additional transaction for write-offs.)

3. What would happen if the write-off was \$40,000?

An additional provision for loan impairment of \$8,792 (\$40,000–\$31,208) would have to be made before the write-off. Participants should actually make a larger provision so that there will be some remaining impairment loss allowance on the Balance Sheet after the write-off. The amount left should be based on a historical analysis of the aged portfolio.

Provision for Loan Impairment
8,792

Impairment Loss Allowance
40,000 8,792

Gross Loan Portfolio
40,000

Depreciation Worksheet

Calculate the depreciation adjustments for each problem below. Use the information in the case as well as from the information gathered to date.

- SAFE purchased computer equipment for \$4,000 on July 1, paid in cash. Record 50 percent depreciation for this year. (Refer to the "Adjusting Entries" at the end of the SAFE case.)

ANALYSIS	RULE	ENTRY

- SAFE bought motorcycles on July 3—paid \$15,000: \$4,000 cash and \$11,000 on short-term credit. At end of year, record depreciation of one-third of the value for this year:

ANALYSIS	RULE	ENTRY

3. Depreciate fixed assets purchased before July 1, 2007 (that is, on the opening balance sheet) by \$72,544:

4. What is the total depreciation expense for SAFE this year?

Depreciation Worksheet – Answers

1. SAFE purchased computer equipment for \$4,000 on July 1, paid in cash. Record 50 percent depreciation for this year. (Refer to the “Adjusting Entries” at the end of the SAFE case.)

ANALYSIS	RULE	ENTRY
Expense “Depreciation” was increased	Increases in expenses are recorded by debits	Debit: Depreciation \$2,000
The contra asset “Accumulated Depreciation” was increased	Increases in contra assets are recorded by a credit	Credit: Accumulated Depreciation \$2,000

Depreciation		
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black; width: 50%; text-align: center;">2,000</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black; width: 50%;"></td> </tr> </table>	2,000	
2,000		
Accumulated Depreciation		
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black; width: 50%; text-align: center;">2,000</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black; width: 50%;"></td> </tr> </table>	2,000	
2,000		

2. SAFE bought motorcycles on July 3—paid \$15,000: \$4,000 cash and \$11,000 on short-term credit. At end of year, record depreciation of one-third of the value for this year:

ANALYSIS	RULE	ENTRY
Expense “Depreciation” was increased	Increases in expenses are recorded by debits	Debit: Depreciation \$5,000
The contra asset “Accumulated Depreciation” was increased	Increases in contra assets are recorded by a credit	Credit: Accumulated Depreciation \$5,000

Depreciation		
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black; width: 50%; text-align: center;">5,000</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black; width: 50%;"></td> </tr> </table>	5,000	
5,000		
Accumulated Depreciation		
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black; width: 50%; text-align: center;">5,000</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black; width: 50%;"></td> </tr> </table>	5,000	
5,000		

3. Depreciate fixed assets purchased before July 1, 2007 (that is, on the opening balance sheet) by \$72,544:

Depreciation	
72,544	
Accumulated Depreciation	
72,544	

4. What is the total depreciation expense for SAFE this year?

$$\$2,000 + \$5,000 + \$72,544 = \$79,544$$

Adjusting for Accruals Worksheet

1. Record accrued interest revenue on long- and short-term investments

a. Amount in interest bearing accounts =

(Use trial balance)

b. Accrued interest (not received but earned) =

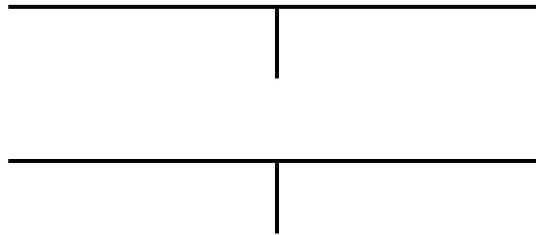
ANALYSIS	RULE	ENTRY

2. Record accrued interest expense on short-term borrowings—for simplicity's sake, assume amount at end-of-year was held all year (that is, ignore changes throughout the year).

a. Short-term borrowings =

b. Interest to accrue (record interest that has been incurred but has not been paid):

ANALYSIS	RULE	ENTRY



3. Should SAFE accrue any expense for client deposits? Explain your answer and make relevant T-accounts.

Adjusting for Accruals Worksheet – Answers

1. Record accrued interest revenue on long- and short-term investments
- a. Amount in interest bearing accounts = *(Use trial balance)*
- Trade (Short-term) investments + Long-term investments =
- $\$38,270 + \$40,000 = \$78,270$
- b. Accrued interest (not received but earned) =
- Rate x total investments
- $7\% \times \$78,270 = \$5,479$

ANALYSIS	RULE	ENTRY
The asset "Other Current Assets" was increased	Increases in assets are recorded by debits	Debit: Other Current Assets \$5,479
The revenue account "Financial Revenue from Investments" was increased	Increases in revenue are recorded by credits	Credit: Financial Revenue from Investments \$5,479

Other Current Assets	
5,479	
Financial Revenue from Investments	
5,479	

2. Record accrued interest expense on short-term borrowings—for simplicity's sake, assume amount at end-of-year was held all year (that is, ignore changes throughout the year).
- From the trial balance SAFE has short-term borrowings equal to \$12,014
 - Interest to accrue (record interest that has been incurred but not been paid)
 - a. Short-term borrowings = **$\$12,014 \times 15\% = \$1,802$**
 - b. Interest to accrue (record interest that has been incurred but has not been paid):

ANALYSIS	RULE	ENTRY
The expense "Interest and Fee Expense on Borrowings" was increased	Increases in expenses are recorded by debits	Debit: Interest and Fee Expense on Borrowings \$1,802
The liability account "Short-term Borrowings" was increased	Increases in liability are recorded by credits	Credit: Short-term Borrowings \$1,802

Interest and Fee Expense on Borrowings	
1,802	
Short-term Borrowings	
1,802	

3. Should SAFE accrue any expense for client deposits?

Refer to the case study and remember that in accounting, one should always err on the conservative side, and therefore should accrue future expenses. However, it is difficult to estimate exactly how much to accrue in this case since SAFE only pays interest at year end or when someone leaves. They could estimate from historical data. To be prudent SAFE has decided to accrue the full amounts due.

Deposits equal to \$950,517

$\$950,517 \times 5\% = \$47,526$

Interest Expense on Deposits	
47, 526	
Interest Payable on Funding Liabilities	
47,	526

General Journal – Adjusting Entries

DEC	Account Title and Explanation	Ref.	Debit	Credit
31	Provisions for Loan Impairment	530	12,080	
	Impairment Loss Allowance (increase loan loss reserve)	125		12,080
31	Depreciation Expense	555	79,544	
	Accumulated Depreciation (depreciate fixed assets)	155		79,544
31	Other Current Assets	135	5,479	
	Financial Revenue from Investments (accrue interest revenue)	420		5,479
31	Interest Expense on Borrowings	515	1,802	
	Interest Payable Short-term Borrowings (accrue interest expense)	220		1,802
31	Interest Expense on Deposits	510	47,526	
	Interest Payable	220		47,526

Trial Balance Adjusted Worksheet

31 December 2007

Ledger Accounts	Ref	Debit	Credit
Cash and Due from Banks	101		
Trade investments	110		
Gross Loan Portfolio	120		
Impairment Loss Allowance	125		
Acct Receivable & Other Assets	135		
Other (Long-Term) Investments	140		
Gross Fixed Assets	150		
Accumulated Depreciation & Amort	155		
Demand Deposits	201		
Short-Term Borrowings	215		
Interest Payable on Funding Liabilites	220		
Paid in Capital	301		
Donated Equity Prior Years	310		
Retained Earnings Prior Years	325		
Reserves	335		
Interest on Loan Portfolio	410		
Fees & Commissions on Loan Portfolio	415		
Financial Revenue from Investment	420		
Donations	440		
Interest & Fee Expense on Depositss	510		
Interest & Fee Expense on Borrowings	515		
Provision for Loan Impairment	530		
Personnel Expense	545		
Depreciation Expense	555		
Training and Professional Development	565		
Rent and Utilities	566		
Communications (phone, postage, courier)	567		
Bank Charges	568		
Insurance	569		
Printing Materials Supplies	570		
Repair and Maintenance	571		
Travel and Transport	572		
Legal and Audit Fees	573		
Board Meeting Expenses	574		
Miscellaneous	575		
Totals			

General Ledger Adjusted

December 2007

(Note: the accounts affected by adjusting entries are larger and colored)

Date	Explanation	Ref	Debit	Credit	Balance
	CASH AND DUE FROM BANKS	101			193,601
Oct 8	Received donation		25,000		218,601
10	Attend training course			500	218,101
31	Collected savings		61,000		279,101
31	Oct loan repayments		330,200		609,301
31	Oct loan disbursements			343,000	266,301
31	Oct loan fees		6,860		273,161
Nov 4	Attend conference			1,000	272,161
19	Pay insurance			700	271,461
30	Collected savings		64,000		335,461
30	Nov loan repayments		369,200		704,661
30	Nov loan disbursements			374,000	330,661
30	Nov loan fees		7,480		338,141
Dec 11	Promotional breakfast			775	337,366
31	Repaid short-term loan			16,000	321,366
31	Collected savings		59,000		380,366
31	September loan repayments		392,600		772,966
31	September loan disbursements			401,000	371,966
31	September loan fees		8,020		379,986
31	Receive equity donation		40,000		419,986
	Monthly Expenses			204,300	215,686
	TRADE INVESTMENTS	110			38,270
	GROSS LOAN PORTFOLIO	120			1,282,406
Oct 31	October loan repayments			254,000	1,028,406
31	October loan disbursements		343,000		1,371,406
Nov 30	November loan repayments			284,000	1,087,406
30	November loan disbursements		374,000		1,461,406
Dec 31	December loan repayments			302,000	1,159,406
31	December loan disbursements		401,000		1,560,406
	IMPAIRMENT LOSS ALLOWANCE	125			(19,128)
Dec 31	Increase Allowance			12,080	(31,208)
	ACCT REC & CURRENT ASSETS	135			38,415
Dec 31	Accrue interest revenue		5,479		43,894
	OTHER (LT) INVESTMENTS	140			40,000
	FIXED ASSETS	150			249,504
	ACC. DEPRECIATION	155			(100,353)
Dec 31	Depreciate fixed assets			79,544	(179,897)
	DEMAND DEPOSITS	201			766,517
Oct 31	October savings collected			61,000	827,517
Nov 31	November savings collected			64,000	891,517
Dec 30	December savings collected			59,000	950,517
	SHORT-TERM BORROWINGS	215			26,014
Dec 31	Repaid short-term loan		14,000		12,014

Date	Explanation	Ref	Debit	Credit	Balance
	INTEREST PAYABLE ON FUNDING LIABILITIES	220			-
Dec 31	Accrue interest expense			1,802	1,802
	Accrue interest expense			47,526	49,328
	PAID-IN CAPITAL	301			50,000
	DONATED EQUITY PRIOR YEARS	310			1,389,241
	PRIOR YEARS RETAINED EARN	325			(778,735)
	INTEREST ON LOAN PORTFOLIO	410			416,610
Oct 31	October loan repayments			76,200	492,810
Nov 30	November loan repayments			85,200	578,010
Dec 31	December loan repayments			90,600	668,610
	FEES ON LOAN PORTFOLIO	415			43,099
Oct 31	October loan disbursements			6,860	49,959
Nov 30	November loan disbursements			7,480	57,439
Dec 31	December loan disbursements			8,020	65,459
	FINANCIAL REVENUE INVESTMENTS	420			400
Dec 31	Accrue interest on investments			5,479	5,879
	DONATIONS	440			442,031
Oct 8	Donations for operations			25,000	467,031
Dec 31	Donations			40,000	507,031
	INTEREST/FEE EXPENSE ON DEPOSITS	510			-
Dec 31	Accrue interest expense		47,526		47,526
	INTEREST/FEE EXPENSE ON ST BORROWING	515			2,230
Dec 31	Paid interest on repaid short term loan		2,000		4,230
Dec 31	Accrue interest expense		1,802		6,032
	PROVISION FOR LOAN IMPAIRMENT	530			19,128
Dec 31	Provision expense		12,080		31,208
	PERSONNEL	545			293,940
Oct 31	Salaries		32,000		325,940
Nov 30	Salaries		32,000		357,940
Dec 31	Salaries		32,000		389,940
	DEPRECIATION 555				-
Dec 31	Depreciation expense		79,544		79,544
	TRAINING AND DEVELOPMENT	565			29,379
Oct 14	Financial Management Training		500		29,879
Nov 4	Executive Director Conference		1,000		30,879
	RENT AND UTILITIES	566			96,356
Oct 31	Rent and utilities		10,700		
Nov 30	Rent and utilities		10,700		
Dec 31	Rent and utilities		10,700		128,456

Date	Explanation	Ref	Debit	Credit	Balance
	COMMUNICATION	567			36,659
Oct 31	Phone, courier, etc.		4,000		
Nov 30	Phone, courier, etc.		4,000		
Dec 31	Phone, courier, etc.		4,000		48,659
	BANK FEES	568			11,594
Oct 31	Bank fees		1,300		12,894
Nov 30	Bank fees		1,300		14,194
Dec 31	Bank fees		1,300		15,494
	INSURANCE	569			33
Nov 19	Paid insurance		700		733
	PRINTING AND MATERIALS	570			43,202
Oct 31	Printing and materials		4,700		47,902
Nov 30	Printing and materials		4,700		52,602
Dec 31	Printing and materials		4,700		57,302
	REPAIR AND MAINTENANCE	571			27,119
Oct 31	Repair and maintenance		3,000		30,119
Nov 30	Repair and maintenance		3,000		33,119
Dec 31	Repair and maintenance		3,000		36,119
	TRAVEL AND TRANSPORT	572			111,600
Oct 31	Travel and transport		12,400		124,000
Nov 30	Travel and transport		12,400		136,400
Dec 31	Travel and transport		12,400		148,800
	LEGAL AND AUDIT FEES	573			1,942
	BOARD MEETING EXPENSES	574			6,622
	OTHER ADMIN/MISC EXPENSES	575			2,658
Dec 11	Promotional breakfast		775		3,433

Trial Balance Adjusted

31 December 2007

Ledger Accounts	Ref	Debit	Credit
Cash and Due from Banks	101	215,686	
Trade investments	110	38,270	
Gross Loan Portfolio	120	1,560,406	
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Paid in Capital	301		50,000
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Travel and Transport	572	148,800	
Legal and Audit Fees	573	1,942	
Board Meeting Expenses	574	6,622	
Miscellaneous	575	3,433	
Totals		3,959,184	3,959,184

Technical Notes

THE GENERAL LEDGER

An MFI typically has many accounting transactions each day, such as the disbursement of loans, the payment of employee salaries, and the receipt of loan payments. It would not be practical to prepare financial statements after each transaction. Instead, as we discussed in the last session, individual transactions are recorded in the General Journal.

From the General Journal, the information is consolidated and entered into ledger accounts that make up the General Ledger. (Note: A General Ledger summarizes the transactions of an organization in order of account number whereas the General Journal lists the transactions in chronological order.) This is the next step in the process of creating financial statements. This session covers the steps from the General Journal to the General Ledger, the trial balance, and accounting adjustments. The session following will discuss the creation of the Balance Sheet and the Income Statement.

LEDGER ACCOUNTS

A ledger account represents the accumulation of all information about changes in an asset, liability, equity, revenue, or expense item in one place. For example, a ledger account for the asset cash would record each cash disbursement the organization made in a period as well as all cash that was received by the organization. By recording all cash that goes into and out of the organization, the ledger account provides a record of how much cash the organization has at any given time.

Its account name and its account number identify each ledger account. The accounts are numbered based on whether they are an asset, liability, equity, revenue, or expense account.

The design of the chart of accounts greatly affects an MFI's reporting capabilities. The structure and level of detail determine the type of information that management can access and analyze. Too sketchy a chart of accounts will not provide information precise enough to generate the sophisticated indicators needed to adequately track performance. Attempting to track too much detail generally means creating too many accounts—overwhelming the accounting department and resulting in information too delayed to be of use in decision making, or so disaggregated that management cannot properly identify and interpret trends.¹

ACCOUNT BALANCES

Once journal entries have been made and the General Journal completed, the Account Balances for each ledger account must be determined. This is done by listing all of the debits and credits by ledger account into the General Ledger. The process of copying journal entry information from the General Journal to the General Ledger is called **posting**. In the posting process, journal debits become ledger account debits, and likewise, journal credits become ledger account credits. An account balance can be determined at any point in this process by tallying the debits and credits listed in the ledger account.

Balance Sheet accounts are a summary of the organization's assets, liabilities, and equity since the beginning of the MFI's operations. Therefore, these accounts will have ongoing balances that are carried forward from period to period. These are referred to as opening

¹ Waterfield and Ramsing. *Management Information Systems for Microfinance Institutions*. CGAP, January 1998.

balances. For example, if a Balance Sheet dated December 31, 2004, showed a cash balance of \$28,500, this balance would be carried over as the opening balance on January 1, 2005.

In contrast, Income Statement accounts reflect revenue and expenses over a specified period of time and therefore are not carried over from accounting period to an accounting period. For example, an Income Statement for the 12-month period ending December 31, 2004, shows that an MFI earned \$5,000 interest revenue throughout that period. When the next accounting period begins on January 1, 2005, the interest revenue account will begin with a zero balance since it will be measuring the interest revenue earned from January 1, 2005, to December 31, 2005. All Balance Sheet accounts have opening balances; all income statement accounts do not (unless updating general ledger in the middle of an accounting period).

CREATING THE GENERAL LEDGER

We now take all of the entries from the General Journal and create a General Ledger. The General Ledger includes all accounts that have either opening balances (Balance Sheet accounts) or where transactions have occurred. The General Ledger differs from the General Journal in that all of the transactions are listed by account number (rather than chronologically as in the General Journal). The first ledger account, and one of the most important, is the cash ledger (in our sample chart of accounts, cash is account #101).

CASH ACCOUNT

One of the most important ledger accounts is the *cash account*. The cash account (or bank account) is used to record all cash and bank transactions. Like all other accounts in the chart of accounts, transactions that affect the cash account are recorded in the General Journal. When transferring (or posting) to the General Ledger, all cash transactions are listed together. Many MFIs maintain a separate cash ledger (this is simply a repeat of the cash account entries in the General Ledger but kept separately for ease of use). This is helpful when reconciling the bank statement, and for creating the cash flow statement. It is important to mention the cash account as it relates to the accounting process and proper financial management for an MFI. The cash account is important for the following reasons:

- The number of cash transactions is large in most MFIs. Examples are loan disbursement, loan repayment, payment of salaries and other expenses, and so on.
- The chances of fraud being committed regarding cash are higher as compared to other assets. Strict control is therefore required. A properly maintained cashbook helps to achieve control.
- Timely payments to an organization's creditors increase the reputation of the business. Similarly, timely payments from those who owe the organization money improve the financial position of the business.

The following example includes a number of journal entries that affected the cash account. In this example, the account balance is recorded after each journal entry and the opening account balance of \$358,196 has been carried over from the previous period.

(Note: this example shows only one side (asset – cash) of the accounting entry for each transaction. In double-entry accounting, an equal entry must be made in another account(s).)

Cash and Due from Banks Account No. 101

Date	Explanation	Debit	Credit	Balance
				404,901
July 1	Purchased computer		4,000	400,901
3	Purchased motorcycles		4,000	396,901
31	Collected savings	51,000		447,901
31	July loan repayments	226,200		674,101
31	July loan disbursements		290,000	384,101
31	July loan fees	5,800		389,901
Aug 1	Semiannual board meeting		3,100	386,801
7	Short-term deposit matures	10,400		397,201
9	Prepaid rent		2,000	395,201

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 (for example, August 9) is the **account balance** for that date. The account balance is equal to the difference between the total debits and the total credits in the account.

All asset accounts normally have debit balances. Likewise, all expense accounts normally have debit balances. Liability, equity, and revenue accounts normally have credit balances. In the cash account example, increases were recorded on the left or debit side of the account while decreases in cash were recorded on the right or credit side (assets increase with debits; assets decrease with credits).

It is important to keep close track of the cash account since MFIs particularly need to have cash on hand at all times to continue operations. If it looks as though the cash balance is getting too low, management will have to determine how they will access more cash (borrow, line of credit, overdraft) or reduce some of their cash outlays (loan disbursements, expense payments) keeping in mind the needs of borrowers and the risk the MFI runs of appearing insecure to borrowers and savers.

In addition, too much cash can be expensive. Cash that sits idle does not earn any income and consequently affects profitability. If an MFI has excess cash, it is losing the interest revenue that it could be earning if that cash were in the hands of borrowers. If the funds are borrowed, then the MFI is not only foregoing revenue but also incurring a cost for that money.

CASH ACCOUNT AND BANK RECONCILIATION

On a periodic basis (usually monthly) the bank account statement should be reconciled with the accounting records. This is done by taking the closing cash balance reported on the bank statement and subtracting any outstanding checks and adding any outstanding deposits.

In addition, all bank charges and credits not previously recorded in the accounting records must be recorded (in the example below, \$150 was incurred in bank charges which must be recorded into the General Journal when the bank statement is received and then the General Ledger). The new balance of the cash account must then equal the adjusted bank balance. For example:

Bank Balance, August 31, 2005	40,000
less outstanding checks:	
#1 147	
#2 53	
(200)	
plus outstanding deposits:	
#1 400	
200	
Adjusted Bank Balance	40,200
Cash Account Balance (prior to reconciliation)	40,350
record bank charges	(150)
Adjusted Cash Account	40,200

TRIAL BALANCE

At the end of an accounting period (usually monthly), once all journal entries have been made and posted in the General Ledger, it is necessary to verify that the debits and credits are in balance. This procedure is referred to as preparing the **trial balance**.

The trial balance is prepared by taking the account balances from the General Ledger and listing the accounts having debit balances in one column and those having credit balances in the other column. Next, the debit balances are totaled and the credit balances are totaled. Finally, the sum of the debit balances is compared with the sum of the credit balances. The sums should be equal in order for the ledger accounts to be in balance.

If the trial balance does not balance, the General Ledger should be checked to ensure that every account balance is correct and has been transferred properly.

ADJUSTMENTS

Once the trial balance is completed (and balanced), adjustments are made to record transactions that have not previously been recorded, such as bank charges, depreciation, provisions for loan impairment, and so forth.

For example, after an adequate impairment loss allowance has been determined, an entry must be made to record a provision for loan impairment expense. This is done periodically, either monthly, bimonthly, or annually.

LOAN LOSS

An impairment loss allowance represents the amount of outstanding principal that is not expected to be recovered by the MFI—that is, it is the amount set aside to cover losses on the loan portfolio. This amount is not set aside in cash and thus does not affect the cash flow of the MFI (delinquent loans affect the cash flow). The longer a loan is in arrears, the lower is the chance of receiving payment. The amount of the impairment loss allowance should be based on a rate based on historical information regarding loan default and the aging analysis. Aging of the portfolio-at-risk creates the information necessary to establish the adequacy of the impairment loss allowance.

The impairment loss allowance is on the Balance Sheet and thus has an opening balance, unless no allowance has ever been created. If this is the case, when the allowance is created, a loan loss expense (referred to as the provision for loan impairment) is recorded on the Income Statement as an expense. The amount of provision for loan impairment is then recorded on the Balance Sheet as a *negative* asset—impairment loss allowance—reducing the net outstanding loan balance (or as a liability). Future increases to the impairment loss allowance are made the same way—by recording a provision for loan impairment on the Income Statement.

Provision for Loan Impairment. Based on the historical default rate and the current outstanding impairment loss allowance, the provision for loan impairment is the amount expensed in a period to increase the impairment loss allowance to an adequate level to cover expected defaults of the loan portfolio. Although the provision for loan impairment is a noncash expense, it is treated as a direct expense for an MFI. It is helpful to separate the provision for loan impairment as a separate cost as an indicator of portfolio quality.

Actual loan losses, or write-offs, are reflected on the Balance Sheet only (and not on the Income Statement) as a reduction of the impairment loss allowance and the gross loan portfolio. The resulting effect is to leave the net portfolio on the Balance Sheet unchanged since the allowance has already been made (and expensed as a provision for loan impairment). If the impairment loss allowance is too low relative to the value of loans to be written off, then the impairment loss allowance needs to be increased through making a provision for loan impairment expense on the Income Statement. (The impairment loss allowance is sometimes treated as a liability and is reduced when loans are written off.)

Accounting for Loan Loss Impairment and Write-Offs

An *Impairment Loss Allowance* records the possibility that an asset in the Balance Sheet is not 100 percent 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 and Expense 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 impairment allowances and provisions, loan losses are written off against the impairment loss allowance and are also removed from the outstanding 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 and expense statement as Value of Loans Recovered, which reduces the Provision amount.

An Impairment Loss Allowance

- Is an account that represents the amount of outstanding principal that is not expected to be recovered by a microfinance organization.
- Is a negative asset on the Balance Sheet that reduces the outstanding portfolio. (An alternative presentation is to show it as a liability.)

A Provision for Loan Impairment

- Is the amount expensed on the Income and Expenses Statement.



It increases the *Impairment Loss Allowance*

Loan Losses or Write-Offs

- Occur only as an accounting entry. They do not mean that loan recovery should not continue to be pursued.



They decrease the *Impairment Loss Allowance* **and** the outstanding portfolio

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 year (or accounting period) and is referred to as an **adjustment**. For example:

Refer to the “Adjusting Entries” at the end of the SAFE case: Purchase computer equipment on July 1.

Fixed Assets	
4,000	

Cash	
4,000	

Record depreciation (50 percent) for one year.

Depreciation	
2,000	

Accumulated Depreciation	
2,000	

SAFE bought motorcycles on July 3—paid \$15,000.

Gross Fixed Asset	
15,000	
Cash	
4,000	
Short-term Borrowings	
11,000	

At end of year, record depreciation (33.33 percent) for one year:

ANALYSIS	RULE	ENTRY
Expense "Depreciation" was increased	Increases in expenses are recorded by debits	Debit: Depreciation \$5,000
The contra asset "Accumulated Depreciation" was increased	Increases in contra assets are recorded by a credit	Credit: Accumulated Depreciation \$5,000

Depreciation	
5,000	
Accumulated Depreciation	
5,000	

Depreciate fixed assets purchased before July 1, 2007 (that is, on the opening balance sheet) by \$72,544:

Depreciation	
72,544	
Accumulated Depreciation	
72,544	

Total depreciation expense is therefore \$79,544.

ADJUSTING FOR ACCRUALS

Accruing revenue refers to recording revenue that has not yet been received. For example, when a loan is past due, some MFIs **accrue** or **capitalize** interest revenue (recorded as an

asset) even though it has not actually been received. *Note that IAS recommends accrual accounting and (as previously discussed) an MFI must be extremely prudent when accruing such revenue from the loan portfolio. Accruing revenue on term deposits or an investment that is sure to pay interest revenue, or accruing revenue for the period from the last interest payment to the end of the period are acceptable.* When accruing revenue an asset account is debited (such as accrued interest or interest receivable) and a revenue account is credited (such as interest). When the revenue that has been accrued is actually received, the income statement is not affected. Rather, the asset account (such as interest receivable) is credited and cash is debited.

If an expense account is debited and a liability account credited, this refers to **accrued** expenses. This means that the expense has been recorded but not paid—it has been accrued. When the expense is paid, cash is credited and the liability account debited. (Note that some organizations may choose to follow cash accounting rules and not accrual accounting rules and will record transactions only when the revenue has been received or the expense incurred.)

If a transaction has been accrued, when the actual cash is received (in the case of accrued interest revenue) or paid out (in the case of an accrued expense—account payable) the corresponding entries do not affect the Income Statement but affect accounts that are on the Balance Sheet only.

Record accrued interest revenue on term deposits.

Assume for simplicity’s sake, that the end of the year amount is the same for all year. To discover how much SAFE has in interest-bearing investments at the end of the year, look on trial balance and add “short-term investments”—\$38,270—and “long-term investments”—\$40,000—for a total of \$78,270.

To determine how much interest to accrue (record interest that has not been received but has been earned) multiply \$78,270 by 7 percent for a total accrued interest revenue of \$5,479.

ANALYSIS	RULE	ENTRY
The asset “Other Current Assets” was increased	Increases in assets are recorded by debits	Debit: Other Current Assets \$5,479
The revenue account “Interest on Investments” was increased	Increases in revenue are recorded by credits	Credit: Interest on Investments \$5,479

Other Current Assets
5,479
Interest on Investments
5,479

Record accrued interest expense on short-term borrowings. For simplicity’s sake, assume the amount at end-of-year was held all year (that is, ignore changes throughout the year).

From the trial balance SAFE has short-term borrowings equal to \$12,014. To determine how much interest to accrue (record interest that has been incurred but not paid) multiply \$12,014 by 15 percent for a total accrued interest expense of \$1,802.

ANALYSIS	RULE	ENTRY
The expense "Interest Expense on Borrowings" was increased	Increases in expenses are recorded by debits	Debit: Interest Expense on Borrowings \$1,802
The liability account "Interest Payable on Funding Liabilities" was increased	Increases in liabilities are recorded by credits	Credit: Interest Payable on Funding Liabilities \$1,802

Interest Expense on Borrowings

1,802

Interest Payable on Funding Liabilities

1,802

Should SAFE accrue any expense for client savings?

Refer to the case study and remember that in accounting, one should always err on the conservative side, and therefore should accrue future expenses. However, it is difficult to estimate exactly how much to accrue in this case since SAFE pays interest when someone leaves or at year end. However, SAFE should be planning for these expenses and to be prudent should probably accrue based on historical data of the MFI clients exiting.

From the trial balance SAFE has deposits equal to 950,517.

To determine how much interest to accrue (record interest that is owed to clients but not paid) multiply 950,517 by 5 percent for a total accrued interest expense of 47,526.

Interest Expense on Deposits

47,526

Interest Payable on Funding Liabilities

47,526

Once it has been determined what adjustments are required, journal entries must be made in the General Journal (all transactions must be recorded in the General Journal to maintain appropriate records) and transferred to the ledger accounts. After all the adjustments have been made, and final account balances have been calculated, the financial statements can be prepared.

SESSION 6: CREATING STATEMENTS

Session Summary

OBJECTIVES: By the end of the session participants will be able to:

- Prepare an Income Statement and a Balance Sheet from the trial balance
- Discuss the importance and use of a Cash Flow Statement
- Record closing entries to clear and close revenue accounts

TIME: 150 minutes

SUPPLIES: Flipchart
Markers
LED projector
Markers

TRAINER MATERIALS

A3-M1 Technical Notes – Why Are We Interested in Financial Statements?
A3-M2 Trainer Notes on IAS 7 Statement of Cash Flows
A6-M1 Technical Notes – Closing Entries
A6-M2 Possible Answers for Discussion of A6-H8

PARTICIPANT MATERIALS

OVERHEADS: A3-O1–A3-O12

A4-O1 The Accounting Cycle
A5-O19a–b Trial Balance Adjusted – December 2007
A6-O1a–b General Journal – Closing Entries
A6-O2a–b SAFE Income Statement
A6-O3a–b SAFE Balance Sheet
A6-O4a–b Direct Method – Statement of Cash Flows Worksheet
A6-O4c–d Indirect Method – Statement of Cash Flows Worksheet
A6-O5a–b Direct Method – Statement of Cash Flows
A6-O5c–d Indirect Method – Statement of Cash Flows

HANDOUTS: A5–H13 Trial Balance Adjusted – 31 December 2007 (*Answers*)
A6-H1 General Journal – Closing Entries
A6-H2 SAFE Income Statement – Worksheet
A6-H3 SAFE Income Statement
A6-H4 SAFE Balance Sheet – Worksheet
A6-H5 SAFE Balance Sheet
A6-H6a Direct Method – Statement of Cash Flows Worksheet
A6-H6b Indirect Method – Statement of Cash Flows Worksheet

Trainer Instructions

A6-H7a	Direct Method – Statement of Cash Flows
A6-H7b	Indirect Method – Statement of Cash Flows
A6-H8	Group Discussion Guide
A6-H9	Technical Notes – Closing Entries

CASE STUDY: SAFE—“Our clients are SAFE with us” *(If desired, all case handouts may be copied onto colored paper to assist participants.)*

Session 6: Creating Statements

INTRODUCTION

1. (3 minutes) Introduce the session by revealing once again the Accounting cycle (A4-O1). Tell the group that they now have all the information needed to construct financial statements for SAFE, and remind them of the materials they need to have available to complete the session work (Case Study and A5-H13).
2. (10 minutes) Referring back to session 3, ask participants to verbally summarize the session. (You may wish to have the overheads from session 3 and A3-M1 on hand for review purposes). Main points to include are statement purpose, components, format of three financial statements and their relationships to each other. Elicit what is new about these formats: separates sources of loans—commercial, concessional; shows actual revenue; and separates out donor funds. These formats enable managers to make better decisions about the performance of their MFI.
3. (5 minutes) Amounts are taken from the ledger accounts. Explain closing entries using A6-O1 and A6-M1 and pass out A6-H1. Tell the group that journal entries must be made to close out the Income Statement account balances. Demonstrate the posting of closing entries using T-accounts and/or General Ledger accounts.

Ask: On A6-O1, what does the debit of \$292,741 mean? Where does it come from? What does it tell us about SAFE? What are the management implications for this situation? (Do this to get them thinking; inform participants that they will be discussing these issues more, and in groups, with the I/S, B/S and Cash Flow Statement in front of them.)
4. (20 minutes) Tell the group that in this session they will create financial statements from the trial balance created in session 5. Pass out Income Statement worksheets (A6-H2) and ask participants to create the Income Statement for SAFE. (Depending on the group's experience levels, this can either be done individually or in subgroups of no more than four members.)
5. (10 minutes) Once the group has completed the I/S, review it using A6-O2, take questions and pass out A6-H3, Completed SAFE Income Statement. Congratulate participants on creating the Income Statement starting from journal entries, then posting to ledger accounts, trial balance, accounting adjustments, and closing entries—through the whole accounting cycle!
6. (35 minutes) Explain that they now will complete the Balance Sheet. Amounts on balance sheet ledgers are transferred to the Balance Sheet. These balances will be carried forward to the next accounting period. Have the group repeat steps 4 and 5 in order to complete a Balance Sheet for SAFE. Pass out Balance Sheet worksheets (A6-H4) and review the completed SAFE Balance Sheet using A6-H5 and A6-O3. Suggest that those who finish quickly should start thinking about what

the Income Statement and Balance Sheet tell managers. Congratulate participants again and let them know they have just one financial statement left to create.

7. (10 minutes) Reintroduce the Cash Flow Statement and demonstrates how to create one, using A6-M1 and A3-M2, Trainers Notes on Cash Flow, if needed. Use A6-O4a–b or A6-O4c–d (or both, depending on the participants) and 2006 figures to illustrate how the Cash Flow Statement is completed. (Strong groups may want you to take more time here, so plan accordingly.)
Optional: For the indirect method, which is less easy to understand, consider posting a flipchart with a summary of the effects of changes in assets, liabilities, and equity on cash flow:
 - ↓ Sources of cash: decrease in assets, increase in liabilities, increase in equity
 - ↑ Uses of cash: increase in assets, decrease in liabilities, decrease in equity
8. (20 minutes) **Optional:** Distribute A6-H6a or H6b (choose either direct or indirect). Tell the group that since they have additional information on accruals and adjustments for 2007, they will need to include them. Have participants complete the exercise in their subgroups.
9. (10 minutes) **Optional:** Use A6-O4a–b or A6-O4c–d, Statement of Cash Flows worksheets, to review the exercise. Ask participants to provide answers line by line. Enter correct answers and takes any questions. Show the SAFE Cash Flow for three years, using A6-O5a–b or A6-O5c–d and handouts A6-H7a or A6-H7b. Be sure to congratulate participants on their achievements!
10. (15 minutes) Refer participants to all three statements—the Balance Sheet, Income Statement, and Cash Flow Statement—and ask: So what? Divide participants into their preassigned groups and have them start a preliminary discussion of the statements, using the questions on A6-H8, Group Discussion Guide.
11. (10 minutes) Reconvene the large group and review the subgroups' responses.
12. (5 minutes) Ask again: Why do you make these statements? (Answer: to conduct analysis.) Bridge to the next session, where the group will use the information on the statements to make good financial decisions. Pass out A6-H9, Technical Notes, on closing entries.

Technical Notes – Closing Entries

Now that we have completed the General Journal, the General Ledger, the trial balance, and the adjusting entries, the next step is to record closing entries. Closing entries are prepared after the final trial balance is completed. Closing entries clear and close revenue and expense accounts at the end of each accounting period by transferring their balances to the current year profit/loss account. This leaves them with a zero balance.

To clear revenue accounts, which have normal credit balances, an entry debiting the account and crediting the current year profit/loss account is required. Similarly, to clear expense accounts, which have normal debit balances, an entry crediting the account and debiting the current year profit/loss account is required. 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 in summarizing an organization's change in financial position over a period is to transfer the amounts from the final trial balance to the financial statements. By transferring the amounts to the Balance Sheet and Income Statement, we can determine the financial position of SAFE as of December 31, 2007, and record the profit or loss for the full year. Remember that net operating profit or loss must be transferred to the Balance Sheet under current year profit/loss.

In addition to the operating profit/(loss), the donations for that year get transferred separately to the Balance Sheet from the Income Statement.

Possible Answers for Discussion of A6-H8

Group Discussion Guide

COMMENT ON SAFE'S POSITION WITH RESPECT TO:

1. Its operating profit/(loss)

- SAFE has had a big operating loss for three years and does not seem to be improving quickly enough.
- Would want to calculate profitability (and efficiency) ratios (in next session).

2. Its donor funds

- Donor funds are slowly decreasing over time, but are still high. They should work to reduce them or convert them to equity.
- SAFE appears to be slowly working toward self-sufficiency but is highly dependent on donor funding; it has gained some investors, and continues to mobilize savings.

3. What can we deduce about SAFE's sustainability from this?

- Its operating costs are increasing dramatically but they are related to increases in portfolio size. Still, its operating income is very much lower than its operating costs.
- Moving in the right direction and improving—should examine costs carefully and plan for sustainability.

4. Comment on the major elements of SAFE's cash flow over the years?

- Volume of deposits is increasing—a potential source of future loan fund capital.
- The loan portfolio is also increasing rapidly.
- Negative annual cash flow for 2007—even after donor funding—may indicate future problems.

5. What do you think about SAFE establishing a reserve for its demand deposits? Was it appropriate to record it directly from the paid-in capital?

- Establishing reserves for demand deposits is good practice for any MFI since it ensures that funds are available when clients withdraw their savings. Reserves are sometimes required by laws and regulations.
- Recording it directly from the paid-in capital is open to discussion, especially when demand deposits grow more quickly than the paid-in capital (in cooperatives, for example). In such cases, the reserve may not be sufficient to cover demand deposits.

6. What other information would you want or need to be able to comment on SAFE's performance?

- Ratios that indicate efficiency and profitability and loan portfolio quality data.
- Data on market, competition, macroeconomic information, and so on.

Overheads

OVERHEADS FOR SESSION 6 ARE CONTAINED IN POWERPOINT FILE ENTITLED "CGAP ACCOUNTING OVERHEADS_3."

(Don't forget sessions 3–5 overheads: A3-01–012, A4-01, and A5-019a–b)

A6-01a

General Journal – Closing Entries

CLOSING ENTRIES 31 Dec 07				
Date	Ledger Accounts	Ref	Debit	Credit
Dec 31	Interest on Loan Portfolio	410	668,610	
31	Fees & Commissions on Loan Portfolio	415	65,459	
31	Financial Revenue from Investment	420	5,879	
31	Interest & Fee Expense on Deposits	510		47,526
31	Interest & Fee Expense on Borrowings	515		6,032
31	Provision for Loan Impairment	530		31,208
31	Personnel Expense	545		389,940
31	Depreciation Expense	555		79,544
31	Training and Professional Development	565		30,879
31	Rent and Utilities	566		128,456
31	Communications (phone, postage, courier)	567		48,659

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General Journal – Closing Entries (continued)

A6-01b

Date	Ledger Accounts	Ref	Debit	Credit
Dec 31	Bank Charges	568		15,494
31	Insurance	569		733
31	Printing Materials Supplies	570		57,302
31	Repair and Maintenance	571		36,119
31	Travel and Transport	572		148,800
31	Legal and Audit Fees	573		1,942
31	Board Meeting Expenses	574		6,622
31	Miscellaneous	575		3,433
31	Retained Earnings - Current Year	330	292,741	
31	Donations	440	507,031	
31	Donated Equity - Current Year	315		507,031
	Totals		1,539,720	1,539,720

The net effect on the current year profits/losses account is a \$292,741 debit.

The \$507,031 donation is recorded “below the line” as nonoperational income and transferred separately to the Balance Sheet as a credit to donated equity—current year.

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A6-O2a

SAFE – “Our clients are SAFE with us”

Income Statement for the year ending December 31, 2007

Ref.	Account Name	2005	2006	2007
I1	Financial Revenue	60,114	200,455	739,948
I2	Financial Revenue from Loan Portfolio	47,072	189,619	734,069
I3	Interest on Loan Portfolio	42,626	171,708	668,610
I4	Fees and Commissions on Loan Portfolio	4,446	17,911	65,459
I5	Financial Revenue from Investment	13,042	10,836	5,879
I6	Other Operating Revenue			
I7	Financial Expense	2,087	645	53,558
I8	Financial Expense on Funding Liabilities	2,087	645	53,558
I9	Interest and Fee Expense on Deposits			47,526
I10	Interest and Fee Expense on Borrowings	2,087	645	6,032
I11	Other Financial Expense			
I12	Net Financial Income	58,027	199,810	686,390
I13	Impairment Losses on Loans	-	-	31,208
I14	Provisions for Loan Impairment	-	-	31,208
I15	Value of Loans Recovered			
I16	Operating Expense	365,181	671,391	947,923

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A6-O2b

Income Statement for the year ending December 31, 2007 (continued)

Ref.	Account Name	2005	2006	2007
I17	Personnel Expense	145,288	288,145	389,940
I18	Administrative Expense	219,893	383,246	557,983
I19	Depreciation and Amortization Expense	36,437	63,916	79,544
I20	Other Administrative Expense	183,456	319,330	478,439
I21	Net Operating Income	(307,154)	(471,581)	(292,741)
I22	Net Nonoperating Income/(Expense)	-	-	-
I23	Nonoperating Revenue	-	-	-
I24	Nonoperating Expense			
I25	Net Income (Before Taxes and Donations)	(307,154)	(471,581)	(292,741)
I26	Taxes	-	-	-
I27	Net Income (After Taxes and Before Donations)	(307,154)	(471,581)	(292,741)
I28	Donations	746,317	642,924	507,031
I29	Donations for Loan Capital	746,317	642,924	507,031
I30	Donations for Operating Expense	-	-	-
I31	Net Income (After Taxes and Donations)	439,163	171,343	214,290

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SAFE Balance Sheet

A6-O3a

Ref.	Account Name	2005	2006	2007
ASSETS				
B1	Cash and Due from Banks	267,439	302,067	215,686
B2	Trade Investments	17,000	47,319	38,270
B3	Net Loan Portfolio	201,470	617,263	1,529,198
B4	Gross Loan Portfolio	201,470	617,263	1,560,406
B5	Impairment Loss Allowance			31,208
B6	Interest Receivable on Loan Portfolio			
B7	Accounts Receivable and Other Assets			43,894
B8	Other Investments	18,219	28,283	40,000
B9	Net Fixed Assets	107,507	114,009	69,607
B10	Gross Fixed Assets	143,944	214,362	249,504
B11	Accumulated Depreciation and Amortization	36,437	100,353	179,897
B12	TOTAL ASSETS	611,635	1,108,941	1,936,655
LIABILITIES				
B13	Demand Deposits	130,960	434,344	950,517
B14	Short-term Time Deposits			
B15	Short-term Borrowings	41,512	64,091	12,014
B16	Interest Payable on Funding Liabilities			49,328
B17	Accounts Payable & Other Short-term Liabilities			
B18	Long-term Time Deposits			
B19	Long-term Borrowings			
B20	Other Long-term Liabilities			
B21	TOTAL LIABILITIES	172,472	498,435	1,011,859

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SAFE Balance Sheet (continued)

A6-O3b

Ref.	Account Name	2005	2006	2007
EQUITY				
B22	Paid-in Capital*			50,000
B23	Donated Equity	746,317	1,389,241	1,896,272
B24	Prior Years		746,317	1,389,241
B25	Current Year	746,317	642,924	507,031
B26	Retained Earnings	(307,154)	(778,735)	(1,071,476)
B27	Prior Years		(307,154)	(778,735)
B28	Current Year	(307,154)	(471,581)	(292,741)
B29	Reserves			50,000
B30	Other Equity Accounts			
B31	Adjustments to Equity			
B32	TOTAL EQUITY	439,163	610,506	924,796
	TOTAL LIABILITIES + EQUITY	611,635	1,108,941	1,936,655

*Paid in Capital was 100,000; SAFE board allocated 50,000 to Reserves.

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Direct Method – Statement of Cash Flows Worksheet

A6-O4a

Ref.	Term	2005	2006	2007
CASH FLOWS FROM OPERATING ACTIVITIES				
C1	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	47,072	189,619	
C2	Cash Received from Interest on Investment	13,042	10,836	
C3	Cash Received as Other Operating Revenue			
C4	Value of Loans Repaid	-	-	
C5	(Cash Paid for Financial Expenses on Funding Liabilities)	(2,087)	(645)	
C6	(Cash Paid for Other Financial Expenses)			
C7	(Cash Paid for Operating Expenses)	(328,744)	(607,475)	
C8	(Cash Paid for Taxes)		-	
C9	(Value of Loans Disbursed)	(201,470)	(415,793)	
C10	Net (Purchase)/Sale of Trade Investments	(17,000)	(30,319)	
C11	Deposits/(Withdrawals) from Clients	130,960	303,384	
C12	Cash Received/(Paid) for Other Operating Assets & Liabilities	(18,219)	(10,064)	
C13	NET CASH FROM OPERATING ACTIVITIES	(376,446)	(560,457)	

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Direct Method – Statement of Cash Flows Worksheet (continued)

A6-O4b

Ref.	Term	2005	2006	2007
CASH FLOWS FROM INVESTING ACTIVITIES				
C14	Net (Purchase)/Sale of Other Investments	-	-	
C15	Net (Purchase)/Sale of Fixed Assets	(143,944)	(70,418)	
C16	NET CASH FROM INVESTING ACTIVITIES	(143,944)	(70,418)	
CASH FLOW FROM FINANCING ACTIVITIES				
C17	Cash Received/(Repaid) for Short- and Long-term Borrowings	41,512	22,579	
C18	Issuance/(Repurchase) of Paid-in Capital			
C19	(Dividends Paid)			
C20	Donated Equity	746,317	642,924	
C21	NET CASH FROM FINANCING ACTIVITIES	787,829	665,503	
C22	Net Cash Received/(Paid) for Nonoperating Activities	-	-	
C23	Net Change in Cash and Due from Banks	267,439	34,628	
C24	Cash and Due from Banks at the Beginning of the Period	-	267,439	
C25	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	-	-	
C26	Cash and Due from Banks at the End of the Period	267,439	302,067	

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A6-O4c

Indirect Method – Statement of Cash Flows Worksheet

Ref.	Term	2005	2006	2007
CASH FLOWS FROM OPERATING ACTIVITIES				
C27	Net Operating Income	(307,154)	(471,581)	
C28	Depreciation and Amortization	36,437	63,916	
C29	Impairment Losses on Loans	-	-	
C30	(Cash Paid for Taxes)		-	
C31	Value of Loans Repaid			
C32	(Value of Loans Disbursed)	(201,470)	(415,793)	
C33	(Increase)/Decrease in Trade Investments	(17,000)	(30,319)	
C34	Increase/(Decrease) in Deposits	130,960	303,384	
C35	(Increase)/Decrease in Receivables and Other Assets	(18,219)	(10,064)	
C36	Increase/(Decrease) in Payables and Other Liabilities	-	-	
C37	NET CASH FROM OPERATING ACTIVITIES	(376,446)	(560,457)	

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A6-O4d

Indirect Method – Statement of Cash Flows Worksheet (continued)

Ref.	Term	2005	2006	2007
CASH FLOWS FROM INVESTING ACTIVITIES				
C38	(Increase)/Decrease in Other Investments	-	-	
C39	(Increase)/Decrease in Book Value of Gross Fixed Assets	(143,944)	(70,418)	
C40	NET CASH FROM INVESTING ACTIVITIES	(143,944)	(70,418)	
CASH FLOW FROM FINANCING ACTIVITIES				
C41	Increase/(Decrease) in Short- and Long-term Borrowings	41,512	22,579	
C42	Increase/(Decrease) in Paid-in Capital			
C43	(Dividends Paid)			
C44	Donated Equity	746,317	642,924	
C45	NET CASH FROM FINANCING ACTIVITIES	787,829	665,503	
C46	Net Cash Received/(Paid) for Nonoperating Activities			
C47	Net Change in Cash and Due from Banks	267,439	34,628	
C48	Cash and Due from Banks at the Beginning of the Period	-	267,439	
C49	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	-		
C50	Cash and Due from Banks at the End of the Period	267,439	302,067	

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Direct Method – Statement of Cash Flows

A6-O5a

Ref.	Term	2005	2006	2007
CASH FLOWS FROM OPERATING ACTIVITIES				
C1	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	47,072	189,619	734,069
C2	Cash Received from Interest on Investment	13,042	10,836	5,879
C3	Cash Received as Other Operating Revenue			
C4	Value of Loans Repaid	-	-	-
C5	(Cash Paid for Financial Expenses on Funding Liabilities)	(2,087)	(645)	(4,230)
C6	(Cash Paid for Other Financial Expenses)			
C7	(Cash Paid for Operating Expenses)	(328,744)	(607,475)	(868,379)
C8	(Cash Paid for Taxes)		-	-
C9	(Value of Loans Disbursed)	(201,470)	(415,793)	(943,143)
C10	Net (Purchase)/Sale of Trade Investments	(17,000)	(30,319)	9,049
C11	Deposits/(Withdrawals) from Clients	130,960	303,384	516,173
C12	Cash Received/(Paid) for Other Operating Assets & Liabilities			(43,894)
C13	NET CASH FROM OPERATING ACTIVITIES	(358,227)	(550,393)	(594,476)

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Direct Method – Statement of Cash Flows

(continued)

A6-O5b

Ref.	Term	2005	2006	2007
CASH FLOWS FROM INVESTING ACTIVITIES				
C14	Net (Purchase)/Sale of Other Investments	(18,219)	(10,064)	(11,717)
C15	Net (Purchase)/Sale of Fixed Assets	(143,944)	(70,418)	(35,142)
C16	NET CASH FROM INVESTING ACTIVITIES	(162,163)	(80,482)	(46,859)
CASH FLOW FROM FINANCING ACTIVITIES				
C17	Cash Received/(Repaid) for Short- and Long-term Borrowings	41,512	22,579	(52,077)
C18	Issuance/(Repurchase) of Paid-in Capital			100,000
C19	(Dividends Paid)			
C20	Donated Equity	746,317	642,924	507,031
C21	NET CASH FROM FINANCING ACTIVITIES	787,829	665,503	554,954
C22	Net Cash Received/(Paid) for Nonoperating Activities	-	-	-
C23	Net Change in Cash and Due from Banks	267,439	34,628	(86,381)
C24	Cash and Due from Banks at the Beginning of the Period	-	267,439	302,067
C25	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	-	-	-
C26	Cash and Due from Banks at the End of the Period	267,439	302,067	215,686

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A6-O5c

Indirect Method – Statement of Cash Flows

Ref.	Term	2005	2006	2007
CASH FLOWS FROM OPERATING ACTIVITIES				
C27	Net Operating Income	(307,154)	(471,581)	(292,741)
C28	Depreciation and Amortization	36,437	63,916	79,544
C29	Impairment Losses on Loans	-	-	31,208
C30	(Cash Paid for Taxes)		-	-
C31	Value of Loans Repaid			
C32	(Value of Loans Disbursed)	(201,470)	(415,793)	(943,143)
C33	(Increase)/Decrease in Trade Investments	(17,000)	(30,319)	9,049
C34	Increase/(Decrease) in Deposits	130,960	303,384	516,173
C35	(Increase)/Decrease in Receivables and Other Assets	-	-	(43,894)
C36	Increase/(Decrease) in Payables and Other Liabilities	-	-	49,328
C37	NET CASH FROM OPERATING ACTIVITIES	(358,227)	(550,393)	(594,476)

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A6-O5d

Indirect Method – Statement of Cash Flows (continued)

Ref.	Term	2005	2006	2007
CASH FLOWS FROM INVESTING ACTIVITIES				
C38	(Increase)/Decrease in Other Investments	(18,219)	(10,064)	(11,717)
C39	(Increase)/Decrease in Book Value of Gross Fixed Assets	(143,944)	(70,418)	(35,142)
C40	NET CASH FROM INVESTING ACTIVITIES	(162,163)	(80,482)	(46,859)
CASH FLOW FROM FINANCING ACTIVITIES				
C41	Increase/(Decrease) in Short- and Long-term Borrowings	41,512	22,579	(52,077)
C42	Increase/(Decrease) in Paid-in Capital			100,000
C43	(Dividends Paid)			
C44	Donated Equity	746,317	642,924	507,031
C45	NET CASH FROM FINANCING ACTIVITIES	787,829	665,503	554,954
C46	Net Cash Received/(Paid) for Nonoperating Activities			
C47	Net Change in Cash and Due from Banks	267,439	34,628	(86,381)
C48	Cash and Due from Banks at the Beginning of the Period	-	267,439	302,067
C49	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	-		
C50	Cash and Due from Banks at the End of the Period	267,439	302,067	215,686

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Handouts

General Journal – Closing Entries

CLOSING ENTRIES				
31 Dec 07				
Date	Ledger Accounts	Ref	Debit	Credit
Dec 31	Interest on Loan Portfolio	410	668,610	
31	Fees & Commissions on Loan Portfolio	415	65,459	
31	Financial Revenue from Investment	420	5,879	
31	Interest & Fee Expense on Deposits	510		47,526
31	Interest & Fee Expense on Borrowings	515		6,032
31	Provision for Loan Impairment	530		31,208
31	Personnel Expense	545		389,940
31	Depreciation Expense	555		79,544
31	Training and Professional Development	565		30,879
31	Rent and Utilities	566		128,456
31	Communications (phone, postage, courier)	567		48,659
31	Bank Charges	568		15,494
31	Insurance	569		733
31	Printing Materials Supplies	570		57,302
31	Repair and Maintenance	571		36,119
31	Travel and Transport	572		148,800
31	Legal and Audit Fees	573		1,942
31	Board Meeting Expenses	574		6,622
31	Miscellaneous	575		3,433
31	Retained Earnings - Current Year	330	292,741	
31	Donations	440	507,031	
31	Donated Equity - Current Year	315		507,031
	Totals		1,539,720	1,539,720

The net effect on the current year profits/losses account is a \$292,741 debit.

The \$507,031 donation is recorded “below the line” as nonoperational income and transferred separately to the Balance Sheet as a credit to donated equity – current year.

SAFE Income Statement – Worksheet

Ref.	Account Name	2005	2006	2007
I1	Financial Revenue	60,114	200,455	
I2	Financial Revenue from Loan Portfolio	47,072	189,619	
I3	Interest on Loan Portfolio	42,626	171,708	
I4	Fees and Commissions on Loan Portfolio	4,446	17,911	
I5	Financial Revenue from Investment	13,042	10,836	
I6	Other Operating Revenue			
I7	Financial Expense	2,087	645	
I8	Financial Expense on Funding Liabilities	2,087	645	
I9	Interest and Fee Expense on Deposits			
I10	Interest and Fee Expense on Borrowings	2,087	645	
I11	Other Financial Expense			
I12	Net Financial Income	58,027	199,810	
I13	Impairment Losses on Loans	-	-	
I14	Provisions for Loan Impairment	-	-	
I15	Value of Loans Recovered			
I16	Operating Expense	365,181	671,391	
I17	Personnel Expense	145,288	288,145	
I18	Administrative Expense	219,893	383,246	
I19	Depreciation and Amortization Expense	36,437	63,916	
I20	Other Administrative Expense	183,456	319,330	
I21	Net Operating Income	(307,154)	(471,581)	
I22	Net Nonoperating Income/(Expense)	-	-	
I23	Nonoperating Revenue	--		
I24	Nonoperating Expense			
I25	Net Income (Before Taxes and Donations)	(307,154)	(471,581)	
I26	Taxes	--		
I27	Net Income (After Taxes and Before Donations)	(307,154)	(471,581)	
I28	Donations	746,317	642,924	
I29	Donations for Loan Capital	746,317	642,924	
I30	Donations for Operating Expense	--		
I31	Net Income (After Taxes and Donations)	439,163	171,343	

SAFE Income Statement

Ref.	Account Name	2005	2006	2007
I1	Financial Revenue	60,114	200,455	739,948
I2	Financial Revenue from Loan Portfolio	47,072	189,619	734,069
I3	Interest on Loan Portfolio	42,626	171,708	668,610
I4	Fees and Commissions on Loan Portfolio	4,446	17,911	65,459
I5	Financial Revenue from Investment	13,042	10,836	5,879
I6	Other Operating Revenue			
I7	Financial Expense	2,087	645	53,558
I8	Financial Expense on Funding Liabilities	2,087	645	53,558
I9	Interest and Fee Expense on Deposits			47,526
I10	Interest and Fee Expense on Borrowings	2,087	645	6,032
I11	Other Financial Expense			
I12	Net Financial Income	58,027	199,810	686,390
I13	Impairment Losses on Loans	-	-	31,208
I14	Provisions for Loan Impairment	-	-	31,208
I15	Value of Loans Recovered			
I16	Operating Expense	365,181	671,391	947,923
I17	Personnel Expense	145,288	288,145	389,940
I18	Administrative Expense	219,893	383,246	557,983
I19	Depreciation and Amortization Expense	36,437	63,916	79,544
I20	Other Administrative Expense	183,456	319,330	478,439
I21	Net Operating Income	(307,154)	(471,581)	(292,741)
I22	Net Nonoperating Income/(Expense)	-	-	-
I23	Nonoperating Revenue	-	-	-
I24	Nonoperating Expense			
I25	Net Income (Before Taxes and Donations)	(307,154)	(471,581)	(292,741)
I26	Taxes	-	-	
I27	Net Income (After Taxes and Before Donations)	(307,154)	(471,581)	(292,741)
I28	Donations	746,317	642,924	507,031
I29	Donations for Loan Capital	746,317	642,924	507,031
I30	Donations for Operating Expense	-	-	
I31	Net Income (After Taxes and Donations)	439,163	171,343	214,290

SAFE Balance Sheet – Worksheet

Ref.	Account Name	2005	2006	2007
	ASSETS			
B1	Cash and Due from Banks	267,439	302,067	
B2	Trade Investments	17,000	47,319	
B3	Net Loan Portfolio	201,470	617,263	
B4	Gross Loan Portfolio	201,470	617,263	
B5	Impairment Loss Allowance			
B6	Interest Receivable on Loan Portfolio			
B7	Accounts Receivable and Other Assets			
B8	Other Investments	18,219	28,283	
B9	Net Fixed Assets	107,507	114,009	
B10	Gross Fixed Assets	143,944	214,362	
B11	Accumulated Depreciation and Amortization	36,437	100,353	
B12	TOTAL ASSETS	611,635	1,108,941	
	LIABILITIES			
B13	Demand Deposits	130,960	434,344	
B14	Short-term Time Deposits			
B15	Short-term Borrowings	41,512	64,091	
B16	Interest Payable on Funding Liabilities			
B17	Accounts Payable & Other Short-term Liabilities			
B18	Long-term Time Deposits			
B19	Long-term Borrowings			
B20	Other Long-term Liabilities			
B21	TOTAL LIABILITIES	172,472	498,435	
	EQUITY			
B22	Paid-in Capital			
B23	Donated Equity	746,317	1,389,241	
B24	Prior Years		746,317	
B25	Current Year	746,317	642,924	
B26	Retained Earnings	(307,154)	(778,735)	
B27	Prior Years		(307,154)	
B28	Current Year	(307,154)	(471,581)	
B29	Reserves			
B30	Other Equity Accounts			
B31	Adjustments to Equity			
B32	TOTAL EQUITY	439,163	610,506	
	TOTAL LIABILITIES + EQUITY	611,635	1,108,941	

SAFE Balance Sheet

Ref.	Account Name	2005	2006	2007
	ASSETS			
B1	Cash and Due from Banks	267,439	302,067	215,686
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B15	Short-term Borrowings	41,512	64,091	12,014
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B17	Accounts Payable & Other Short-term Liabilities			
B18	Long-term Time Deposits			
B19	Long-term Borrowings			
B20	Other Long-term Liabilities			
B21	TOTAL LIABILITIES	172,472	498,435	1,011,859
	EQUITY			
B22	Paid-in Capital			50,000
B23	Donated Equity	746,317	1,389,241	1,896,272
B24	Prior Years		746,317	1,389,241
B25	Current Year	746,317	642,924	507,031
B26	Retained Earnings	(307,154)	(778,735)	(1,071,476)
B27	Prior Years		(307,154)	(778,735)
B28	Current Year	(307,154)	(471,581)	(292,741)
B29	Reserves			50,000
B30	Other Equity Accounts			
B31	Adjustments to Equity			
B32	TOTAL EQUITY	439,163	610,506	924,796
	TOTAL LIABILITIES + EQUITY	611,635	1,108,941	1,936,655

Direct Method – Statement of Cash Flows Worksheet

Ref.	Term	2005	2006	2007
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C2	Cash Received from Interest on Investment	13,042	10,836	
C3	Cash Received as Other Operating Revenue			
C4	Value of Loans Repaid	-	-	
C5	(Cash Paid for Financial Expenses on Funding Liabilities)	(2,087)	(645)	
C6	(Cash Paid for Other Financial Expenses)			
C7	(Cash Paid for Operating Expenses)	(328,744)	(607,475)	
C8	(Cash Paid for Taxes)		-	
C9	(Value of Loans Disbursed)	(201,470)	(415,793)	
C10	Net (Purchase)/Sale of Trade Investments	(17,000)	(30,319)	
C11	Deposits/(Withdrawals) from Clients	130,960	303,384	
C12	Cash Received/(Paid) for Other Operating Assets & Liabilities			
C13	NET CASH FROM OPERATING ACTIVITIES	(358,227)	(550,393)	
CASH FLOWS FROM INVESTING ACTIVITIES				
C14	Net (Purchase)/Sale of Other Investments	(18,219)	(10,064)	
C15	Net (Purchase)/Sale of Fixed Assets	(143,944)	(70,418)	
C16	NET CASH FROM INVESTING ACTIVITIES	(162,163)	(80,482)	
CASH FLOW FROM FINANCING ACTIVITIES				
C17	Cash Received/(Repaid) for Short- and Long-term Borrowings	41,512	22,579	
C18	Issuance/(Repurchase) of Paid-in Capital			
C19	(Dividends Paid)			
C20	Donated Equity	746,317	642,924	
C21	NET CASH FROM FINANCING ACTIVITIES	787,829	665,503	
C22	Net Cash Received/(Paid) for Nonoperating Activities	-	-	
C23	Net Change in Cash and Due from Banks	267,439	34,628	
C24	Cash and Due from Banks at the Beginning of the Period	-	267,439	
C25	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	-	-	
C26	Cash and Due from Banks at the End of the Period	267,439	302,067	

Indirect Method – Statement of Cash Flows Worksheet

Ref.	Term	2005	2006	2007
CASH FLOWS FROM OPERATING ACTIVITIES				
C27	Net Operating Income	(307,154)	(471,581)	
C28	Depreciation and Amortization	36,437	63,916	
C29	Impairment Losses on Loans	-	-	
C30	(Cash Paid for Taxes)		-	
C31	Value of Loans Repaid			
C32	(Value of Loans Disbursed)	(201,470)	(415,793)	
C33	(Increase)/Decrease in Trade Investments	(17,000)	(30,319)	
C34	Increase/(Decrease) in Deposits	130,960	303,384	
C35	(Increase)/Decrease in Receivables and Other Assets	-	-	
C36	Increase/(Decrease) in Payables and Other Liabilities	-	-	
C37	NET CASH FROM OPERATING ACTIVITIES	(358,227)	(550,393)	
CASH FLOWS FROM INVESTING ACTIVITIES				
C38	(Increase)/Decrease in Other Investments	(18,219)	(10,064)	
C39	(Increase)/Decrease in Book Value of Gross Fixed Assets	(143,944)	(70,418)	
C40	NET CASH FROM INVESTING ACTIVITIES	(162,163)	(80,482)	
CASH FLOW FROM FINANCING ACTIVITIES				
C41	Increase/(Decrease) in Short- and Long-term Borrowings	41,512	22,579	
C42	Increase/(Decrease) in Paid-in Capital			
C43	(Dividends Paid)			
C44	Donated Equity	746,317	642,924	
C45	NET CASH FROM FINANCING ACTIVITIES	787,829	665,503	
C46	Net Cash Received/(Paid) for Nonoperating Activities			
C47	Net Change in Cash and Due from Banks	267,439	34,628	
C48	Cash and Due from Banks at the Beginning of the Period	-	267,439	
C49	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	-		
C50	Cash and Due from Banks at the End of the Period	267,439	302,067	

Direct Method – Statement of Cash Flows

Ref.	Term	2005	2006	2007
CASH FLOWS FROM OPERATING ACTIVITIES				
C1	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	47,072	189,619	734,069
C2	Cash Received from Interest on Investment	13,042	10,836	5,879
C3	Cash Received as Other Operating Revenue			
C4	Value of Loans Repaid	-	-	-
C5	(Cash Paid for Financial Expenses on Funding Liabilities)	(2,087)	(645)	(4,230)
C6	(Cash Paid for Other Financial Expenses)			
C7	(Cash Paid for Operating Expenses)	(328,744)	(607,475)	(868,379)
C8	(Cash Paid for Taxes)		-	-
C9	(Value of Loans Disbursed)	(201,470)	(415,793)	(943,143)
C10	Net (Purchase)/Sale of Trade Investments	(17,000)	(30,319)	9,049
C11	Deposits/(Withdrawals) from Clients	130,960	303,384	516,173
C12	Cash Received/(Paid) for Other Operating Assets & Liabilities			(43,894)
C13	NET CASH FROM OPERATING ACTIVITIES	(358,227)	(550,393)	(594,476)
CASH FLOWS FROM INVESTING ACTIVITIES				
C14	Net (Purchase)/Sale of Other Investments	(18,219)	(10,064)	(11,717)
C15	Net (Purchase)/Sale of Fixed Assets	(143,944)	(70,418)	(35,142)
C16	NET CASH FROM INVESTING ACTIVITIES	(162,163)	(80,482)	(46,859)
CASH FLOW FROM FINANCING ACTIVITIES				
C17	Cash Received/(Repaid) for Short- and Long-term Borrowings	41,512	22,579	(52,077)
C18	Issuance/(Repurchase) of Paid-in Capital			100,000
C19	(Dividends Paid)			
C20	Donated Equity	746,317	642,924	507,031
C21	NET CASH FROM FINANCING ACTIVITIES	787,829	665,503	554,954
C22	Net Cash Received/(Paid) for Nonoperating Activities	-	-	-
C23	Net Change in Cash and Due from Banks	267,439	34,628	(86,381)
C24	Cash and Due from Banks at the Beginning of the Period	-	267,439	302,067
C25	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	-	-	-
C26	Cash and Due from Banks at the End of the Period	267,439	302,067	215,686

Indirect Method – Statement of Cash Flows

Ref.	Term	2005	2006	2007
CASH FLOWS FROM OPERATING ACTIVITIES				
C27	Net Operating Income	(307,154)	(471,581)	(292,741)
C28	Depreciation and Amortization	36,437	63,916	79,544
C29	Impairment Losses on Loans	-	-	31,208
C30	(Cash Paid for Taxes)		-	-
C31	Value of Loans Repaid			
C32	(Value of Loans Disbursed)	(201,470)	(415,793)	(943,143)
C33	(Increase)/Decrease in Trade Investments	(17,000)	(30,319)	9,049
C34	Increase/(Decrease) in Deposits	130,960	303,384	516,173
C35	(Increase)/Decrease in Receivables and Other Assets	-	-	(43,894)
C36	Increase/(Decrease) in Payables and Other Liabilities	-	-	49,328
C37	NET CASH FROM OPERATING ACTIVITIES	(358,227)	(550,393)	(594,476)
CASH FLOWS FROM INVESTING ACTIVITIES				
C38	(Increase)/Decrease in Other Investments	(18,219)	(10,064)	(11,717)
C39	(Increase)/Decrease in Book Value of Gross Fixed Assets	(143,944)	(70,418)	(35,142)
C40	NET CASH FROM INVESTING ACTIVITIES	(162,163)	(80,482)	(46,859)
CASH FLOW FROM FINANCING ACTIVITIES				
C41	Increase/(Decrease) in Short- and Long-term Borrowings	41,512	22,579	(52,077)
C42	Increase/(Decrease) in Paid-in Capital			100,000
C43	(Dividends Paid)			
C44	Donated Equity	746,317	642,924	507,031
C45	NET CASH FROM FINANCING ACTIVITIES	787,829	665,503	554,954
C46	Net Cash Received/(Paid) for Nonoperating Activities			
C47	Net Change in Cash and Due from Banks	267,439	34,628	(86,381)
C48	Cash and Due from Banks at the Beginning of the Period	-	267,439	302,067
C49	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	-		
C50	Cash and Due from Banks at the End of the Period	267,439	302,067	215,686

Group Discussion Guide

(Use all statements together and discuss the following.)

COMMENT ON SAFE'S POSITION WITH RESPECT TO:

1. Its operating profit/(loss)
2. Its capital structure—donations, paid-in capital, commercial loans, and so on
3. What can we deduce about SAFE's sustainability from this?
4. Comment on the major elements of SAFE's cash flow over the years
5. What do you think about SAFE establishing a reserve for its demand deposits? Was it appropriate to record it directly from the paid-in capital?
6. What other information would you want or need to be able to comment on SAFE's performance?

Technical Notes – Closing Entries

Now that we have completed the General Journal, the General Ledger, the trial balance, and the adjusting entries, the next step is to record closing entries. Closing entries are prepared after the final trial balance is completed. Closing entries clear and close revenue and expense accounts at the end of each accounting period by transferring their balances to the current year profit/loss account. This leaves them with a zero balance.

To clear revenue accounts, which have normal credit balances, an entry debiting the account and crediting the current year profit/loss account is required. Similarly, to clear expense accounts, which have normal debit balances, an entry crediting the account and debiting the current year profit/loss account is required. 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 in summarizing an organization's change in financial position over a period is to transfer the amounts from the final trial balance to the financial statements. By transferring the amounts to the Balance Sheet and Income Statement, we can determine the financial position of SAFE as of December 31, 2007, and record the profit or loss for the full year. Remember that net operating profit or loss must be transferred to the Balance Sheet under current year profit/loss.

In addition to the operating profit/(loss), the donations for that year get transferred separately to the Balance Sheet from the Income Statement.

SESSION 7: INTERPRETING STATEMENTS

Session Summary

OBJECTIVES: By the end of the session participants will be able to:

- Discuss how financial statements can be used to identify and analyze problems
- Define and discuss key indicators to monitor in an MFI
- Describe the reports (that is, outputs of the MIS) that are useful to an MFI
- State why internal controls and audits are valuable

TIME: 180 minutes (If you are ahead of schedule you may either spend more time on this session or do a shorter version in order to move on to playing the game at the end of day 3 and give more time to focus on the accounting lessons learned.)

SUPPLIES: Flipchart
Markers
LED projector

TRAINER MATERIALS

Participants' comments from the Organizational Information handout (A1-H7) completed in session 1
A7-M1 Technical Notes – Statements and Reports

PARTICIPANT MATERIALS

OVERHEADS: A1-O1 Goals
A1-O3 Objectives
A3-O7a–b Sample Portfolio and Activity Report

A3-O9	Data Source Summary	Optional
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A6-O2a–b SAFE Income Statement
A6-O3a–b SAFE Balance Sheet
A7-O1 MIS (*definition*)
A7-O2 Quote on indicators
A7-O3a–b Financial Analysis Ratios
A7-O4a–b Sustainability and Profitability Ratios
A7-O5a–b ALM Ratios and Formulae
A7-O6 Analytical Adjustments WHY
A7-O7 Types of Analytical Adjustments
A7-O8 Subsidies Adjustments
A7-O9a–b SAFE Inflation Adjustments

A7-O10	Sample Adjustment for Impairment Loss Allowance and Write-Off	Optional
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- A7-O11 SAFE Analytical Adjustments
- A7-O12a–b Adjusted Income Statement
- A7-O13a–b Adjusted Balance Sheet
- A7-O14a–b SAFE Profitability Indicators
- A7-O15a–b SAFE ALM Ratios
- A7-O16 Purpose of Internal Controls
- A7-O17 Sources of Risk
- A7-O18 External Audits

- HANDOUTS:**
- A3-H6 Sample Portfolio and Activity Report
 - A6-H3 SAFE Income Statement
 - A6-H5 SAFE Balance Sheet
 - A7-H1 Financial Analysis Ratios
 - A7-H2 Sustainability and Profitability Ratios and Formulae
 - A7-H3 ALM Ratios and Formulae
 - A7-H4 SAFE Analytical Adjustments
 - A7-H5 Adjusted Income Statement
 - A7-H6 Adjusted Balance Sheet
 - A7-H7 Profitability and Sustainability Ratios – Worksheet
 - A7-H8 ALM Ratios – Worksheet
 - A7-H9 Profitability and Sustainability Ratios – Answers
 - A7-H10 ALM Ratios – Answers
 - A7-H11 Benchmarking of Key Indicators
 - A7-H12 Questions about SAFE’s Performance
 - A7-H13 Use of Reports – Worksheet
 - A7-H14 Purpose of Internal Controls, Sources of Risk, and External Audits (*definitions*)
 - A7-H15 Technical Notes – Statements and Reports

Session 7: Interpreting Statements

INTRODUCTION

1. (1 minute) Link this session to the previous one by reminding participants that they have completed the accounting cycle and created the I/S, B/S and Cash Flow Statement. Use A4-O1 to review the steps they have taken and to arrive at financial statements formatted according to the SEEP Framework, CGAP Appraise, and microfinance best practices. Remind the group that during the last session they started looking at what these statements indicated about SAFE. Ask participants what they think comes next. Examine the question using the following short skit:

2. (5 minutes)

Characters: Executive Director (ED) of MFI and possible investor or donor (ID) as appropriate

Setting: ED's office; ED is sitting at the desk, with lots of papers around, all in a jumble.

[ID enters, is greeted, and small talk follows]

ID indicates interest in funding the MFI and therefore wants information on how the MFI is performing.

ED says the MFI is performing very well, and shares anecdotes about clients who have done well, and so on.

ID asks for specifics in terms of financial performance, ratios, and so forth.

ED says no problem: "We have just completed this month's trial balance, accurate as of yesterday."

ID says that is not adequate.

ED says: "Here are the financial statements that we completed internally last year; they show we had a small operating profit." ED then finds the audited statements from the year before (but takes time to find them)

ID does not have time to analyze financial statements and wants a summary analysis—doesn't the MFI have information about profitability/sustainability, asset liability management, efficiency, and portfolio quality that compares itself with regional benchmarks or international best practices?

ED "But look at these statements—they are in the right format. We especially prepared them for possible investors and donors. They show we are doing well."

ID (getting exasperated): "Yes, but I do not have the time to do the analysis of the statements myself. I need the information in a form that summarizes the trends and so on. You as ED also need to be able to use these statements to improve your institution. Perhaps you could be doing very much better—how would you know? I will have to come back when your information is better organized."

3. (3 minutes) Ask the group again: Why do we take so much time understanding accounting and then collecting and organizing data? What can we do with it now? Probe participants until an answer emerges that relates to using the information for decision making and to identify and solve problems. Possibly refer back to the course goals (A1-O1) and objectives (A1-O3) and also to the session 1 flipchart with the steps from financial information to sustainability that lists Financial Analysis for Financial Management after Financial Formats.

Introduce this session's goal: beginning to understand how to use the information that they have carefully collected and organized for decision making and to identify and solve problems.

For a more detailed treatment of using financial statements, encourage participants to take the CGAP Financial Analysis course.

4. (5 minutes) Explain that before they start discussing what kind of analysis of these financial statements they should undertake, they need to understand what decisions the analysis will help them make as managers (ED, finance manager, and credit manager). Point out that other people in the MFI also make decisions: the board, the loan officers, and so on. Explain that in the MIS course, they will look at all the different audiences for financial decision making, but for this short exercise, they are focusing on the managers.

Have the group brainstorm the major financial decisions that MFI managers—ED, finance manager, and credit manager—have to make and write them on a flipchart titled “MFI Financial Decisions.” Responses will probably include how to increase sustainability, how to be more efficient, how fast should the MFI grow, is there enough cash to disburse loans and pay salaries, how to spend donor money, how to reduce delinquency, and so on.

5. (5 minutes) Ask: Given these decisions, what information in the financial statements will help you make these decisions and what additional information do you need? On another flipchart next to the first, make two columns titled “Financial Statement information” and “Additional Information.” Then go through each of the major decisions from the brainstorming in step 4 and write the information needed to make that decision under the column which it belongs.

Point out that the major source of information in addition to the accounting system is the loan tracking system (refer back to A3-O7, Loan Portfolio Report, and the optional A3-O8). Emphasize that there are of course other sources that include personnel records, client files, and so on. All of this information together makes up the MFI's management information system. (Refer to A7-M1 for additional points.

6. (2 minutes) Introduce the definition of “management information system” using A7-O1 as background. Be sure to comment on the difference between data (of the systems) and information. Tell the group that today they will only briefly look at the output of the I/S to get the information managers need. However, there is a complete CGAP course on I/S (and financial analysis) that addresses these issues in much greater depth. Stress that this is just an introduction to the issues.

7. (5 minutes) Ask participants to name the most useful outputs of the I/S that will enable them to make the decisions they have identified. (Answer: ratios/Indicators in reports.) Refer to the quote on A7-O2 and ask: What is meant by financial and management indicators? Take a few answers and introduce ratios and indicators
8. (5 minutes) Introduce the concept of indicators using information from A7-M1. Mention that there are volumes of indicators that can be calculated—in fact, there is also a whole course on financial analysis that is dedicated to understanding indicators. In this course we will only present an overview. Ask: What indicators do you calculate? Have participants brainstorm a list of indicators that they presently will calculate in their MFIs, and then highlight the ones that managers use regularly (often only a small subset!).
9. (10 minutes) Introduce the SEEP-recommended list of ratios (A7-O3a–b) and hand out A7-H1. As each one is quickly explained, it should be related to the generated list. Ask why there are only 18 on the list. (Answer: because they are found to be the most useful and together give a good picture/general overview of an MFI.)
10. (2 minutes) Explain that now we will be focusing on the profitability and asset liability management indicators (A7-O4a–b and A7-O5a–b) and hand out A7-H2 and A7-H3. These indicators rely solely on the financial statements; the sustainability indicators are where all the other financial decisions they have identified are ultimately tested. Remind the group that this is just an introduction to or overview of these indicators to enlighten them about the further use of the financial statements.

ADJUSTMENTS

11. (15 minutes) Remind the group that the ratios use the term “adjusted.” Ask why they make these adjustments. Show A7-O6. Before calculating the indicators, ask what kinds of further adjustments should be made to SAFE’s statements in order to get an even better understanding of its true financial situation. Show and briefly explain A7-O7.

Explain that in order to get a better picture of the profitability of SAFE, the group should further adjust SAFE’s expenses to reflect the cost of inflation, the market value of subsidized funds, and the value of in-kind donations. (Point out that SAFE enjoys the services of an expatriate consultant paid for by the donor, as noted in a footnote of the case.)

Present A7-O8, Adjustment for Subsidies Worksheet, and demonstrate how to arrive at the adjusted operating profit/loss for SAFE in 2005 by explaining each entry. Next, present A7-O9, Inflation Adjustment worksheet and answers for SAFE 2006. (Consider showing optional A7-O10 and explaining that since they do not have the portfolio data for 2005 and 2006, they will not be able to adjust for the impairment—and that they have already corrected the impairment in previous exercises.) All this may be overwhelming for some participants, so reassure them

they will not have to calculate it and when they take the CGAP Financial Analysis course they will be fully explained.

Put up A7-O11, A7-O12, and A7-13, Adjustment worksheet, Adjusted Balance Sheet, and Adjusted Income Statement, respectively. Then distribute A7-H4, SAFE Analytical Adjustments; A7-H5, Adjusted Income Statement; and A7-H6, Adjusted Balance Sheet. Explain the adjustments and statements and that these adjusted figures will be used when calculating the profitability ratios for SAFE.

12. (15–20 minutes) Distribute A7-H7, Profitability Worksheet, and A7-H8, ALM Worksheet. Participants should work in small groups and may divide up the work of calculating the ratios for SAFE 2007.

When they have completed their ratios, hand out A7-H9, Profitability and Sustainability Ratios, and A7-H10, ALM Ratios, for them to check their own work. (If short of time, just give out the answers; the analysis in step 15 below is more important than this calculation.)

13. (5 minutes) Ask for the group's attention and solicit questions and comments on the ratios. Clarify answers as necessary, using A7-O14 and A7-O15.
14. (20 minutes) Have the group resume their small groups and distribute A7-H11, Microfinance Industry Benchmarks. Be sure you have updated this as needed. Also give out A7-H12, Questions about SAFE's Profitability. They must discuss and be prepared to give a short analysis of the status of SAFE's performance.
15. (10 minutes) Have each group share one piece of their analysis of SAFE's performance; use that as the launching point to a general discussion on what the ratios tell them about SAFE and how SAFE's ratios compare with the industry. Remind participants that for a more complete picture of SAFE, they must look at all the indicators—portfolio quality, ALM, and profitability—together. Optimally, they would also want to understand SAFE's business plan and compare actual performance with projected performance.
16. (2 minutes) Conclude the discussion by saying that they have just begun to undertake the type of financial analysis that the investor/donor urged the ED to do in the skit. This has been just an introduction, so participants know the power in their financial statements for management purposes.

Note: Steps 17–20 are optional. Separate CGAP MIS and operational risk management (which includes internal control) courses address these issues.

REPORTS

17. (5 minutes) Begin the section on reports by saying: You now have financial statements and a list of ratios that are important to calculate—does everyone in the MFI need all of them every day? How do you decide who needs what information in what report format and when? (Answers should relate back to the decisions that need to be made, the type of institution, and the capability of its

MIS. Also tie in responses from A1-H7 either verbally or through a previously prepared flipchart that lists some of the responses.)

18. (15 minutes) Keeping their same subgroups, participants will start to answer the question by filling in A7-H13, the Report Worksheet, together. Visit each group after 15 minutes or so and assign each group one (or two) reports to present in detail on a flipchart. Presentations should include who uses them, when, and for what purpose.
19. (15 minutes) Have each group present, making sure to comment and clarify after each presentation and allow for comments from the large group. Flipcharts should remain visible throughout.
20. (5 minutes) Summarize the use of reports in an MFI, emphasizing that the **most useful reports are the ones that are needed by the MFI and are timely, relevant, reliable, and accurate!** There is no one right answer; this will depend on each institution and its particular stage of development. Remind participants that they will need to make these decisions for their own institutions.

At the end of this exercise, consider taking the information generated by participants and having it typed for distribution the next day.

SUMMARY AND CONCLUSION

21. (2 minutes) Review the group's progress to date, pointing out that they now are beginning to get a good picture of the usefulness of all their accounting work: financial statements, ratios, and report formats that enable managers to progress towards sustainability. However, how do they know that these numbers are all correct? How can they be sure that there were no mistakes, bad accounting, or fraud?
22. (10 minutes) Lead the group in a brief discussion on the purpose of internal control, using A7-O16, and address the sources of risk that internal controls need to mitigate, using A7-O17. Also explain the purpose of the external audit, using A7-O18. Distribute A7-H14. If there are many questions, refer participants to the CGAP course on operational risk management that includes internal control and audits.
23. (2 minutes) Conclude by summarizing the session's main points and handing out A7-H15. (You may also show A1-H5, the SEEP Framework, or mention where to find it on the Web.) Move to the next session by saying that tomorrow they will have an opportunity to put into practice all that they have learned over the last three days. Announce that after the break, they will be preparing themselves for the Balancing Act game!

Technical Notes – Statements and Reports

Now that the financial statements have been created, we need to look at how the information provided can be used in a useful manner—that is, how do financial statements help management and shareholders make decisions?

“A management information system is the 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 and Ramsing, p. 4)

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 in decision making.

To obtain the information necessary to create financial statements, we have learned that an accurate accounting system needs to be in place. To obtain the information necessary to create other management reports and analysis, we need a portfolio tracking system. As part of this tracking system we also need information on the operations of the MFI, including the number of staff and loan officers, number of branches, salaries for loan officers, and so on. This helps to determine the efficiency and productivity of the MFI.

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

Many indicators and reports are generated by combining information from the accounting system (such as income and expenses) with information from the portfolio system (such as number, amount, and size of loans, or number of staff). Although independent, the two systems share data and must be compatible.

The starting point in developing an MIS is to determine what information the institution needs to perform well. That means defining the needs of different users of information, based on the decisions they need to make. Good information provided in a useful form on a timely basis empowers all stakeholders in the institution to participate meaningfully. To do this, an MFI must determine its information needs through identifying the users of information and evaluating the needs of each user group.

The following questions need to be answered:

- What decisions does each set of stakeholders make?
- What key information do the users need to make those decisions?
- What key indicators or ratios do the users need to monitor to perform their jobs well?
- What additional information should the users have to be knowledgeable about the organization’s performance and achievement of broader goals?
- What supplemental information could be included in the reports to improve staff performance?
- How can all the information the users need be clustered in the minimum number of useful reports provided in the necessary timeframe?
- How can key indicators be incorporated so as to enable the users to monitor trends in them?

- How can reports be designed to meet the needs of different users?
- How frequently and how immediately do the users need to receive the information?
- How might the users' information needs change in the future, and how would those changes affect the design of the MIS?

KEY ISSUES IN REPORT DESIGN INCLUDE:

- Content – reports should focus on one issue and present all information pertinent to that issue
- Categorization and level of detail – information might need to be present at different levels of aggregation
- Frequency and timelines
- Identifying information – include standardized headers and footers wherever possible
- Period covered
- Trend information on key indicators – this may include incorporating a series of consecutive columns for different points in time or providing a comparison of actual and budgeted figures

REPORTS FOR MFIS CAN BE GROUPED INTO SEVEN CATEGORIES:

1. Balance sheet reports
2. Income statement reports
3. Cash flow reports
4. Savings reports
5. Loan activity reports
6. Portfolio quality reports
7. Summary operational reports

According to Waterfield and Ramsing, a sample list of reports for a small, *credit-only* MFI might include:

Balance Sheet Reports

- Summary balance sheet
- Detailed balance sheet

Income Statement Reports

- Summary income statement
- Detailed income statement
- Detailed actual to budget income statement
- Adjusted income statement

Cash Flow Reports

- Cash flow review
- Projected cash flow

Loan Activity Reports

- Loan repayment schedule
- Loan account activity

- Active loans by loan officer

Portfolio Quality Reports

- Delinquent loans by loan officer
- Summarized aging of portfolio-at-risk by loan officer
- Loan write-off and recuperations report
- Aging of loans and calculation of reserve requirements

If a credit and savings MFI, add:

Savings Reports

- Active savings accounts by branch and product

Additionally, there are reports for:

- Clients (savings account activity, loan repayment schedule)
- Field staff (activity reported by loan officer or branch)
- Branch and regional managers (reports split by branch, region and product)
- Senior managers in head office (consolidated reports, financial statements)
- The board (summary reports, financial statements)
- Donors and shareholders (summary financial statements)
- Regulators (specified by the regulators themselves)

Reports are used at several levels. For example, the same summary Balance Sheet might be used for both board members and shareholders. Delinquent loans by loan officer might be used by both field staff and branch managers.

INDICATORS

“An MIS is created to generate information for decision making, and the best information for that purpose is generally that 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. The data for an indicator are usually selected because they have a causal link, and the resulting number, often a percentage, can be judged relatively independent of such factors as changes in scale of activity. For example, comparing salaries as a percentage of total expenditure from one year to the next can be more informative than simply comparing total salary expenditure for each year.

When using indicators, it is important to remember that numbers don't tell everything about an MFI. Indicators need to be complemented by discussions with staff and clients, and with close attention to morale and perceptions. Furthermore, interpreting financial ratios can be challenging. It requires a solid grasp of the underlying financial principles and in-depth knowledge of the MFI's operations and environment. No indicator should be evaluated in isolation from others. For example, an evaluation of portfolio-at-risk should always include the loan write-off ratio and the loan rescheduling ratio (if applicable).

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 SEEP 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 are necessarily correct. It is the trend in these ratios that is critically important.

Ratios must be analyzed together, and ratios tell you more when consistently tracked over a period of time. Frequent measurement can help identify problems that need to be solved before they fundamentally threaten the MFI, thus enabling correction. Trend analysis also helps moderate the influence of seasonality or exceptional factors.

Different levels of users will require a set of different indicators and analysis. They might be summarized as follows:

- Operations staff need portfolio quality, efficiency ratios, outreach, and branch level profitability.
- Senior management needs institution-level portfolio quality, efficiency, profitability, and ALM.
- Regulators need, at a minimum, capital adequacy and liquidity.
- Donors/investors need institution-level portfolio quality, ALM, and profitability.

In addition to analyzing past trends, ratios, in conjunction with policy decisions, are helpful when preparing financial projections.

Overheads

OVERHEADS FOR SESSION 7 ARE CONTAINED IN 2 SEPARATE POWERPOINT FILES ENTITLED "CGAP ACCOUNTING OVERHEADS_4a & 4b."

(Don't forget sessions 1–6 overheads: A1-O1–O3, A3-O7a–b & -O9, and A6-O2a–b & -O3a–b)

A7-01



“A management information system is

the series of processes and actions
involved in capturing raw data,



processing the data into usable information,



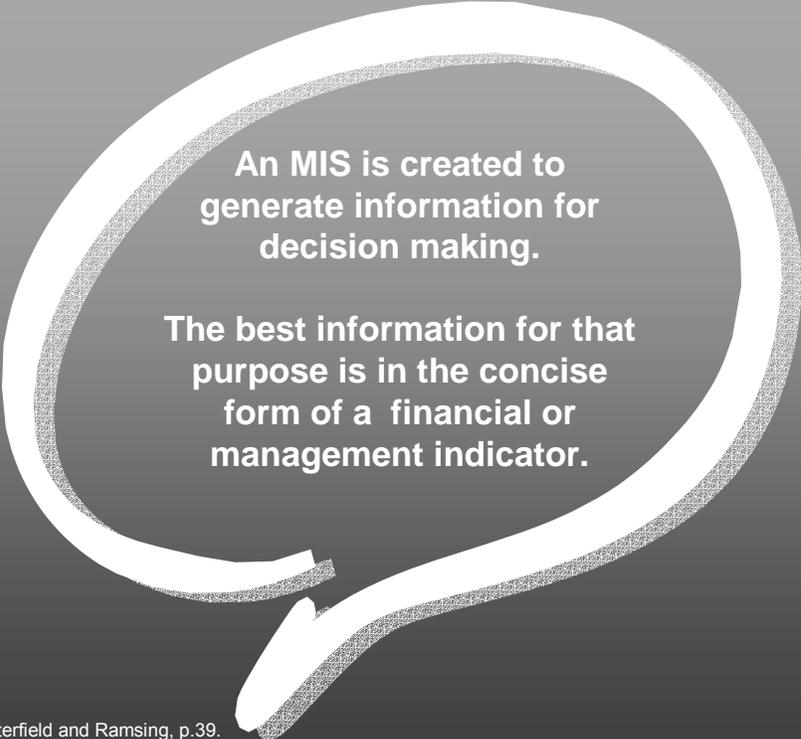
and disseminating the information
to users in the form needed.”



Source: Waterfield and Ramsing, p.4.
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A7-02



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.

Source: Waterfield and Ramsing, p.39.
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A7-O4a

Sustainability and Profitability Ratios

RATIO	FORMULA
Operational Self-Sufficiency	$\frac{\text{Financial Revenue}}{\text{Financial Expense} + \text{Impairment Losses on Loans} + \text{Operating Expense}}$
Financial Self-Sufficiency	$\frac{\text{Adjusted Financial Revenue}}{\text{Adjusted Financial Expense} + \text{Adjusted Impairment Losses on Loans} + \text{Adjusted Operating Expense}}$
Return on Assets (ROA)	$\frac{\text{Net Operating Income} - \text{Taxes}}{\text{Average Assets}}$
Adjusted ROA (AROA)	$\frac{\text{Adjusted Net Operating Income} - \text{Taxes}}{\text{Average Adjusted Assets}}$

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A7-O4b

Sustainability and Profitability Ratios (continued)

RATIO	FORMULA
Return on Equity (ROE)	$\frac{\text{Net Operating Income} - \text{Taxes}}{\text{Average Equity}}$
Adjusted ROE (AROE)	$\frac{\text{Adjusted Net Operating Income} - \text{Taxes}}{\text{Average Adjusted Equity}}$

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ALM Ratios and Formulae

Interest Rate Management	
Yield on Gross Portfolio	$\frac{\text{Cash received from interest, fees and commissions on loan portfolio}}{\text{Average gross loan portfolio}}$
Yield Gap	$100\% - \frac{\text{Cash revenue from loan portfolio}}{\text{Net loan portfolio} \times \text{expected annual yield}}$
Cost of Funds	$\frac{\text{Financial expense on funding liabilities}}{\text{(Average deposit + average borrowing)}}$
Adjusted Cost of Funds	$\frac{\text{Adjusted financial expense on funding liabilities}}{\text{(Average deposit + average borrowing)}}$
Funding Expense Ratio	$\frac{\text{Financial expense on funding liabilities}}{\text{Average gross loan portfolio}}$
Adjusted Funding Expense Ratio	$\frac{\text{Adjusted financial expense on funding liabilities}}{\text{Average gross loan portfolio}}$

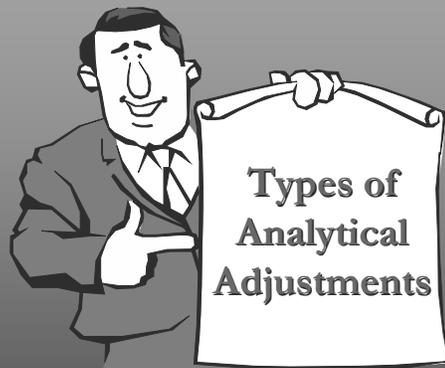
ALM Ratios and Formulae (continued)

Asset Management	
Portfolio to Assets	$\frac{\text{Gross loan portfolio}}{\text{Assets}}$
Leverage	
Debt/Equity	$\frac{\text{Liabilities}}{\text{Equity}}$
Adjusted Debt/Equity	$\frac{\text{Liabilities}}{\text{Adjusted equity}}$
Liquidity Management	
Current Ratio	$\frac{\text{Cash + trade investments}}{\text{Demand deposit + short-term time deposit + short-term borrowing + interest payable on funding liabilities + accounts payable and other short-term liabilities}}$

Analytical Adjustments

WHY?

- To reflect the true performance of MFIs
- To enable benchmarking across a wide range of institutions



Subsidies	
A1	Subsidized Cost of Funds
A2	In-kind Subsidy

Inflation	
A3	Inflation

Portfolio-at-Risk	
A4	Impairment Loss Allowance
A5	Write-off

Subsidies Adjustments SAFE 2005

A7-08

Cost of Funds		CALCULATION
a	Average Short-term Borrowings + Average Long-term Borrowings	20,756
b	Market Rate, End of Period	26%
c	Market Cost of Funds = a x b	5,397
d	Interest and Fee Expense on Borrowings	2,087
e	Adjustment for Subsidized Cost of Funds (A1) = c - d	3,310

IN KIND Subsidies	Paid By Other (Donor)	ADJUSTMENT
Personnel Expense	40,000	40,000
Administrative Expenses	0	0
Adjustment for In-kind Subsidies (A2)	40,000	40,000

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SAFE Inflation Adjustments

A7-09a

	FORMULA	ADJUSTMENT
a	Equity, Beginning of Period	
b	Inflation Rate	
c	Adjustment to Equity (A3.1) = a x b	
d	Net Fixed Assets, Beginning of Period	
e	Inflation Rate	
f	Adjustment to Fixed Assets (A3.2) = d x e	
g	Net Adjustment for Inflation (A3) = c - f	

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A7-O9b

SAFE Inflation Adjustments *(continued)*

	FORMULA	ADJUSTMENT
a	Equity, Beginning of Period	439,163
b	Inflation Rate	18%
c	Adjustment to Equity (A3.1) = a x b	79,049
d	Net Fixed Assets, Beginning of Period	107,507
e	Inflation Rate	18%
f	Adjustment to Fixed Assets (A3.2) = d x e	19,351
g	Net Adjustment for Inflation (A3) = c – f	59,698

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A7-O10

Sample Adjustment for Impairment Loss Allowance and Write-Off

	Category	Value of Portfolio (000)	Loss Allowance Rate	Impairment Loss Allowance (000)
	Current	16,343	–	–
	PAR 1 to 30 days	1,173	10%	117
	PAR 31 to 60 days	905	30%	272
	PAR 61 to 90 days	116	30%	35
	PAR 91 to 180 days	24	60%	27
	PAR >180 days	45	100%	24
a	Impairment Loss Allowance			475
b	Actual Impairment Loss Allowance (B5)			434
c	Adjustment to Impairment Loss Allowance (if >0) A4 = a – b			41

ADJUSTMENT FOR WRITE-OFF	ADJUSTED VALUE
PAR >180 days Past Due	24
Number of Loans >180 days Past Due	9

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SAFE Analytical Adjustments

A7-O11

DESCRIPTION		2005	2006	2007
A1	Adjustment for Subsidized Cost of Funds			
	a. Average Short-term Borrowings	20,756	52,802	38,053
	b. Average Long-term Borrowings	-	-	-
	c. Average Long- and Short-Term Borrowings	20,756	52,802	38,053
	d. Market Rate, End of Period	26%	26%	26%
	e. Market Cost of Funds = c x d	5,397	13,728	9,894
	f. Interest and Fee Expense on Borrowings	2,087	645	6,032
	g. Adjustment for Subsidized Cost of Funds = e - f	3,310	13,083	3,862
A2	Adjustment for In-kind Subsidies			
	a. Personnel Expense	40,000	40,000	40,000
	b. Administrative Expense	-	-	-
	c. Adjustment for In-kind Subsidies = a + b	40,000	40,000	40,000
A3	Inflation Adjustment			
	a. Equity, Beginning of Period	-	610,506	924,796
	b. Inflation Rate	18%	18%	18%
A3.1	c. Inflation Adjustment to Equity = (a x b)	-	109,891	166,463
	d. Net Fixed Assets, Beginning of Period	-	107,507	114,009
A3.2	e. Inflation Adjustment to Fixed Assets = (d x b)	-	19,351	20,522
	f. Net Adjustment for Inflation = c - e	-	90,540	145,942
A4	Adjustment for Impairment Loss Allowance			
	a. Adjusted Impairment Loss Allowance	-	-	31,208
	b. Actual Impairment Loss Allowance	-	-	31,208
	c. Adjustment to Impairment Loss Allowance = a - b >0	-	-	-
A5	Adjustment for Write-off			
	PAR > 180 days Past Due	-	-	-
TOTAL ADJUSTMENTS		43,310	143,623	189,803

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Adjusted Income Statement

A7-O12a

Ref.	Account Name	2005	2006	2007
I1	Financial Revenue	60,114	200,455	739,948
I2	Financial Revenue from Loan Portfolio	47,072	189,619	734,069
I3	Interest on Loan Portfolio	42,626	171,708	668,610
I4	Fees and Commissions on Loan Portfolio	4,446	17,911	65,459
I5	Financial Revenue from Investment	13,042	10,836	5,879
I6	Other Operating Revenue	-	-	-
I7	Financial Expense	5,397	104,268	203,361
I8	Financial Expense on Funding Liabilities	5,397	13,728	57,420
I9	Interest and Fee Expense on Deposits	-	-	47,526
I10	Interest and Fee Expense on Borrowings	2,087	645	6,032
A1	Adjustment for Subsidized COF	3,310	13,083	3,862
I11	Other Financial Expense	-	-	-
A3	Adjustment for Financial Expenses	-	90,540	145,942
I12	Net Financial Income	54,717	96,187	536,587
I13	Impairment Losses on Loans	2,005	2,006	33,215
I14	Provisions for Loan Impairment	-	-	31,208
A4	Adjustment for Provision for Loan Impairment	-	-	-

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A7-O12b

Adjusted Income Statement *(continued)*

Ref.	Account Name	2005	2006	2007
I15	Value of Loans Recovered			
I16	Operating Expense	405,181	711,391	987,923
I17	Personnel Expense	145,288	288,145	389,940
A2.1	Adjustment for In-kind Personnel Expenses	40,000	40,000	40,000
I18	Administrative Expense	219,893	383,246	557,983
I19	Depreciation and Amortization Expense	36,437	63,916	79,544
I20	Other Administrative Expense			
I21	Net Operating Income	(352,469)	(617,210)	(484,551)
I22	Net Nonoperating Income/(Expense)	-	-	-
I23	Nonoperating Revenue	-	-	-
I24	Nonoperating Expense			
I25	Net Income (Before Taxes and Donations)	(352,469)	(617,210)	(484,551)
I26	Taxes	-	-	-
I27	Net Income (After Taxes and Before Donations)	(352,469)	(617,210)	(484,551)
I28	Donations	746,317	642,924	507,031
I29	Donations for Loan Capital	746,317	642,924	507,031
I30	Donations for Operating Expense	-	-	-
I31	Net Income (After Taxes and Donations)	393,848	25,714	22,480

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A7-O13a

Adjusted Balance Sheet

Ref.	Account Name	2005	2006	2007
ASSETS				
B1	Cash and Due from Banks	267,439	302,067	215,686
B2	Trade Investments	17,000	47,319	38,270
B3	Net Loan Portfolio	201,470	617,263	1,529,198
B4	Gross Loan Portfolio	201,470	617,263	1,560,406
Adjustment for Write-Off				
B5	Impairment Loss Allowance			(31,208)
A4, A5	Adjustment for Impairment Loss Allowance			
B6	Interest Receivable on Loan Portfolio	-	-	-
B7	Accounts Receivable and Other Assets	-	-	43,894
B8	Other Investments	18,219	28,283	40,000
B9	Net Fixed Assets	107,507	133,360	90,129
B10	Gross Fixed Assets	143,944	214,362	249,504
A3.2	Inflation Adjustment to Fixed Assets	-	19,351	20,522
B11	Accumulated Depreciation and Amortization	36,437	100,353	179,897
B12	TOTAL ASSETS	611,635	1,128,292	1,957,177
LIABILITIES				
B13	Demand Deposits	130,960	434,344	950,517
B14	Short-term Time Deposits	-	-	-
B15	Short-term Borrowings	41,512	64,091	12,014
B16	Interest Payable on Funding Liabilities	-	-	49,328
B17	Accounts Payable & Other Short-term Liabilities	-	-	-
B18	Long-term Time Deposits	-	-	-
B19	Long-term Borrowings	-	-	-
B20	Other Long-term Liabilities	-	-	-
B21	TOTAL LIABILITIES	172,472	498,435	1,011,859

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Adjusted Balance Sheet *(continued)*

Ref.	Account Name	2005	2006	2007
EQUITY				
B22	Paid-in Capital	-	-	50,000
B23	Donated Equity	746,317	1,389,241	1,896,272
B24	Prior Years	-	746,317	1,389,241
B25	Current Year	746,317	642,924	507,031
B26	Retained Earnings	(350,464)	(922,358)	(1,261,279)
B27	Prior Years	-	(307,154)	(778,735)
B28	Current Year	(307,154)	(471,581)	(292,741)
A1 – A4	Adjustments to Income	(43,310)	(143,623)	(189,803)
B29	Reserves			
B30	Other Equity Accounts			
B31	Adjustments to Equity	43,310	162,974	210,325
B31 – A1	Subsidized Cost of Funds Adjustment *	3,310	13,083	3,862
B31 – A2	In-kind Subsidy Adjustment	40,000	40,000	40,000
B31 – A3.1	Inflation Adjustment *	-	109,891	166,463
B32	TOTAL EQUITY	439,163	629,857	895,318
	TOTAL LIABILITIES + EQUITY	611,635	1,128,292	1,907,177

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SAFE Profitability Indicators

Ref.	DESCRIPTION	2005	2006	2007
R1	Operational Self-Sufficiency Ratio			
a	Financial Revenue	60,114	200,455	739,948
b	Financial Expense	2,087	645	53,558
c	Impairment Losses on Loans	-	-	31,208
d	Operating Expense	365,181	671,391	947,923
e	b + c + d	367,268	672,036	1,032,689
R1	Operational Self-Sufficiency Ratio = a/e	16.37%	29.83%	71.65%
Adj R1	Financial Self-Sufficiency Ratio			
a	Financial Revenue	60,114	200,455	739,948
b	Adjusted Financial Expense	5,397	73,426	146,789
c	Adjusted Impairment Losses on Loans	-	-	-
d	Adjusted Operating Expense	405,181	711,391	987,923
e	b + c + d	410,578	784,817	1,134,712
Adj R1	Financial Self-Sufficiency Ratio = a/e	14.64%	25.54%	65.21%
R2	Return on Assets (ROA)			
a	Net Operating Income	(307,154)	(471,581)	(292,741)
b	Taxes	-	-	-
c	a - b	(307,154)	(471,581)	(292,741)
d	Average Assets	305,818	860,288	1,522,798
R2	Return on Assets (ROA) = c/d	-100.44%	-54.82%	-19.22%

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A7-O14b

SAFE Profitability Indicators *(continued)*

Ref.	DESCRIPTION	2005	2006	2007
Adj R2	Adjusted Return on Assets (AROA)			
a	Adjusted Net Operating Income	(350,464)	(584,362)	(425,972)
b	Taxes	-	-	-
c	a - b	(350,464)	(584,362)	(425,972)
d	Adjusted Average Assets	305,818	869,964	1,542,734
Adj R2	Adjusted Return on Assets (AROA) = c/d	-114.60%	-67.17%	-27.61%
R3	Return on Equity (ROE) = c/d			
a	Net Operating Income	(307,154)	(471,581)	(292,741)
b	Taxes	-	-	-
c	a - b	(307,154)	(471,581)	(292,741)
d	Average Equity	219,582	524,835	767,651
R3	Return on Equity (ROE) = c/d	-139.88%	-89.85%	-38.13%
Adj R3	Adjusted Return on Equity (AROE) = c/d			
a	Adjusted Net Operating Income	(350,464)	(584,362)	(425,972)
b	Taxes	-	-	-
c	a - b	(350,464)	(584,362)	(425,972)
d	Adjusted Average Equity	219,582	534,510	787,588
Adj R3	Adjusted Return on Equity (AROE) = c/d	-159.61%	-109.33%	-54.09%

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A7-O15a

SAFE ALM Ratios

Ref.	DESCRIPTION	2005	2006	2007
R4	Yield on Gross Portfolio Ratio = a/b			
a	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	47,072	189,619	734,069
b	Average Gross Loan Portfolio	100,735	409,367	1,088,835
R4	Yield on Gross Portfolio Ratio = a/b	46.73%	46.32%	67.42%
R5	Portfolio to Assets Ratio			
a	Gross Loan Portfolio	201,470	617,263	1,560,406
b	Assets	611,635	1,108,941	1,936,655
R5	Portfolio to Assets Ratio = a/b	32.94%	55.66%	80.57%
R6	Cost of Fund Ratio			
a	Financial Expenses on Funding Liabilities	2,087	645	6,032
b	Average Deposits			
c	Average Borrowings	20,756	52,802	38,053
d	b + c	20,756	52,802	38,053
R6	Cost of Fund Ratio = a/d	10.05%	1.22%	15.85%
Adj R6	Adjusted Cost of Fund Ratio			
a	Adjusted Financial Expenses on Funding Liabilities	5,397	13,728	57,420
b	Average Deposits			
c	Average Borrowings	20,756	52,802	38,053
d	b + c	20,756	52,802	38,053
Adj R6	Adjusted Cost of Fund Ratio = a/d	26.00%	26.00%	150.90%

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SAFE ALM Ratios *(continued)*

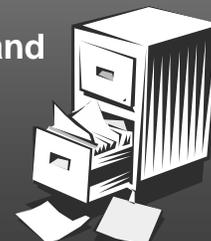
Ref.	DESCRIPTION	2005	2006	2007
R7	Debt to Equity Ratio			
a	Liabilities	172,472	498,435	1,011,859
b	Equity	439,163	610,506	924,796
R7	Debt to Equity Ratio = a/b	39.27%	81.64%	109.41%
Adj R7	Adjusted Debt to Equity Ratio			
a	Liabilities	172,472	498,435	1,011,859
b	Adjusted Equity	439,163	629,857	895,318
Adj R7	Adjusted Debt to Equity Ratio = a/b	39.27%	79.13%	113.02%
R8	Liquid Ratio			
a	Cash	267,439	302,067	215,686
b	Trade Investments	17,000	47,319	38,270
c	a + b	284,439	349,386	253,956
d	Demand Deposits	130,960	434,344	950,517
e	Short-term Deposits	-	-	-
f	Short-term Borrowings	41,512	64,091	12,014
g	Interest Payable on Funding Liabilities	-	-	49,328
h	Account Payable and Other Short-term Liabilities	-	-	-
i	d + e + f + g + h	172,472	498,435	1,011,859
R8	Liquid Ratio = c/i	164.92%	70.10%	25.10%

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Purpose of Internal Controls

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



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A7-017

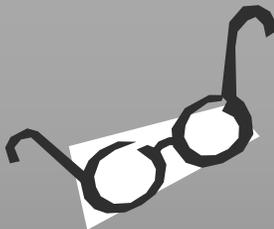
Sources of Risk

- Delinquency Risk
- Fraud
- Liquidity Risk
- Operating Risk
- Security Risks
- Accounting/Bookkeeping Risk
- Risk of Computerization
- Governance

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A7-018



External Audits

A formal, independent review of an entity's financial statements, records, transactions, and operations, performed by professionals, for purposes of:

- Lending credibility to financial statements and other management reports
- Assuring accountability for donor funds
- Identifying weaknesses in internal controls and systems

Scopes differ significantly according to the objectives of each audit.

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Handouts

NO-RTS-System-Analysis-Indicator-List

Sustainability and Profitability	
R1	Operational Self-Sufficiency Financial Self-Sufficiency
R2	Return on Assets (ROA) Adjusted Return on Assets (AROA)
R3	Return on Equity (ROE) Adjusted Return on Equity (AROE)

Asset/Liability Management	
R4	Yield on Gross Portfolio
R5	Portfolio to Assets
R6	Cost of Funds Ratio Adjusted Cost of Funds Ratio
R7	Debt to Equity Adjusted Debt to Equity
R8	Liquid Ratio

Portfolio Quality	
R9	Portfolio-at-Risk (PAR) Ratio Adjusted Portfolio-at-Risk (PAR) Ratio
R10	Write-off Ratio Adjusted Write-off Ratio
R11	Risk Coverage Ratio Adjusted Risk Coverage Ratio

Efficiency and Productivity	
R12	Operating Expense Ratio Adjusted Operating Expense Ratio
R13	Cost per Active Client Adjusted Cost per Active Client
R14	Borrowers per Loan Officer
R15	Active Clients per Staff Member
R16	Client Turnover
R17	Average Outstanding Loan Size Adjusted Average Outstanding Loan Size
R18	Average Loan Disbursed

Sustainability and Profitability Ratios and Formulae

RATIO	FORMULA
Operational Self- Sufficiency	$\frac{\text{Financial Revenue}}{\text{(Financial Expense + Impairment Losses on Loans + Operating Expense)}}$
Financial Self- Sufficiency	$\frac{\text{Adjusted Financial Revenue}}{\text{(Adjusted Financial Expense + Adjusted Impairment Losses on Loans + Adjusted Operating Expense)}}$
Return on Assets (ROA)	$\frac{\text{Net Operating Income – Taxes}}{\text{Average Assets}}$
Adjusted Return on Assets (AROA)	$\frac{\text{Adjusted Net Operating Income – Taxes}}{\text{Average Adjusted Assets}}$
Return on Equity (ROE)	$\frac{\text{Net Operating Income – Taxes}}{\text{Average Equity}}$
Adjusted Return on Equity (AROE)	$\frac{\text{Adjusted Net Operating Income – Taxes}}{\text{Average Adjusted Equity}}$

ALM Ratios and Formulae

INTEREST RATE MANAGEMENT

Yield on Gross Portfolio	$\frac{\text{Cash Received from Interest, Fees, and Commissions on Loan Portfolio}}{\text{Average Gross Loan Portfolio}}$
Cost of Funds	$\frac{\text{Financial Expense on Funding Liabilities}}{(\text{Average Deposit} + \text{Average Borrowing})}$
Adjusted Cost of Funds	$\frac{\text{Adjusted Financial Expense on Funding Liabilities}}{(\text{Average Deposit} + \text{Average Borrowing})}$
Funding Expense Ratio	$\frac{\text{Financial Expense on Funding Liabilities}}{\text{Average Gross Loan Portfolio}}$
Adjusted Funding Expense Ratio	$\frac{\text{Adjusted Financial Expense on Funding Liabilities}}{\text{Average Gross Loan Portfolio}}$

ASSET MANAGEMENT

Portfolio to Assets	$\frac{\text{Gross Loan Portfolio}}{\text{Assets}}$
----------------------------	---

LEVERAGE

Debt/Equity	$\frac{\text{Liabilities}}{\text{Equity}}$
Adjusted Debt/Equity	$\frac{\text{Liabilities}}{\text{Adjusted Equity}}$

LIQUIDITY MANAGEMENT

Current Ratio	$\frac{\text{Cash} + \text{Trade Investments}}{\text{Demand Deposit} + \text{Short-term Time Deposit} + \text{Short-term Borrowing} + \text{Interest Payable on Funding Liabilities} + \text{Accounts Payable and Other Short-term Liabilities}}$
----------------------	---

SAFE Analytical Adjustments

DESCRIPTION	2005	2006	2007
A1 Adjustment for Subsidized Cost of Funds			
a. Average Short-term Borrowings	20,756	52,802	38,053
b. Average Long-term Borrowings	-	-	-
c. Average Long and Short Term Borrowings	20,756	52,802	38,053
d. Market Rate, End of Period	26%	26%	26%
e. Market Cost of Funds = c x d	5,397	13,728	9,894
f. Interest and Fee Expense on Borrowings	2,087	645	6,032
g. Adjustment for Subsidized Cost of Funds = e - f	3,310	13,083	3,862
A2 Adjustment for In-kind Subsidies			
a. Personnel Expense	40,000	40,000	40,000
b. Administrative Expense			
c. Adjustment for In-kind Subsidies = a + b	40,000	40,000	40,000
A3 Inflation Adjustment			
a. Equity, Beginning of Period	-	610,506	924,796
b. Inflation Rate	18%	18%	18%
A3.1 c. Inflation Adjustment to Equity = (a x b)	-	109,891	166,463
d. Net Fixed Assets, Beginning of Period	-	107,507	114,009
A3.2 e. Inflation Adjustment to Fixed Assets = (d x b)	-	19,351	20,522
f. Net Adjustment for Inflation = c - e	-	90,540	145,942
A4 Adjustment for Impairment Loss Allowance			
a. Adjusted Impairment Loss Allowance	-		31,208
b. Actual Impairment Loss Allowance	-		31,208
c. Adjustment to Impairment Loss Allowance = a - b >0	-	-	-
A5 Adjustment for Write-off			
PAR > 180 days Past Due	-		

Adjusted Income Statement

Ref.	Account Name	2005	2006	2007
I1	Financial Revenue	60,114	200,455	739,948
I2	Financial Revenue from Loan Portfolio	47,072	189,619	734,069
I3	Interest on Loan Portfolio	42,626	171,708	668,610
I4	Fees and Commissions on Loan Portfolio	4,446	17,911	65,459
I5	Financial Revenue from Investment	13,042	10,836	5,879
I6	Other Operating Revenue			-
I7	Financial Expense	5,397	104,268	203,361
I8	Financial Expense on Funding Liabilities	5,397	13,728	57,420
I9	Interest and Fee Expense on Deposits			47,526
I10	Interest and Fee Expense on Borrowings	2,087	645	6,032
A1	Adjustment for Subsidized COF	3,310	13,083	3,862
I11	Other Financial Expense			-
A3	Adjustment for Financial Expenses	-	90,540	145,942
I12	Net Financial Income	54,717	96,187	536,587
I13	Impairment Losses on Loans	-	-	31,208
I14	Provisions for Loan Impairment	-	-	31,208
A4	Adjustment for Provision for Loan Impairment			
I15	Value of Loans Recovered			
I16	Operating Expense	405,181	711,391	987,923
I17	Personnel Expense	145,288	288,145	389,940
A2.1	Adjustment for In-kind Personnel Expenses	40,000	40,000	40,000
I18	Administrative Expense	219,893	383,246	557,983
I19	Depreciation and Amortization Expense	36,437	63,916	79,544
I20	Other Administrative Expense	183,456	319,330	478,439
I21	Net Operating Income	(350,464)	(615,204)	(482,544)
I22	Net Nonoperating Income/(Expense)	-	-	-
I23	Nonoperating Revenue	-	-	-
I24	Nonoperating Expense			
I25	Net Income (Before Taxes and Donations)	(350,464)	(615,204)	(482,544)
I26	Taxes	-	-	-
I27	Net Income (After Taxes and Before Donations)	(350,464)	(615,204)	(482,544)
I28	Donations	746,317	642,924	507,031
I29	Donations for Loan Capital	746,317	642,924	507,031
I30	Donations for Operating Expense	-	-	-
I31	Net Income (After Taxes and Donations)	395,853	27,720	24,487

Adjusted Balance Sheet

Ref.	Account Name	2005	2006	2007
ASSETS				
B1	Cash and Due from Banks	267,439	302,067	215,686
B2	Trade Investments	17,000	47,319	38,270
B3	Net Loan Portfolio	201,470	617,263	1,529,198
B4	Gross Loan Portfolio	201,470	617,263	1,560,406
	Adjustment for Write-Off			
B5	Impairment Loss Allowance			(31,208)
A4, A5	Adjustment for Impairment Loss Allowance			
B6	Interest Receivable on Loan Portfolio	-	-	-
B7	Accounts Receivable and Other Assets	-	-	43,894
B8	Other Investments	18,219	28,283	40,000
B9	Net Fixed Assets	107,507	133,360	90,129
B10	Gross Fixed Assets	143,944	214,362	249,504
A3.2	Inflation Adjustment to Fixed Assets	-	19,351	20,522
B11	Accumulated Depreciation and Amortization	36,437	100,353	179,897
B12	TOTAL ASSETS	611,635	1,128,292	1,957,177
LIABILITIES				
B13	Demand Deposits	130,960	434,344	950,517
B14	Short-term Time Deposits	-	-	-
B15	Short-term Borrowings	41,512	64,091	12,014
B16	Interest Payable on Funding Liabilities	-	-	49,328
B17	Accounts Payable & Other Short-term Liabilities	-	-	-
B18	Long-term Time Deposits	-	-	-
B19	Long-term Borrowings	-	-	-
B20	Other Long-term Liabilities	-	-	-
B21	TOTAL LIABILITIES	172,472	498,435	1,011,859
EQUITY				
B22	Paid-in Capital	-	-	50,000
B23	Donated Equity	746,317	1,389,241	1,896,272
B24	Prior Years	-	746,317	1,389,241
B25	Current Year	746,317	642,924	507,031
B26	Retained Earnings	(350,464)	(922,358)	(1,261,279)
B27	Prior Years	-	(307,154)	(778,735)
B28	Current Year	(307,154)	(471,581)	(292,741)
A1 - A4	Adjustments to Income	(43,310)	(143,623)	(189,803)
B29	Reserves			
B30	Other Equity Accounts			
B31	Adjustments to Equity	43,310	162,974	210,325
B31 - A1	Subsidized Cost of Funds Adjustment *	3,310	13,083	3,862
B31 - A2	In-kind Subsidy Adjustment	40,000	40,000	40,000
B31 - A3.1	Inflation Adjustment *	-	109,891	166,463
B32	TOTAL EQUITY	439,163	629,857	895,318
	TOTAL LIABILITIES + EQUITY	611,635	1,128,292	1,907,177

Profitability and Sustainability Ratios – Worksheet

Ref.	DESCRIPTION	2005	2006	2007
R1	Operational Self-Sufficiency Ratio			
a	Financial Revenue	60,114	200,455	
b	Financial Expense	2,087	645	
c	Impairment Losses on Loans	-	-	
d	Operating Expense	365,181	671,391	
e	b + c + d	367,268	672,036	
R1	Operational Self-Sufficiency Ratio = a/e	16.37%	29.83%	
Adj R1	Financial Self-Sufficiency Ratio			
a	Financial Revenue	60,114	200,455	
b	Adjusted Financial Expense	5,397	73,426	
c	Adjusted Impairment Losses on Loans	-	-	
d	Adjusted Operating Expense	405,181	711,391	
e	b + c + d	410,578	784,817	
Adj R1	Financial Self-Sufficiency Ratio = a/e	14.64%	25.54%	
R2	Return on Assets (ROA)			
a	Net Operating Income	(307,154)	(471,581)	
b	Taxes	-	-	
c	a - b	(307,154)	(471,581)	
d	Average Assets	305,818	860,288	
R2	Return on Assets (ROA) = c/d	-100.44%	-54.82%	
Adj R2	Adjusted Return on Assets (AROA)			
a	Adjusted Net Operating Income	(350,464)	(584,362)	
b	Taxes	-	-	
c	a - b	(350,464)	(584,362)	
d	Adjusted Average Assets	305,818	869,964	
Adj R2	Adjusted Return on Assets (AROA) = c/d	-114.60%	-67.17%	
R3	Return on Equity (ROE) = c/d			
a	Net Operating Income	(307,154)	(471,581)	
b	Taxes	-	-	
c	a - b	(307,154)	(471,581)	
d	Average Equity	219,582	524,835	
R3	Return on Equity (ROE) = c/d	-139.88%	-89.85%	
Adj R3	Adjusted Return on Equity (AROE) = c/d			
a	Adjusted Net Operating Income	(350,464)	(584,362)	
b	Taxes	-	-	
c	a - b	(350,464)	(584,362)	
d	Adjusted Average Equity	219,582	534,510	
Adj R3	Adjusted Return on Equity (AROE) = c/d	-159.61%	-109.33%	

ALM Ratios – Worksheet

Ref.	DESCRIPTION	2005	2006	2007
R4	Yield on Gross Portfolio Ratio = a/b			
a	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	47,072	189,619	
b	Average Gross Loan Portfolio	100,735	409,367	
R4	Yield on Gross Portfolio Ratio = a/b	46.73%	46.32%	
R5	Portfolio to Assets Ratio			
a	Gross Loan Portfolio	201,470	617,263	
b	Assets	611,635	1,108,941	
R5	Portfolio to Assets Ratio = a/b	32.94%	55.66%	
R6	Cost of Fund Ratio			
a	Financial Expenses on Funding Liabilities	2,087	645	
b	Average Deposits			
c	Average Borrowings	20,756	52,802	
d	b c +	20,756	52,802	
R6	Cost of Fund Ratio = a/d	10.05%	1.22%	
Adj R6	Adjusted Cost of Fund Ratio			
a	Adjusted Financial Expenses on Funding Liabilities	5,397	13,728	
b	Average Deposits			
c	Average Borrowings	20,756	52,802	
d	b c +	20,756	52,802	
Adj R6	Adjusted Cost of Fund Ratio = a/d	26.00%	26.00%	
R7	Debt to Equity Ratio			
a	Liabilities	172,472	498,435	
b	Equity	439,163	610,506	
R7	Debt to Equity Ratio = a/b	39.27%	81.64%	
Adj R7	Adjusted Debt to Equity Ratio			
a	Liabilities	172,472	498,435	
b	Adjusted Equity	439,163	629,857	
Adj R7	Adjusted Debt to Equity Ratio = a/b	39.27%	79.13%	
R8	Liquid Ratio			
a	Cash	267,439	302,067	
b	Trade Investments	17,000	47,319	
c	a b +	284,439	349,386	
d	Demand Deposits	130,960	434,344	
e	Short-term Deposits	-	-	
f	Short-term Borrowings	41,512	64,091	
g	Interest Payable on Funding Liabilities	-	-	
h	Account Payable and Other Short-term Liabilities	-	-	
i	d + e + f + g + h	172,472	498,435	
R8	Liquid Ratio = c/i	164.92%	70.10%	

Profitability and Sustainability Ratios – Answers

Ref.	DESCRIPTION	2005	2006	2007
R1	Operational Self-Sufficiency Ratio			
a	Financial Revenue	60,114	200,455	739,948
b	Financial Expense	2,087	645	53,558
c	Impairment Losses on Loans	-	-	31,208
d	Operating Expense	365,181	671,391	947,923
e	b + c + d	367,268	672,036	1,032,689
R1	Operational Self-Sufficiency Ratio = a/e	16.37%	29.83%	71.65%
Adj R1	Financial Self-Sufficiency Ratio			
a	Financial Revenue	60,114	200,455	739,948
b	Adjusted Financial Expense	5,397	73,426	146,789
c	Adjusted Impairment Losses on Loans	-	-	-
d	Adjusted Operating Expense	405,181	711,391	987,923
e	b + c + d	410,578	784,817	1,134,712
Adj R1	Financial Self-Sufficiency Ratio = a/e	14.64%	25.54%	65.21%
R2	Return on Assets (ROA)			
a	Net Operating Income	(307,154)	(471,581)	(292,741)
b	Taxes	-	-	-
c	a - b	(307,154)	(471,581)	(292,741)
d	Average Assets	305,818	860,288	1,522,798
R2	Return on Assets (ROA) = c/d	-100.44%	-54.82%	-19.22%
Adj R2	Adjusted Return on Assets (AROA)			
a	Adjusted Net Operating Income	(350,464)	(584,362)	(425,972)
b	Taxes	-	-	-
c	a - b	(350,464)	(584,362)	(425,972)
d	Adjusted Average Assets	305,818	869,964	1,542,734
Adj R2	Adjusted Return on Assets (AROA) = c/d	-114.60%	-67.17%	-27.61%
R3	Return on Equity (ROE) = c/d			
a	Net Operating Income	(307,154)	(471,581)	(292,741)
b	Taxes	-	-	-
c	a - b	(307,154)	(471,581)	(292,741)
d	Average Equity	219,582	524,835	767,651
R3	Return on Equity (ROE) = c/d	-139.88%	-89.85%	-38.13%
Adj R3	Adjusted Return on Equity (AROE) = c/d			
a	Adjusted Net Operating Income	(350,464)	(584,362)	(425,972)
b	Taxes	-	-	-
c	a - b	(350,464)	(584,362)	(425,972)
d	Adjusted Average Equity	219,582	534,510	787,588
Adj R3	Adjusted Return on Equity (AROE) = c/d	-159.61%	-109.33%	-54.09%

ALM Ratios – Answers

Ref.	DESCRIPTION	2005	2006	2007
R4	Yield on Gross Portfolio Ratio = a/b			
a	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	47,072	189,619	734,069
b	Average Gross Loan Portfolio	100,735	409,367	1,088,835
R4	Yield on Gross Portfolio Ratio = a/b	46.73%	46.32%	67.42%
R5	Portfolio to Assets Ratio			
a	Gross Loan Portfolio	201,470	617,263	1,560,406
b	Assets	611,635	1,108,941	1,936,655
R5	Portfolio to Assets Ratio = a/b	32.94%	55.66%	80.57%
R6	Cost of Fund Ratio			
a	Financial Expenses on Funding Liabilities	2,087	645	6,032
b	Average Deposits			
c	Average Borrowings	20,756	52,802	38,053
d	b c +	20,756	52,802	38,053
R6	Cost of Fund Ratio = a/d	10.05%	1.22%	15.85%
Adj R6	Adjusted Cost of Fund Ratio			
a	Adjusted Financial Expenses on Funding Liabilities	5,397	13,728	57,420
b	Average Deposits			
c	Average Borrowings	20,756	52,802	38,053
d	b c +	20,756	52,802	38,053
Adj R6	Adjusted Cost of Fund Ratio = a/d	26.00%	26.00%	150.90%
R7	Debt to Equity Ratio			
a	Liabilities	172,472	498,435	1,011,859
b	Equity	439,163	610,506	924,796
R7	Debt to Equity Ratio = a/b	39.27%	81.64%	109.41%
Adj R7	Adjusted Debt to Equity Ratio			
a	Liabilities	172,472	498,435	1,011,859
b	Adjusted Equity	439,163	629,857	895,318
Adj R7	Adjusted Debt to Equity Ratio = a/b	39.27%	79.13%	113.02%
R8	Liquid Ratio			
a	Cash	267,439	302,067	215,686
b	Trade Investments	17,000	47,319	38,270
c	a b +	284,439	349,386	253,956
d	Demand Deposits	130,960	434,344	950,517
e	Short-term Deposits	-	-	-
f	Short-term Borrowings	41,512	64,091	12,014
g	Interest Payable on Funding Liabilities	-	-	49,328
h	Account Payable and Other Short-term Liabilities	-	-	-
i	d + e + f + g + h	172,472	498,435	1,011,859
R8	Liquid Ratio = c/i	164.92%	70.10%	25.10%

Benchmarking of Key Indicators

Average Indicator for the Category		Administrative Efficiency %	Portfolio Yield %	Operating Self Sufficiency %	Adjusted Return on Assets %	Portfolio-at-Risk > 90 Days %	Number of Active Clients Outstanding	Average Loan Outstanding as a % of GNP per Capita	Clients per Staff Member	Clients per Loan Officer
Category of MFI										
Sustainability	FSS	17.3	31	127	3.4	1.1	14,182	42.4	116	227
	Non FSS	26.9	28.3	99	(5.1)	2.2	6,501	33.6	100	200
Methodology	Individual	14.9	28.7	11.8	1.3	1.8	6,585	57.1	88	180
	Solidarity	24.9	28.4	11.6	(0.2)	0.6	14,182	15.8	145	222
	Village Banking	31.6	33.1	105	0	.9	17,203	15.0	155	290
Poverty Outreach	Low End	30.9	34.6	111	(0.2)	2.3	14,131	13.4	150	262
	Broad	17.9	29.8	119	1.3	1.6	8,712	53.3	101	206
	High End	14.1	24.6	115	1.1	1.4	10,164	172.3	57	143
Age of Institution	New	37.3	30.3	97	(4.7)	0.6	5,715	36.6	95	181
	Young	21.1	31.1	118	1.3	1.1	8,634	44.6	103	229
	Mature	18.1	29.5	117	1.2	1.9	14,781	38.3	119	226

Average Indicator for the Category		Administrative Efficiency %	Portfolio Yield %	Operating Self Sufficiency %	Adjusted Return on Assets %	Portfolio-at-Risk > 90 Days %	Number of Active Clients Outstanding	Average Loan Outstanding as a % of GNP per Capita	Clients per Staff Member	Clients per Loan Officer
Category of MFI										
All the MFIs reporting in the Region	Africa	33.4	31.6	104	(2.4)	2.4	9,976	70.1	110	235
	Asia	16.9	26.5	115	0.1	1.2	16,168	20.8	125	206
	Eastern Europe	17.2	29.3	125	1.3	0.6	4,690	80.0	69	165
	Latin America	20.4	32.3	117	2.1	2.1	10,661	30.7	119	241
	Middle East and North Africa	21.1	30.0	126	(0.5)	0.4	13,796	15.0	162	245

Source: Micro Banking Bulletin, Issue 15, Autumn 2007.

Questions about SAFE'S Performance

1. How would you describe SAFE's profitability?
2. What are SAFE's prospects for the future?
3. What additional information would you need to more fully understand SAFE's performance?
4. How does SAFE compare to the microfinance industry? (*Note: SAFE has 150 clients per staff member.*)
5. **(Optional)** What questions would you like to ask SAFE's General Manager/CEO about either his/her accounting practices or about plans he/she has in place to improve SAFE's performance?

Use of Reports – Worksheet

Please note which of the following stakeholders needs each report, and if they do, how frequently and for what purpose

Type of Report	Managers	Board	Loan Officers	All Staff	Public
Summary Balance Sheet					
Detailed Balance Sheet					
Summary Income Statement					
Detailed Income Statement					
Detailed Actual to Budget Income Statement					
ALM and Profitability Indicators					
Cash Flow Review					
Projected Cash Flow					
Aging of Portfolio-at-Risk by Loan Officer					
Other (for example, savings by branch and product)					
Other					

Source: Waterfield, Charles and Nick Ramsing. *Management Information Systems for Microfinance Institutions: A Handbook*. Technical Tool Series No. 1. CGAP: Washington, D.C., 1998.

Purpose of Internal Controls

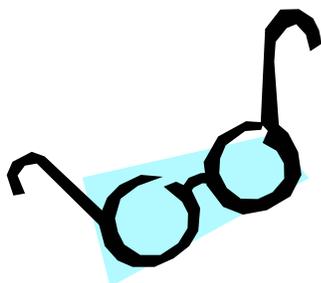
- Preserve the safety of assets
- Improve quality of customer service
- Ensure reliability of financial information
- Ensure staff adherence to policy and guidelines



Sources of Risk

- Delinquency Risk
- Fraud
- Liquidity Risk
- Operating Risk
- Security Risks
- Accounting/Bookkeeping Risk
- Risk of Computerization
- Governance

External Audits



A formal, independent review of an entity's financial statements, records, transactions, and operations, performed by professionals, for purposes of:

- Lending credibility to financial statements and other management reports
- Assuring accountability for donor funds
- Identifying weaknesses in internal controls and systems

Scopes differ significantly according to the objectives of each audit.

Technical Notes – Statements and Reports

Now that the financial statements have been created, we need to look at how the information provided can be used in a useful manner—that is, how do financial statements help management and shareholders make decisions?

“A management information system is the 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 and Ramsing, p. 4)

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 in decision making.

To obtain the information necessary to create financial statements, we have learned that an accurate accounting system needs to be in place. To obtain the information necessary to create other management reports and analysis, we need a portfolio tracking system. As part of this tracking system we also need information on the operations of the MFI, including the number of staff and loan officers, number of branches, salaries for loan officers, and so on. This helps to determine the efficiency and productivity of the MFI.

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

Many indicators and reports are generated by combining information from the accounting system (such as income and expenses) with information from the portfolio system (such as number, amount, and size of loans, or number of staff). Although independent, the two systems share data and must be compatible.

The starting point in developing an MIS is to determine what information the institution needs to perform well. That means defining the needs of different users of information, based on the decisions they need to make. Good information provided in a useful form on a timely basis empowers all stakeholders in the institution to participate meaningfully. To do this, an MFI must determine its information needs through identifying the users of information and evaluating the needs of each user group.

The following questions need to be answered:

- What decisions does each set of stakeholders make?
- What key information do the users need to make those decisions?
- What key indicators or ratios do the users need to monitor to perform their jobs well?
- What additional information should the users have to be knowledgeable about the organization’s performance and achievement of broader goals?
- What supplemental information could be included in the reports to improve staff performance?
- How can all the information the users need be clustered in the minimum number of useful reports provided in the necessary timeframe?
- How can key indicators be incorporated so as to enable the users to monitor trends in them?
- How can reports be designed to meet the needs of different users?

- How frequently and how immediately do the users need to receive the information?
- How might the users' information needs change in the future, and how would those changes affect the design of the MIS?

KEY ISSUES IN REPORT DESIGN INCLUDE:

- Content – reports should focus on one issue and present all information pertinent to that issue
- Categorization and level of detail – information might need to be present at different levels of aggregation
- Frequency and timelines
- Identifying information – include standardized headers and footers wherever possible
- Period covered
- Trend information on key indicators – this may include incorporating a series of consecutive columns for different points in time or providing a comparison of actual and budgeted figures

REPORTS FOR MFIs CAN BE GROUPED INTO SEVEN CATEGORIES:

1. Balance sheet reports
2. Income statement reports
3. Cash flow reports
4. Savings reports
5. Loan activity reports
6. Portfolio quality reports
7. Summary operational reports

According to Waterfield and Ramsing, a sample list of reports for a small, *credit-only* MFI might include:

Balance Sheet Reports

- Summary balance sheet
- Detailed balance sheet

Income Statement Reports

- Summary income statement
- Detailed income statement
- Detailed actual to budget income statement
- Adjusted income statement

Cash Flow Reports

- Cash flow review
- Projected cash flow

Loan Activity Reports

- Loan repayment schedule
- Loan account activity
- Active loans by loan officer

Portfolio Quality Reports

- Delinquent loans by loan officer
- Summarized aging of portfolio-at-risk by loan officer
- Loan write-off and recuperations report
- Aging of loans and calculation of reserve requirements

If a credit and savings MFI, add:

Savings Reports

- Active savings accounts by branch and product

Additionally, there are reports for:

- Clients (savings account activity, loan repayment schedule)
- Field staff (activity reported by loan officer or branch)
- Branch and regional managers (reports split by branch, region and product)
- Senior managers in head office (consolidated reports, financial statements)
- The board (summary reports, financial statements)
- Donors and shareholders (summary financial statements)
- Regulators (specified by the regulators themselves)

Reports are used at several levels. For example, the same summary Balance Sheet might be used for both board members and shareholders. Delinquent loans by loan officer might be used by both field staff and branch managers.

INDICATORS

“An MIS is created to generate information for decision making, and the best information for that purpose is generally that 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. The data for an indicator are usually selected because they have a causal link, and the resulting number, often a percentage, can be judged relatively independent of such factors as changes in scale of activity. For example, comparing salaries as a percentage of total expenditure from one year to the next can be more informative than simply comparing total salary expenditure for each year.

When using indicators, it is important to remember that numbers don't tell everything about an MFI. Indicators need to be complemented by discussions with staff and clients, and with close attention to morale and perceptions. Furthermore, interpreting financial ratios can be challenging. It requires a solid grasp of the underlying financial principles and in-depth knowledge of the MFI's operations and environment. No indicator should be evaluated in isolation from others. For example, an evaluation of portfolio-at-risk should always include the loan write-off ratio and the loan rescheduling ratio (if applicable).

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 SEEP 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 are necessarily correct. It is the trend in these ratios that is critically important.

Ratios must be analyzed together, and ratios tell you more when consistently tracked over a period of time. Frequent measurement can help identify problems that need to be solved before they fundamentally threaten the MFI, thus enabling correction. Trend analysis also helps moderate the influence of seasonality or exceptional factors.

Different levels of users will require a set of different indicators and analysis. They might be summarized as follows:

- Operations staff need portfolio quality, efficiency ratios, outreach, and branch level profitability.
- Senior management needs institution-level portfolio quality, efficiency, profitability, and ALM.
- Regulators need, at a minimum, capital adequacy and liquidity.
- Donors/investors need institution level, portfolio quality, ALM, and profitability.

In addition to analyzing past trends, ratios, in conjunction with policy decisions, are helpful when preparing financial projections.

8: BALANCING ACT

Session Summary

OBJECTIVES: By the end of the session, participants will be able to:

- Practice skills in accounting, decision making, and auditing
- Produce financial statements from information generated based on their participation in an MFI accounting game

TIME: 5–7 hours

SUPPLIES: Flipchart

Markers

LED projector/overhead projector

6 complete game sets (can be downloaded from Accounting course page on <http://www.cgap.org>)

Dice (2 per board)

Playing pieces (1 per player—coins, buttons, etc.)

Prizes (for best branches, overall winner, fastest balance, and so on)

Participants will need: Pencils

Erasers

Calculators

Something to move around the board (for example, a key ring)

TRAINER MATERIALS

A8-M1 Game Overview for Trainer

A8-M2 Game Directions for Trainer

A8-M3 Half-year Expense Cards

A8-M4 Flipchart Guide

PARTICIPANT MATERIALS

OVERHEADS: A8-O1 Balancing Act: A Microfinance Accounting Game

A8-O2a–b Instructions to Determine Levels of Risk and Interest on Debt

A8-O3a–e Sample Entries for Loan Disbursements and Loan Repayments

A8-O4 Opportunity and Other Squares

A8-O5 Accessing a Line of Credit

A8-O6 Instructions on How to Start Playing

Note: The handouts for the game have been changed from the original to reflect the new financial statement formats. The playing board and cards remain the same as in the original game.

HANDOUTS:	A8-H1	Chart of Accounts
	A8-H2	Opening Balance Sheet
	A8-H3	General Journal form (5–10 per person)
	A8-H4	General Ledger form (5 per person)
	A8-H5	Balancing Act – A Microfinance Accounting Game
	A8-H6	Landing on a Square
	A8-H7	Sample Entries for Loan Disbursements, Loan Repayments, and Accessing Lines of Credit
	A8-H8	Trial Balance form (2–4 per person)
	A8-H9	Tracing Errors in the Trial Balance
	A8-H10	Ending the Game (Week 52)
	A8-H11	Adjusted Trial Balance form
	A8-H12	Statement of Income and Expenditure form
	A8-H13	Closing Balance Sheet form
	A8-H14	Analytical Adjustments (Worksheet)
	A8-H15	Performance Indicators (Worksheet)
	A8-H16a	Direct Method – Statement of Cash Flows (Worksheet)
	A8-H16b	Indirect Method – Statement of Cash Flows (Worksheet)

PREPARED FLIPCHARTS:

As noted in A8-M4

Session 8: Balancing Act

INTRODUCTION TO THE GAME

1. (2 minutes) (Using A8-O1 as background, introduce the session by telling participants that they will participate in an accounting game for MFIs. The game is called the Balancing Act and is to serve as summary application of skills learned and reinforced during the course. It is about an MFI and its activities throughout one year. This game really makes accounting FUN!
2. (5 minutes) Introduce the game and some basics of play. Participants will start the game with the same Balance Sheet assets, liabilities, and equity. By virtue of rolling a die and moving around a game board, they will encounter “transactions” that they will have to account for by keeping a General Journal and a cash ledger. (Choose some fun examples to illustrate transactions.) Explain that the game “lasts” for 52 weeks with participants continuing to make entries. At the end of the game each participant will produce account ledgers, a trial balance, Income Statement and a balanced Balance Sheet. Each participant’s statements will be different, depending on what squares were landed on. The results will on depend on chance and the luck of the die.
3. (5 minutes) Place copies of the playing board on every table so that participants can see what it looks like during the tea break.

Show the board and read some entries from the squares aloud. Explain that each participant will record and account for his or her transactions individually. Participants may help each other, but each participant is responsible for producing his or her own statements in the end. (Consider having participants work in pairs, depending on group level, or let participants choose to work individually or in pairs.)

Note: The handouts have been updated to reflect the formats for the financial statements and ratios, as in the SEEP Framework. They are therefore different than the ones packaged with the game itself. They will work in the same way and just as effectively with the game board and game cards. There may be minor terminology differences that the trainer can address as he or she sees best. The game has no transactions that relate to demand deposits.

Pass out the Chart of Accounts (A8-H1), Opening Balance Sheet (A8-H2), General Journal form (A8-H3), and General Ledger form (A8-H4) to each participant, and set out the Balancing Act board before beginning the instructions.

INSTRUCTIONS

4. (45 minutes) Give the following instructions to the participants, using predesigned flipcharts, overheads, and the materials in A8-M1 and A8-M2.

Be aware that nothing substitutes for good preparation in giving these instructions. If your explanation is muddled, the participants will be very muddled. Flipcharts should be left on the wall for the following day.

- Game overview: Using flipchart 1 and A8-O1, go over the broad steps to be followed.

Trainer Instructions

- To start: Referring to the materials already given to participants (A8-H1 through A8-H4), use flipchart 2 to tell participants what they will need to start playing the game.
 - Determine levels of risk and interest rates. Using A8-O2, walk participants through the process of setting risk levels and interest rates. Ask participants to enter their results on the initial Balance Sheet (A8-H2).
 - Explain loan disbursement procedures using flipchart 3 and A8-O3a–d. Refer to the "D" squares on the game board. Using the "striptease" method with the overhead, reveal each step as participants respond to questions about how to book the disbursement, loan fees, and interest (income and deferred portion). State that all loans have a one-year term.
 - Explain loan repayment procedures using flipchart 4 and A8-O3e. Refer to the "R" squares on the game board. Using the "striptease" method with the overhead, reveal each step as participants respond to questions about how to book the repayment and recognition of deferred interest.
 - Explain the other squares (opportunity and other transactions) on the game board, using A8-O4.
 - Describe the processes required for the halfway point at week 26, using flipchart 5. Don't let them forget to prepare a midyear trial balance!
 - Using A8-O5, explain how to access a line of credit in cases where participants do not have enough cash to cover disbursements and/or expenses.
 - Explain that interest income on investments and interest expenses for short-term debt, concessional loans, and commercial loans are not accrued until the end of the year (or after 26 weeks if some participants are slow and you want them to finish). Use flipchart 6.
 - Ending the game. Explain how to finish the game using flipchart 7. (This may be left until later, since participants rarely remember and you may need to finish after week 26.)
 - Hand out A8-H5, A8-H6, and A8-H7 to reinforce the instructions just provided. Allow a few minutes for participants to review the handouts.
5. (2 minutes) Explain to participants that to make the game more interesting they will have a bit of competition added to the game! Each subgroup will make up a region consisting of three to four branches of the MFI. (For fun, give each an appropriate regional name or have them choose.) Each individual in the subgroup will be representing and recording for a branch of the Balancing Act.

At the end of the game, there will be a competition to select the "best branch" of each region. Each regional best branch will then compete for best branch of all the regions represented today, with the winning branch receiving the grand prize.

Remind participants that outcomes depend upon chance—participants can't control their branch's performance!

SETTING CRITERIA FOR “BEST BRANCH”

6. (10 minutes) Ask participants how they will choose the best branch. If necessary, remind them this is an accounting game, so they want to reward good accounting. Have the group quickly brainstorm a list of factors to be considered when selecting the best branch. Expect answers such as greatest outstanding portfolio balance, first accurate trial balance, percent operating cost, first to submit financial statements, ALM, profitability indicators, and so on.

Then ask the group to prioritize the criteria by voting on the top four to five factors and write the top criteria clearly on a new flipchart.

Have the group describe how those factors will be measured and judged.

Get the group to agree on the measurement and criteria, and establish voting procedures. (For example, allow each participant to vote x number of times, allow each participant to vote only once, and so on.)

Clarify to the group that this list and procedures will be used to determine the best branch at the end of the game.

If appropriate, to add a touch of reality, consider designating another trainer as the “internal auditor” who will randomly select participants to have their General Journal checked (and to ensure no cheating).

Strive to keep the competition healthy and light-hearted—it should be fun!

BEGIN THE GAME

7. (4–5 hours) Using A8-O6, give participants specific instructions on how to start playing the game. Make sure that there are plenty of extra General Journal (A8-H3) and General Ledger (A8-H4) forms. Ask the group to begin the game.

Be sure to circulate around the room(s) while the game is being played, to answer questions and give assistance as the need arises. The game should also be used as an opportunity to evaluate the participants’ abilities to create financial statements. The following specific instructions should guide you as you support participants:

There are several options for how participants play and you will need to give clear instructions: each participant plays at her/his own pace individually; the group works with each participant to check she/he makes correct entries; etc.

- When participants arrive at the midpoint of the board (week 26), provide them with Trial Balance forms (A8-H8) and A8-H9, Tracing Errors in the Trial Balance. Refer participants to flipchart 5 for midway point instructions.

Note: Decide early in the process how fast participants are going and, if they are slow, whether it would be better for some of them to complete the accounting cycle and prepare I/S and B/S based on week 26 rather than, say, only completing a trial balance at week 52. Because it is so fun and satisfying to create an I/S and B/S, as many participants as possible should complete them—nothing beats learning by doing!

- When participants get near the end of the board (week 52), provide them with more Trial Balance forms (A8-H8). Refer participants to the instructions on flipchart 7 and pass out instructions for ending the game (A8-H10).
 - After participants complete accounting adjustments (accrued interest income and expense, loan loss provision and reserves, and depreciation), provide them with A8-H11 for the final adjusted trial balance.
 - Once participants have balanced adjusted trial balances, pass out Statement of Income and Expenditure forms (A8-H12) and Closing Balance Sheet forms (A8-H13). (Distribute the handouts individually when players need them to end the game. This prevents participants from being overwhelmed with paper while playing.)
 - For more advanced participants, provide them with A8-H14 through A8-H16 (Financial Adjustments, Profitability and ALM Indicators, Direct Cash Flow Statement, and Indirect Cash Flow Statement worksheets). These exercises are optional.
8. (2 minutes) When sufficient time has passed that all or the vast majority of players have balanced their Balance Sheets, stop the game. Participants should remain in their playing groups.
 9. (10 minutes) Ask the groups: What problems did you have in balancing your branch? How did you find your mistakes? Distribute and review A8-H9 to those who do not already have it.
 10. (10 minutes) Have each of the playing groups/regions discuss their individual results in terms of what happened at each branch. Then, based on the predetermined criteria, have each playing group select the “Best Branch” from their region.

(If necessary, remind participants that this is a game and transactions were left to chance. Although people had similar experiences, they all recorded and perceived them differently. The choice of best branch does not reflect the accounting or operational skills of the player!)
 11. (10 minutes) Each playing group must then prepare a three-minute presentation to describe the winning branch and why it was selected.
 12. (20 minutes) Have each region present the case for “best branch” to the entire group.
 13. (5 minutes) After the entire group has voted on the best branch in the country, award prizes and congratulate all for playing the Balancing Act.

14. (20 minutes or longer) Debrief the group, processing what happened, drawing conclusions, and discussing applications of the event. (Use the Socratic method!)

The following questions can be used as a guide for this discussion:

Processing Questions

- What did you think about playing the game?
- How did you feel once you had completed the Balance Sheet?
- What were the pros and cons of playing?
- What were the difficult and good points for you?

Generalizing Questions

- What did you learn from playing the game?
- What skills did you think the game reinforced?
- What skills do you feel you have mastered?

15. (10–15 minutes or longer) Ask specifically: What questions do you still have about the concepts/skills? Or ask participants to answer: “I am still unsure of how to....”

Note the questions and answer them thoroughly. (*This is the last chance for review.*)

16. (2 minutes) Ask: What will you do with what the game has taught you back in the office? How do you think you will apply what you have learned? (Expect answers such as employ new techniques, take a refresher course in X, and so on.) Link to the next session on Action Planning.

End by once again thanking the participants for playing Balancing Act and close the day with a round of applause for all!

Trainer’s Notes

- The use of a structured experience such as a game provides participants with significant opportunities to experience learning. By experience, we mean to learn from one’s personal involvement as opposed to being told by the trainer what should be learned from it. While the game/experience provides the vehicle for learning, the learning comes about by actually undergoing the experience. Therefore debriefing occurs at two levels—game analysis AND its application to the real world.
 - The point is that, while the structured event/game itself is not reality, the learning from it is very real indeed.
 - In this session the game is used to conclude the course. The impact of the game should serve to provide participants with an enthusiastic close and durable reminder of the course teachings.
 - Before beginning the session, the trainer assigns participants into playing groups of three to four each, with a range of abilities based on their performance during the course. You should have also previously identified a table for each group to work around, preferably in the same large room, in close proximity to each other.
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BALANCING ACT: A Microfinance Accounting Game

GAME OVERVIEW FOR TRAINER

The use of a structured experience such as a game provides participants with significant opportunities to experience learning. By experience—we mean to learn from one's personal involvement as opposed to being told by the trainer what should be learned from it. While the game experience provides the vehicle for learning—the learning comes about by actually undergoing the experience. Therefore debriefing occurs at two levels—game analysis AND its application to the real world. While the structured event/game itself is not reality, the learning from it is very real indeed.

While this guide provides detailed instructions on the mechanics of the game, we recommend that the Trainer has at least an intermediate understanding of accounting principles, preferably as they apply to either traditional banking or microfinance institutions. Trainers should be very comfortable in the role of group instructor and facilitator. We recommend a maximum ratio of 10 participants per trainer.

Where possible, the trainer should assess the participants' level of understanding prior to beginning the session. In many, but not all, cases the game will be used to conclude a course in microfinance accounting. The impact of the game should serve to provide participants with an enthusiastic dose and durable reminder of the course content. For those who are playing the game as an independent learning tool, the game should provide a link between the general accounting knowledge they bring to the session and the field of microfinance.

OBJECTIVES

By the end of the session participants will be able to:

- Practice skills in accounting and decision making
- Produce financial statements from information generated by their participation in a microfinance accounting game

TECHNIQUE/TIME

- Game and discussion
- 8 hours (i.e., one full working day to introduce, play, and wrap up the session)

MATERIALS

- Overhead projector, overhead projector markers (optional for larger groups)
- Appropriate number of complete game sets—boards, cards and dice (We suggest that players use one single die per roll.)
- The maximum suggested group size per board is 4–5 players. We recommend a maximum ratio of 1 trainer to 10 players.
- Playing pieces—trainer will need to supply these. We suggest using local coins, buttons, etc.
- Semiannual expense cards to place on Square 26
- Handouts (make photocopies):
 - H-1 Game Directions for Players
 - H-2 Sample Entries and Calculating Interest Revenue
 - H-3 Chart of Accounts

- H-4 Opening Balance Sheet
 - H-5 Ledger paper for General Journal (distribute 2–3 per person)
 - H-6 Ledger paper for Cash Ledger (distribute 2 per person)
 - H-7 Ledger paper for General Ledger (distribute 2–3 per person)
 - H-8 Ending the Game Guide/Tracing Errors in the Trial Balance
 - H-9 Trial Balance form (distribute 2–3 per person)
 - H-10 Income Statement form
 - H-11 Closing Balance Sheet
- It may be useful to have the following forms for use on an overhead projector:
 - 0-1 Blank General Journal
 - 0-2 Blank General Ledger – Cash 101
 - 0-3 Sample Entries & Calculating Interest Revenue
 - 0-4 Tracing Errors in the Trial Balance

ACTIVITIES

1. (2 minutes)

Trainer introduces the session by telling participants that they will participate in an accounting game designed specifically for microfinance institutions (MFIs).

During the game, participants will each be acting as managers of separate small MFIs. The game is about activities of the MFI over a one-year period.

The game is called Balancing Act: A Microfinance Accounting Game. It was developed by CALMEADOW, a Canadian NGO specializing in providing technical assistance to MFIs.

2. (5 minutes)

Trainer introduces the game and some basics of play. Each participant will start the game with the same Balance Sheet—Assets, Liabilities, and Equity. By virtue of rolling a die and moving around a game board they will encounter "transactions" that they will need to account for by keeping a General Journal and a Cash Ledger. The game proceeds for 52 weeks and the participants continue to make entries. At the end of the game each participant will produce Account Ledgers, a Trial Balance, Income Statement and a 'balanced' closing Balance Sheet. Each participant's statements will be different, depending on what squares they landed on during the game. The results will depend on chance and the luck of the die.

3. (5 minutes)

Trainer places copies of the playing board so that every 4–5 participants can see what it looks like. (*The participants, if all playing in the same room, could be divided into playing groups at this point.*)

Trainer shows the board and reads some entries from the squares aloud. Trainer states that each participant will record and account for their transactions individually. Participants are encouraged to discuss transactions and help each other but each participant is responsible for producing her/his own statements in the end. (*Trainer may elect to have participants work in pairs depending on group level, or let participants choose to work individually or in pairs.*)

4. (60 minutes)

Trainer presents the instructions as noted in section M-2. (Trainer may wish to distribute handouts that go along with the topics presented at the same time—H-1 and H-2. Alternatively, trainer may choose to give them at the end as a review.)

Trainer Instructions

Trainer should not go into the details of ending the game at this point and only alert the participants to the closing entries and that detailed instructions will be distributed at the end of the game.

Trainer may elect to work through one roll of the die with the group. (If the trainer is using an overhead projector they may use 0-1 and 0-2 to work through a sample entry.)

Special emphasis should be given to sample transactions for loan disbursements and repayments. Trainer distributes H-3 to illustrate (*and may refer to 0-3*).

Trainer distributes remainder of all needed information and forms—H-4–H-8.

Before proceeding trainer should allow time for participants to read materials and be very sure that EVERYONE understands the rules of the game.

5. (5–6 hours)

Trainer pre-assigns participants into subgroups of 4–5 each (*if necessary and if not previously done*) and asks them to begin the game. Trainer should have also previously identified workspace for each group to work in/at, preferably in the same large room but at least in close proximity to each other.

It is imperative that trainers circulate around the room(s) while the game is being played to answer questions and give assistance as the need arises. It should also be used as an opportunity to evaluate the participants' level of understanding of basic principles.

As the trainers are circulating among the groups, they should distribute the handouts for ending the game (H-9 to H-12) as they see participants reaching square 52. (*The handouts are distributed individually when players need them to end the game. This is to prevent participants from being overwhelmed with paper while playing.*)

6. (2 minutes)

When sufficient time has passed so that all, or the vast majority of players have prepared closing financial statements, the trainer should stop the game.

7. (15 minutes)

Trainer asks each player (or group) to discuss their individual results in terms of what happened at their MFI.

8. (10 minutes)

Trainer then debriefs the group, processing what happened, drawing conclusions and discussing applications of the event.

9. (10 minutes)

Trainer asks: What problems did you have in balancing your books? How did you find your mistakes? Trainer distributes and reviews H-13 and shows 0-4 Tracing Errors in the Trial Balance.

10. (15 minutes)

Continue to process the game through questioning (be Socratic!)

The following questions can be used as a guide for this discussion:

- What did you think about playing the game?
- What were the pros and cons?
- What did you learn from playing the game?
- What skills did you think the game reinforced?
- What skills do you feel you have mastered?

11. (20 minutes)

Trainer asks specifically: "What questions do you still have about the concepts/skills?" OR "What aspects of the principles of accounting and logistics of the game might future groups

find most difficult to understand?" OR asks participants to answer: "I am still unsure of how to..." Trainer should note the questions and answer them thoroughly. (This is the last chance for review.)

12. (2 minutes)

Ask: What will you do with what the game has taught you back in the office? (Expect answers such as employ new techniques; take a refresher course in...) Trainer once again thanks the participants for playing "BALANCING ACT" and closes the day with a round of applause for all.

BALANCING ACT: A Microfinance Accounting Game

GAME DIRECTIONS FOR TRAINER

TO BEGIN THE GAME

- Each player makes a strategic decision regarding the amount of risk they wish to take on their investments—either high, medium or low.
- Once the decision is made, roll the die to determine the rate of return you will earn on your investments. Rates are calculated based on the following formula: (low risk rate = 1 x die; medium risk = 2 x die; high risk = 3 x die). *So if you have chosen medium risk and roll a 5 on the die then the rate of return on your investments will be 10% during the game.*
- The same roll of the die also determines the interest rate each player will pay on the debt they carry (concessional loans = $\frac{1}{2}$ x die; commercial loans = 2 x die). *If you rolled a 5, this means your concessional loan rate is 2.5% and your commercial loan rate is 10%.*
- Record the interest rates in the space provided at the bottom of the Opening Balance Sheet for future reference.

PLAYING THE GAME

- Roll the die to determine who begins the game. The highest roll begins and the next person is on the left (i.e., move clockwise from starter).
- A turn consists of rolling the die and moving a marker around the game board by the number indicated on the die. There are 52 squares in total and four different types of squares—Disbursement; Repayment; Opportunity; and General—as well as the half year square. Once on a square, players follow the instructions on the square and make the appropriate entries into their General Journal and Cash Ledger.

Cash Ledger – players are asked to keep a Cash Ledger (a record of all cash transactions) during the game so that they know their cash balance at all times. This is necessary in order to know whether or not the player needs to borrow additional cash to make loans or pay for expenses, and/or whether or not the player has excess cash to invest. *For expenses less than \$5,000, players have the option of using short-term credit or cash.*

Line of Credit – if at any time during the game a player does not have enough cash to either (i) make loan disbursements, or (ii) pay expenses, s/he must access their line of credit. The annual interest rate charged is 15% flat payable annually. For simplicity, assume that the line of credit is never reduced (i.e., paid down) and is outstanding for the full year (rather than pro-rated based on the number of weeks the loan was outstanding). This means that the interest expense must be accrued at the end of the year. (See *sample journal entry on H-3.*)

LANDING ON A SQUARE

Disbursement Squares "D"

- When a player lands on a "D" square, s/he picks up a "D" card from the middle of the board and disburses loans in the amount stated on the card. All loans disbursed during the game are 12-month (52-week) loans at 26% flat annual rate with a lump sum payment due at the end of the loan term.
- Loan fees (5%) are collected when the loan is disbursed.
- All interest is collected and recorded upfront. However, since the interest represents 52 weeks of revenue, only a portion is recorded as interest received in this year and the remainder is recorded as deferred revenue to be recognized next year. The portion recorded as interest this year is calculated based on the number of weeks the loan will be outstanding this year (see sample journal entry on H-3).

Note: if a player does not have enough cash to make the required loan disbursements, s/he must access the 'line of credit' as described earlier.

Repayment Squares "R"

- When a player lands on an "R" square, s/he picks up an "R" card from the middle of the board and records a loan repayment. Repayments received during the course of the game are from loans that were disbursed 52 weeks prior (with the same 26% flat annual rate of interest).
- As described above, when the loan was initially booked in the year prior, interest revenue was received upfront with a portion being recorded as interest revenue and a portion being recorded as deferred revenue. When a repayment is received, any deferred revenue is recognized now (see sample journal entry on H-3).

Opportunity Squares "?" – Choice

- Opportunity squares are represented on the game board by a question mark (?) indicating an opportunity for players to decide whether or not they wish to take advantage of the instructions on the square. There are two types of "opportunity squares"—“Investments” and “Long-term Debt.”
- Players may choose to take advantage of an Investment Opportunity if they have excess cash they want to find a productive use for. However, they may turn down this opportunity if (i) they have no cash to invest, or (ii) they are risk averse. (*Remember that the rate of return earned on investments was determined at the beginning of the game when each player chose low, medium, or high risk and rolled the die.*)
- Similarly, players may choose to take out a long-term loan if they are cash-short or they may choose not to if they have excess cash. Some players may choose to take a long-term loan, even if they are not cash-short, if they think they may land on a "D" square in the near future. The advantage of borrowing long-term is the lower interest rate (maximum of 12%) for long-term debt compared to the interest rate on the line of credit (15%).

General Squares

- The remaining squares represent typical transactions or events that an MFI experiences. Landing on a general square requires players to make accounting entries to record the transaction of the event.

Half Way Point – Square 26

All players must STOP on this square to:

- Calculate semiannual operating expenses. Players will do this by picking a card on the square and following the directions.
- Disburse loans as indicated on the card.

RECORDING ENTRIES

A Handout (H-3) has been prepared showing step by step how loan disbursement and repayment entries are calculated and entered into the books. Since these entries are so key to playing the game, we suggest that the trainer work through the examples with the players (*using Overhead 0-3 if necessary*).

The following is a suggested example to work through:

Loan disbursements:

- If \$15,000 in loans was disbursed in the second week of the year, the General Journal entry is as follows:

Week #	Account Title and Explanation	Ref.	Debit	Credit
2	Loans Outstanding – Current	102	15,000	
2	Cash	101		15,000

- If the loan has an up front fee equal to 5%, the calculation of Loan Fees earned is as follows:

<p>LOAN FEES EARNED = Amount of Loan Disbursed x Loan Fee Rate Loan Fees Earned = \$15,000 x 5% Loan Fees Earned = \$750</p>
--

The General Journal entry becomes:

Week #	Account Title and Explanation	Ref.	Debit	Credit
2	Loans Outstanding – Current	102	15,000	
2	Cash	101		15,000
2	Cash	101	750	
2	Loan Fees	403		750

Note: the two entries into the Cash account could be consolidated into one Credit entry of \$14,250. We show it as two entries for demonstration purposes. Players may choose the method that they are most comfortable with.

- iii. Carrying on with the above example, the MFI collects full interest payment upfront, i.e., at the time of disbursement, at a rate of 26% annual flat on its loans and the loan term is one year (52 weeks). The recognition of interest is split between two years as follows:

<p>INTEREST REVENUE = Amount of Loan Disbursed x Interest Rate x Number of weeks the loan will be outstanding in the current year</p> <p><i>Note: In this example, the loan was disbursed in week 2. Therefore it will be outstanding for 50 weeks this year.</i></p> <p>Interest revenue = (\$15,000 x 26% x 50/52)</p> <p>Interest Revenue = \$3,750</p> <p>DEFERRED REVENUE = Amount of Loan Disbursed x Interest Rate x Number of weeks the loan will be outstanding in the next year</p> <p><i>Note: In this example, the loan was disbursed in week 2 of this year. Therefore it will be outstanding for 50 weeks this year and will remain outstanding for 2 weeks next year.</i></p> <p>Interest revenue = (\$15,000 x 26% x 2/52)</p> <p>Interest Revenue = \$150</p>
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The complete General Journal entry is:

Week #	Account Title and Explanation	Ref.	Debit	Credit
2	Loans Outstanding – Current	102	15,000	
2	Cash	101		15,000
2	Cash	101	750	
2	Loan Fees	403		750
2	Interest Revenue (50/52 weeks)	401		3,750
2	Deferred revenue (2/52 weeks)	201		150

Note: The above entry uses accrual based accounting principals which the trainer should ensure all participants fully understand.

Loan Repayments:

- i. When loan repayments of \$15,000 are received on the second week of the year, for loans which were disbursed 52 weeks prior, the General Journal entry is as follows:

Week #	Account Title and Explanation	Ref.	Debit	Credit
2	Cash	101	15,000	
2	Loans Outstanding – Current	102		15,000

- ii. For an MFI that collects full interest revenue on a loan upfront and accrues the portion which comes due in the next year, a \$15,000 current loan repayment in the second week of the year would have the following General Journal entry:

Week #	Account Title and Explanation	Ref.	Debit	Credit
2	Cash	101	15,000	
2	Loans Outstanding – Current	102		15,000
2	Deferred Revenue (2/52 weeks)	201	150	
2	Interest Revenue (2/52 weeks)	401		150

ANTICIPATED QUESTIONS/DIFFICULTIES

- If a player lands on squares #13 and/or #39 be sure that the Investment account balance is calculated based on both the opening balance PLUS any investments made during the game.
- If a player is forced to borrow funds on the last day of the year to pay semiannual operating expenses, they do NOT need to record an interest expense for those funds.
- When calculating semiannual operating expenses, to determine the amount of expenses, each player calculates the size of their loan portfolio by taking the opening balance (gross loans outstanding) and adding any loan disbursements made during the game, and subtracting any loan repayments and loans written off during the game.
- When transferring entries from the General Journal to the General Ledger (G/L), the trainer should remind players to leave room in the General Journal for adjusting entries which will be made at the end of the game. Players will record adjusting entries in the General Journal and then make a new "adjusted" Trial Balance which "adjusts" the Trial Balance to include all year-end adjusting entries.
- When the trainer and players are discussing results at the end of the game, the trainer should keep in mind that while attempts were made to make the game and resulting Financial Statements realistic, certain simplifications were made which directly affect players' results. For example, paying interest expense on debt for a full year regardless of when the debt was incurred and, likewise, earning interest on investments for a full year. These types of simplifications may overstate actual financial costs and/or financial income.
- Certain journal entries may be difficult for some players. Trainers may need to review the following entries:

Write-off a \$350 current loan in week 41:

Week #	Account Title and Explanation	Ref.	Debit	Credit
41 Loan	Loss Reserve	104	350	
41	Loans Outstanding – Current	102		350

Make a Loan Loss Provision of \$750:

Week #	Account Title and Explanation	Ref.	Debit	Credit
52	Provision for Loan Losses	503	750	
52 Loan	Loss Reserve	104		750

Half-year Expense Cards

Cut out each square and place on the game board at Week 26.

Make enough so that each player has a square.

STOP

Disburse loans! 10,000 times the value of the number on one die

Receive loan payments! 8,000 times the value of another roll of the die

Pay mid year expenses! To determine the amount of expenses, calculate the size of their loan portfolio: opening balance (gross loans outstanding) plus any loan disbursements and minus any loan payments received during the game so far. Multiply the amount as follows to determine the individual expense amounts:

Salaries 12%	Transportation 4%
Rent 6%	Office expenses 3%
Bank charges 1%	Insurance 2%

PREPARE A TRIAL BALANCE!

STOP

Disburse loans! 10,000 times the value of the number on one die

Receive loan payments! 8,000 times the value of another roll of the die

Pay mid year expenses! To determine the amount of expenses, calculate the size of their loan portfolio: opening balance (gross loans outstanding) plus any loan disbursements and minus any loan payments received during the game so far. Multiply the amount as follows to determine the individual expense amounts:

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PREPARE A TRIAL BALANCE!

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Rent 6%	Office expenses 3%
Bank charges 1%	Insurance 2%

PREPARE A TRIAL BALANCE!

STOP

Disburse loans! 10,000 times the value of the number on one die

Receive loan payments! 8,000 times the value of another roll of the die

Pay mid year expenses! To determine the amount of expenses, calculate the size of their loan portfolio: opening balance (gross loans outstanding) plus any loan disbursements and minus any loan payments received during the game so far. Multiply the amount as follows to determine the individual expense amounts:

Salaries 12%	Transportation 4%
Rent 6%	Office expenses 3%
Bank charges 1%	Insurance 2%

PREPARE A TRIAL BALANCE!

STOP

Disburse loans! 10,000 times the value of the number on one die

Receive loan payments! 8,000 times the value of another roll of the die

Pay mid year expenses! To determine the amount of expenses, calculate the size of their loan portfolio: opening balance (gross loans outstanding) plus any loan disbursements and minus any loan payments received during the game so far. Multiply the amount as follows to determine the individual expense amounts:

Salaries 12%	Transportation 4%
Rent 6%	Office expenses 3%
Bank charges 1%	Insurance 2%

PREPARE A TRIAL BALANCE!

Flipchart Guide

INFORMATION TO BE PREWRITTEN ON FLIPCHARTS: Each centered title represents a new concept and a separate flipchart; each dotted line suggests a separate flipchart because information for a particular concept may not fit on one sheet of paper.

F1

BALANCING ACT: An Accounting Game

What you will do:

General Journal and (cash) ledger
Disburse 10,000 x die at weeks 26 and 52
Enter semiannual expenses at weeks 26 and 52
Close books at the end of 52 weeks
Post General Journal entries to General Ledger
Prepare Trial Balance at end of weeks 26 and 52
Prepare year-end adjusting entries
Prepare adjusted trial balance
Prepare Income Statement
Prepare Balance Sheet

F2

TO START – Before Playing

What you need:

- Chart of Accounts
 - Opening Balance Sheet
 - General Journal forms
 - General Ledger forms
 - Pencil
 - Calculator
 - Brain
-

TYPES OF SQUARES

Loan square (pick up an L card) = LOAN DISBURSEMENT

Loans 26 percent flat annual interest

5 percent up-front fee

Principal collected at end

Interest collected and recorded up front

Interest represents 52 weeks of revenue

- portion will need to be recorded as deferred revenue
- portion recorded as interest revenue this year
- depending on # weeks outstanding in this year

Repayment Square (pick up an R card) = LOAN REPAYMENT

Card states loan payment received that week.

- Loan was issued 52 weeks prior to this week.
 - Recognize the deferred interest revenue.
-

HALFWAY POINT – Week 26

When you stop or pass square 26, pick an expenses card and follow these directions:

1. Disburse loans at 10,000 times a roll of the die.
Die = 6
Disburse loans = 60,000.
 2. Calculate and record semiannual expenses according to instructions on the expenses card.
 3. Post journal entries to ledger.
 4. Create midyear trial balance.¹
-

INTEREST

Interest to be calculated:

- Interest income on investments
- Interest expenses on
 - Short-term Debt
 - Commercial Loans
 - Concessional Loans

Will **NOT** be accrued until end-of-year adjustments.

¹ To help speed up this process, participants may prepare by writing out the opening balances of the Balance Sheet ledger accounts the evening before.

ENDING THE GAME–Week 52

What you will do:

- Disburse 10,000 x Die.
- Pay semiannual expenses again as on square 26.
- If you do not have the cash you must access a line of credit.
- Complete a General Ledger for all transactions.
- Complete a trial balance.
- Calculate year-end adjustments.
- Create adjusted trial balance.
- Create year-end statements.

YEAR-END ADJUSTMENTS

Accrue interest on investments on ending balance.

Accrue interest expense ending balance of debt

Short-term @15 percent

Depreciation expenses

25 percent straight on closing account balance

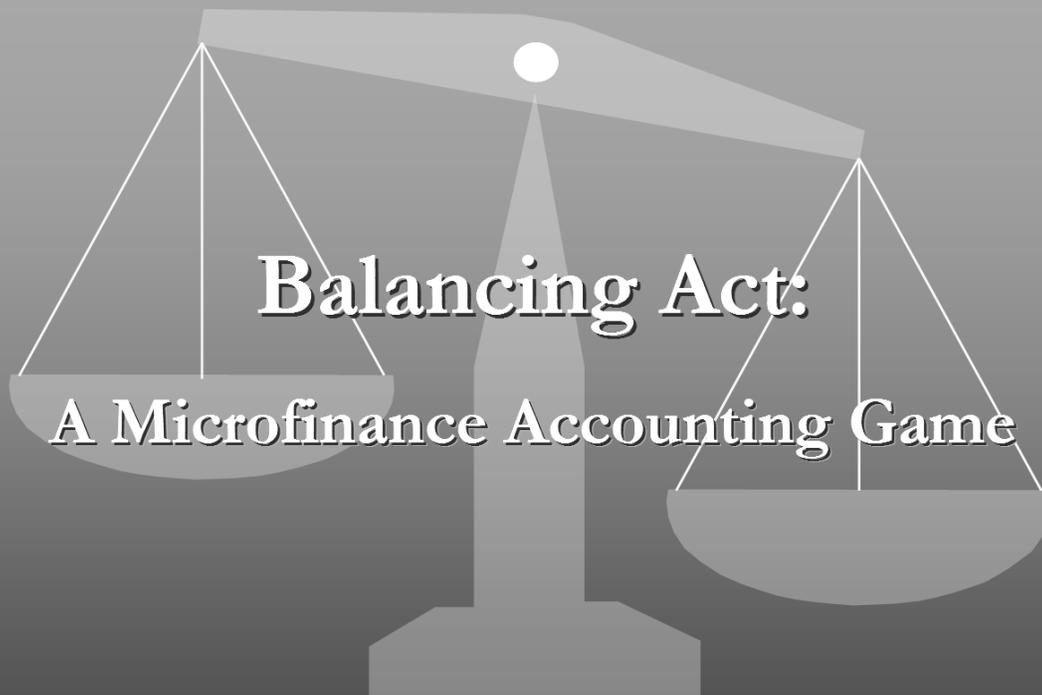
Impairment loss allowance

Make an impairment loss allowance of 5 percent of gross loan portfolio

Overheads

OVERHEADS FOR SESSION 8 ARE CONTAINED IN POWERPOINT FILE ENTITLED "CGAP ACCOUNTING OVERHEADS_4b."

A8-01



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Instructions to Determine Levels^{A8-02a} of Risk and Interest on Debt

Risk Level

- Choose a level of risk: Low, Medium, High
- Roll the die. Given the number that appears on the top of the die, the player calculates his/her risk:

Low risk = 1 x die # = 1x6 = 6

Medium risk = 2 x die #

High risk = 3 x die #

- Record the risk level in the space on the opening balance sheet.

I rolled a 6 and chose medium risk—my risk level is 2 x 6 = 12.

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Instructions to Determine Levels of Risk and Interest on Debt *(continued)*

Determine Interest on Debt

- Using the same number that appeared on the die from the previous roll, players calculate the interest rates to be paid on borrowings. For

$$\text{Concessional loans} = 0.5 \times \text{die \#}$$

$$\text{Commercial Loans} = 2 \times \text{die \#}$$

- Record interest rates for debt on opening Balance Sheet in the box provided.

Using my same roll of 6—

$$\text{my concessional loan rate} = 0.5 \times 6 = 3\%$$

$$\text{my commercial loan rate} = 2 \times 6 = 12\%$$

Sample Entries for Loan Disbursements and Loan Repayments

LOAN DISBURSEMENTS (D cards)

- If \$15,000 in loans was disbursed on the fifth week of the year, the General Journal entry is as follows:

Wk#	Account Title	Ref.	Debit	Credit
5	Loans Outstanding – Current	120	15,000	
5	Cash	101		15,000

Sample Entries for Loan Disbursements and Loan Repayments *(continued)*

A8-O3b

2. The calculation of loan fees earned is as follows:

$$\begin{aligned} \text{LOAN FEES EARNED} &= \text{Amount of Loan Disbursed} \times \text{Loan Fee Rate} \\ \text{Loan Fees Earned} &= (\$15,000 \times 5\%) \\ \text{Loan Fees Earned} &= \$750 \end{aligned}$$

The General Journal entry becomes:

Wk#	Account Title	Ref.	Debit	Credit
5	Loans Outstanding – Current	120	15,000	
5	Cash	101		15,000
5	Cash	101	750	
5	Loan Fees	415		750

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Sample Entries for Loan Disbursements and Loan Repayments *(continued)*

A8-O3c

3. The calculation of interest earned is as follows:

$$\text{INTEREST REVENUE} = \text{Amount of Loan Disbursed} \times \text{Interest Rate} \times [\text{Number of Weeks the Loan will be Outstanding in the Current Year}]$$

NOTE: In this example, the loan was disbursed on week 5. Therefore it will be outstanding for 47 weeks this year.

$$\begin{aligned} \text{Interest Revenue} &= (\$15,000 \times 26\% \times 47/52) \\ \text{Interest Revenue} &= \$3,525 \end{aligned}$$

$$\text{DEFERRED REVENUE} = \text{Amount of Loan Disbursed} \times \text{Interest Rate} \times [\text{Number of Weeks the Loan will be Outstanding in the Next Year}]$$

NOTE: In this example, the loan was disbursed on week 5 of this year. Therefore it will be outstanding for 47 weeks this year and will remain outstanding for five weeks next year.

$$\begin{aligned} \text{Deferred Revenue} &= (\$15,000 \times 26\% \times 5/52) \\ \text{Deferred Revenue} &= \$375 \end{aligned}$$

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Sample Entries for Loan Disbursements and Loan Repayments *(continued)*

The complete General Journal entry becomes:

Wk#	Account Title	Ref.	Debit	Credit
5	Loans Outstanding – Current	120	15,000	
5	Cash	101		15,000
5	Cash	101	750	
5	Loan Fees	415		750
5	Cash	101	3,900	
5	Interest Revenue (47/52 weeks)	410		3,525
5	Deferred Revenue (5/52 weeks)	225		375

Sample Entries for Loan Disbursements and Loan Repayments *(continued)*

LOAN REPAYMENTS (R cards)

Wk#	Account Title	Ref.	Debit	Credit
2	Cash	101	15,000	
2	Loans Outstanding - Current	120		15,000
2	Deferred Revenue (2/52 weeks)	225	150	
2	Interest Revenue (2/52 weeks)	410		150

A8-04

Opportunity Square – A Choice

- This is your decision—you may choose or decline the opportunity.
- Decide based on your risk level, cash position, and so on.

Other Squares

- Typical transactions of an MFI, to be recorded as stated on the square.

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A8-05

Accessing a Line of Credit

- Cash balance at any time should be a positive one.
- If a player does not have enough cash to make loan disbursements or pay expenses, she must access her line of credit.

Wk#	Account Title	Ref.	Debit	Credit
26	Cash	101	15,000	
26	Short-term Borrowings	215		15,000

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Instructions on How to Start Playing

1. Roll die to see who starts first. The person who rolls the highest number on the die begins.
2. The next players are determined in a clockwise direction (the person to your left).
3. The first player rolls die, moves the marker the number squares as appears on the die.
4. Record the transaction of the square you landed on in your General Journal and cash ledger.

Handouts

*Balancing Act***Chart of Accounts****ASSETS**

101 Cash and Due from Banks
 110 Trade Investments
 115 Net Loan Portfolio
 120 Gross Loan Portfolio
 125 Impairment Loss Allowance
 130 Interest Receivable on Loan Portfolio
 135 Accounts Receivable and Other Assets
 140 Other (Long-term) Investments
 145 Net Fixed Assets
 150 Gross Fixed Assets
 155 Accumulated Depreciation and Amortization

LIABILITIES

201 Demand Deposits
 210 Short-term Deposits
 215 Short-term Borrowings
 220 Interest Payable on Funding Liabilities
 225 Accounts Payable & ST Liabilities
 230 Long-term Time Deposits
 235 Long-term Borrowings
 240 Other Long-term Liabilities

EQUITY

301 Paid-in Capital
 305 Donated Equity
 310 Prior Years
 315 Current Year
 320 Retained Earnings
 325 Prior Years
 330 Current Year
 335 Reserves
 340 Other Equity Accounts
 345 Adjustments to Equity

REVENUE

400 Financial Revenue
 405 Financial Revenue from Loan Portfolio
 410 Interest on Loan Portfolio
 415 Fees and Commissions on Loan Portfolio
 420 Financial Revenue from Investment
 425 Other Operating Revenue
 435 Other Nonoperating Revenue
 440 Donations

EXPENSES

500 Financial Expense
 505 Financial Expense on Funding Liabilities
 510 Interest and Fee Expense on Deposits
 515 Interest and Fee Expense on Borrowings
 520 Other Financial Expense
 525 Impairment Losses on Loans
 530 Provisions for Loan Impairment
 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
 569 Insurance
 570 Printing Materials Supplies
 571 Repair and Maintenance
 572 Travel and Transport
 573 Legal and Audit Fees
 574 Board Meeting Expenses
 575 Miscellaneous

Balancing Act

Opening Balance Sheet

ASSETS		LIABILITIES AND EQUITY	
Cash & Due from Banks	\$ 74,100	LIABILITIES	
Loans Outstanding:		Short-term Borrowings (15%)	\$ 16,000
Current 136,70	0	Interest Payable on Funding Liabilities	7,000
Past Due	<u>10,800</u>	Accounts Payable & other ST Liabilities	13,000
Gross Loan Portfolio	147,500	Long-term Debt (commercial)* 7,000	
(Impairment Loss Allowance)	<u>(3,950)</u>	Long-term Debt (concessional)* 35,000	
Net Loans Portfolio	143,550	Other Long-term Liabilities	50,000
Accounts Receivable & Other		TOTAL LIABILITIES	128,000
Investments	200	EQUITY	
Other Long-term Investments	5,000	Paid-in Capital	91,630
Net Fixed Assets	7,600	Retained Earnings Prior Years	10,820
Gross Fixed Assets	8,000	TOTAL EQUITY	102,450
(Accumulated Depreciation)	<u>(400)</u>	TOTAL LIABILITIES & EQUITY	\$230,450
TOTAL ASSETS	\$230,450		

***Roll the Die to Determine the Following Rates:**

Choose risk level first, roll the die, multiply number on die face times risk level.

1. Interest Earned on Investments:	High / Medium / Low (3 x die / 2 x die / 1 x die)	@ %
2. Interest Paid on Long-term Debt:	Commercial Rate (2 x die)	@ %
	Concessional Rate ($\frac{1}{2}$ x die)	@ %
3. Inflation Rate	Same as Concessional	@ %

Balancing Act: A Microfinance Accounting Game

TO BEGIN THE GAME

- Each player makes a strategic decision regarding the amount of risk he/she wishes to take on investments—either high, medium, or low.
- Once the decision is made, players roll the die to determine the rate of return they will earn on their investments. Rates are calculated based on the following formula: (low risk rate = 1 x die; medium risk = 2 x die; high risk = 3 x die).
So if they have chosen medium risk, and roll a 5 on the die, then the rate of return on their investments will be 10 percent during the game.
- The same role of the die also determines the interest rate players will pay on the debt they carry (concessional loans = $\frac{1}{2}$ x die; commercial loans = 2 x die). If a player rolled a 5, this means his/her concessional loan rate is 2.5 percent and commercial loan rate is 10 percent.
- Record the interest rates on the opening Balance Sheet.

PLAYING THE GAME

- Roll the die to determine who begins the game (highest roll begins).
- A turn consists of rolling the die and moving a marker around the game board by the number of squares indicated on the die. There are 52 squares in total and four different types of squares (Loan, Payment, Opportunity, and General) and the half-year square. Once on a square, players follow the instructions on the square and make the appropriate entries into their General Journal and cash ledger.

Cash Ledger – Players are asked to keep a cash ledger (a record of all cash transactions) during the game so that they know their cash balance at all times. This is necessary in order to know whether or not the player needs to borrow additional cash to make loans or pay for expenses, and/or whether or not the player has excess cash to invest. (For purchases less than \$5,000, players have the option to use short-term credit or cash.)

Line of Credit – If at any time during the game a player does not have enough cash to either (1) make loan disbursements or (2) pay expenses, he or she must access their line of credit. The annual interest rate charged is 15 percent flat, payable annually. For simplicity's sake, assume that the line of credit is never reduced (that is, paid down) and is outstanding for the full year (rather than prorated based on the number of weeks the loan was outstanding). This means that the interest expense must be *accrued* at the end of the year (see sample journal entry on A8–H7).

Landing on a Square

LOAN SQUARES (“D”)

- When a player lands on a “D” square, he picks up a “D” card from the middle of the board and disburses loans in the amount stated on the card. All loans disbursed during the game are 12-month (52 weeks) loans at 26 percent flat annual rate (with 5 percent up-front administration fee) with a lump sum payment due at the end of the loan term.
- Administration fees are collected when the loan is booked.
- All interest is collected and recorded up front. However, since the interest represents 52 weeks of revenue, only a portion is recorded as interest received in this year and the remainder is recorded as deferred revenue to be recognized next year. The portion recorded as interest this year is calculated based on the number of weeks the loan will be outstanding this year (see sample journal entry on Handout 3, attached).
- *Note:* if a player does not have enough cash to make the required loan disbursements, she must access the “line of credit” described above.

PAYMENT SQUARES (“R”)

- When a player lands on a “R” square, he picks up a “R” card from the middle of the board and records a loan payment. Payments received during the course of the game are from loans that were disbursed 52 weeks prior (with the same 26 percent flat annual rate of interest).
- As described above, when the loan was initially booked in the year prior, interest revenue was received up front with a portion being recorded as interest revenue and a portion being recorded as deferred revenue. When a payment is received, any deferred revenue is recognized now (see sample journal entry on Handout, 3 attached).

OPPORTUNITY SQUARES (? = CHOICE)

- Opportunity squares are represented on the game board by a question mark (?) indicating an opportunity for players to decide whether or not they wish to take advantage of the instructions on the square. There are two types of opportunity squares—Investments or Long-term Debt.
- Players may choose to take advantage of an Investment Opportunity if they have excess cash they want to find a productive use for. However, they may turn down this opportunity if (1) they have no cash to invest or (2) they are risk-averse. (Remember, the rate of return earned on investments was determined at the beginning of the game when each player chose low, medium, or high risk and rolled the die.)
- Similarly, players may choose to take out a long-term loan if they are cash-short or they may choose not to, if they have excess cash. Some players may choose to take a long-term loan even if they are not cash-short if they think they may land on an “D” square in the near future. The advantage of borrowing long-term is the lower interest rate (maximum of 12 percent) for long-term debt compared to the interest rate on the line of credit (15 percent).

GENERAL SQUARES

- The remaining squares represent typical transactions or events that an MFI experiences. Landing on a general square requires players to make accounting entries to record the transaction of the event.

HALFWAY POINT (SQUARE 26)

- Everyone must stop on this square and calculate half-year expenses. Players will do this by picking a card on the square and following the directions. Expenses are expressed as a percentage of the outstanding portfolio that will have to be calculated first by taking the opening balance and accounting for any disbursements and repayments during the first 26 weeks.

Sample Entries for Loan Disbursements, Loan Repayments, and Accessing Lines of Credit

LOAN DISBURSEMENTS (D CARDS)

If \$15,000 in loans was disbursed in the fifth week of the year at 26 percent flat annual rate with a 5 percent up-front fee, the General Journal entry would be as follows:

Wk #	Ref.	Account Title	Debit	Credit
5	120	Loans Outstanding – Current	15,000	
5	101	Cash		15,000
5	101	Cash	750	
5	415	Loan Fees		750
5	101	Cash	3,900	
5	410	Interest Revenue (47/52 weeks)		3,525
5	225	Deferred Revenue (5/52 weeks)		375

LOAN REPAYMENTS (R CARDS)

When loan repayments of \$15,000 are received in the second week of the year, for loans that were disbursed 52 weeks prior at 26 percent flat annual rate with up-front interest payments, the journal entry would be as follows:

Wk #	Ref.	Account Title	Debit	Credit
2	101	Cash	15,000	
2	120	Loans Outstanding – Current		15,000
2	225	Deferred Revenue (2/52 weeks)	150	
2	410	Interest Revenue (2/52 weeks)		150

ACCESSING A LINE OF CREDIT

If a player needed to access a \$15,000 short-term line of credit in order to disburse the above loans, the journal entry recognizing the \$15,000 loan would be:

Wk #	Ref.	Account Title	Debit	Credit
5	101	Cash	15,000	
5	215	Short-term Borrowings		15,000

Tracing Errors in the Trial Balance

1. Check the additions in the trial balance.
2. Check that all the items have been recorded on the correct side of the trial balance.
3. Calculate the amount of the difference:
 - 3.1 If difference is very big, it is often an indication of a large balance or several balances that have been omitted.
 - 3.2 Divide the difference by 2 and check if the resultant figure appears in the trial balance and on the correct side.
 - 3.3 Check if the amount of the difference is equal to any ledger account balance. Check if such balance has been transferred to the trial balance.
 - 3.4 Check if the amount of the difference is divisible by 9. (This may be an indication of a transposition of figures—for example, 98 recorded as 89 or 35 as 53.)
4. In the case of the game : Check if the totals of the debit and credit General Journal entries agree.
5. Check whether all ledger balances have been transferred to the trial balance.
6. Check your ledger balances calculations.
7. Check your posting from the General Journal to the ledger.
8. Check whether your General Journal entries have been correctly recorded, including adjustments.

One quick test applicable to the game is adding up debit and credit journal entries (see 4 above).

Ending the Game (Week 52)

- Disburse 10,000 times the number appearing on the die.
- Pay semiannual expenses based on the closing loan portfolio. *Note:* If players do not have enough cash to pay the semiannual expenses, they must access their line of credit. However, they should not accrue interest for the full year; rather, assume that it is borrowed on the last day of the year and interest does not begin until the next day.
- Aggregate all accounts posting from the General Journal to General Ledger.
- Create a trial balance.
- Make year-end adjustments:

⇒ RECORD INTEREST REVENUE EARNED ON INVESTMENTS

For long-term investments, record interest earned for a full 52 weeks on the **closing** account balance. (*Note:* for simplicity's sake, we are ignoring the fact that some investments were made during the game and players have not had them on their books for the full year.)

For example:

Assume the closing account balance in the Investment account (#110) is \$7,000 and the interest rate on your investment is 8 percent. (*This rate was established at the beginning of the game and recorded on the opening Balance Sheet based on the risk level chosen and the roll of the die.*)

The calculation and journal entry to record interest accrued at year end for this example would be: [$\$7,000 \times 8\%$] = \$560 for the full year.

Wk #	Ref.	Account Title	Debit	Credit
52	135	Accounts Receivable & Other Assets	560	
52	420	Interest Earned on Investments		560

⇒ RECORD INTEREST EXPENSE ON DEBT

For long-term debt (both concessional and commercial) and short-term debt, record interest paid for **one year** calculated on **closing** account balances. Remember that each type of debt carries a different interest rate. (This rate was determined at the beginning of the game and recorded on the opening balance sheet.) *Note:* for simplicity's sake, we are ignoring the fact that some loans were taken out during the game and players have not had them on their books for the full year.

⇒ RECORD DEPRECIATION EXPENSE (straight-line @25 percent) calculated on the closing account balance of the gross fixed assets account (#150)

⇒ IMPAIRMENT LOSS ALLOWANCE so that the allowance equals 5 percent of gross loan portfolio

- Prepare the adjusted trial balance.
- Transfer balances to create both an Income Statement and a Balance Sheet.

Balancing Act**Adjusted Trial Balance**

Ref.	Account	Title	Debit	Credit
101	Cash and Due from Banks			
110	Trade Investments			
115	Net Loan Portfolio			
120	Gross Loan Portfolio			
125	Impairment Loss Allowance			
130	Interest Receivable on Loan Portfolio			
135	Accounts Receivable and Other Assets			
140	Other (Long-term) Investments			
145	Net Fixed Assets			
150	Gross Fixed Assets			
155	Accumulated Depreciation & Amortization			
201	Demand Deposits			
210	Short-term Deposits			
215	Short-term Borrowings			
220	Interest Payable on Funding Liabilities			
225	Accounts Payable & ST Liabilities			
230	Long-term Time Deposits			
235	Long-term Borrowings			
240	Other Long-term Liabilities			
301	Paid-in Capital			
305	Donated Equity			
310	Prior Years			
315	Donated Equity Current Year			
320	Retained Earnings			
325	Prior Years			
330	Retained Earnings Current Year			
335	Reserves			
340	Other Equity Accounts			
345	Adjustments to Equity			
400	Financial Revenue			
405	Financial Revenue from Loan Portfolio			

Ref.	Account	Title	Debit	Credit
410		Interest on Loan Portfolio		
415		Fees and Commissions on Loan Portfolio		
420		Financial Revenue from Investment		
425		Other Operating Revenue		
435		Other Nonoperating Revenue		
440		Donations		
500		Financial Expense		
505		Financial Expense on Funding Liabilities		
510		Interest and Fee Expense on Deposits		
515		Interest and Fee Expense on Borrowings		
520		Other Financial Expense		
525		Impairment Losses on Loans		
530		Provisions for Loan Impairment		
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		
569		Insurance		
570		Printing Materials Supplies		
571		Repair and Maintenance		
572		Travel and Transport		
573		Legal and Audit Fees		
574		Board Meeting Expenses		
575		Miscellaneous		

*Balancing Act***Statement of Income and Expenditure****FINANCIAL REVENUE**

Financial Revenue from Loan Portfolio

Interest on Loan Portfolio

Fees and Commissions on Loan Portfolio

Financial Revenue from Investments

Other Operating Revenue

Financial Expense

Financial Expense on Funding Liabilities

Interest and Fee Expense on Deposits

Interest and Fee Expense on Borrowings

Other Financial Expense

NET FINANCIAL INCOME

Impairment Losses on Loans

Provision for Loan Impairment

Value of Loans Recovered

Operating Expenses

Personal Expense

Administrative Expense

Depreciation and Amortization

Other Administrative Expenses

NET OPERATING INCOME

NET NONOPERATING INCOME/EXPENSE

Nonoperating Revenue

Nonoperating Expense

NET INCOME(Before Taxes and Donations)

Taxes

NET INCOME (After Taxes and Before Donations)

Donations

Donations for Loan Capital

Donations for Operating Expense

NET INCOME (After Taxes and Donations)

Balancing Act

Closing Balance Sheet

	2006	2007
ASSETS		
Cash and Due from Banks		
Trade Investments		
Net Loan Portfolio		
Gross Loan Portfolio		
Impairment Loss Allowance		
Interest Receivable on Loan Portfolio		
Accounts Receivable and Other Assets		
Other Investments		
Net Fixed Assets		
Gross Fixed Assets		
Accumulated Depreciation and Amortization		
TOTAL ASSETS		
LIABILITIES		
Demand Deposits		
Short-term Time Deposits		
Short-term Borrowings		
Interest Payable on Funding Liabilities		
Accounts Payable & Other Short-term Liabilities		
Long-term Time Deposits		
Long-term Borrowings		
Other Long-term Liabilities		
TOTAL LIABILITIES		
EQUITY		
Paid-in Capital		
Donated Equity		
Prior Years		
Current Year		
Retained Earnings		
Prior Years		
Current Year		
Reserves		
Other Equity Accounts		
Adjustments to Equity		
TOTAL EQUITY		
TOTAL LIABILITIES + EQUITY		

Balancing Act

Analytical Adjustments

	DESCRIPTION	2007
A1	Adjustment for Subsidized Cost of Funds	
	a. Average Short-term Borrowings	
	b. Average Long-term Borrowings	
	c. Average Long- and Short-term Borrowings	
	d. Market Rate, End of Period	
	e. Market Cost of Funds = c x d	
	f. Interest and Fee Expense on Borrowings	
	g. Adjustment for Subsidized Cost of Funds = e - f	
A2	Adjustment for In-kind Subsidies	
	a. Personnel Expense	
	b. Administrative Expense	
	c. Adjustment for In-kind Subsidies = a + b	
A3	Inflation Adjustment	
	a. Equity, Beginning of Period	
	b. Inflation Rate	
A3.1	c. Inflation Adjustment to Equity = (a x b)	
	d. Net Fixed Assets, Beginning of Period	
A3.2	e. Inflation Adjustment to Fixed Assets = (d x b)	
	f. Net Adjustment for Inflation = c - e	
A4	Adjustment for Impairment Loss Allowance	
	a. Adjusted Impairment Loss Allowance	
	b. Actual Impairment Loss Allowance	
	c. Adjustment to Impairment Loss Allowance = a - b >0	
A5	Adjustment for Write-off	
	PAR > 180 days Past Due	

Balancing Act

Performance Indicators

ASSET LIABILITY MANAGEMENT

DESCRIPTION	2007
Yield on Gross Portfolio Ratio = a/b	
a. Cash Received from Interest, Fees, and Commissions on Loan Portfolio	
b. Average Gross Loan Portfolio	
Yield on Gross Portfolio Ratio = a/b	
Portfolio to Assets Ratio	
a. Gross Loan Portfolio	
b. Assets	
Portfolio to Assets Ratio = a/b	
Cost of Fund Ratio	
a. Financial Expenses on Funding Liabilities	
b. Average Deposits	
c. Average Borrowings	
d. b + c	
Cost of Fund Ratio = a/d	
Adjusted Cost of Fund Ratio	
a. Adjusted Financial Expenses on Funding Liabilities	
b. Average Deposits	
c. Average Borrowings	
d. b + c	
Adjusted Cost of Fund Ratio = a/d	
Debt to Equity Ratio	
a. Liabilities	
b. Equity	
Debt to Equity Ratio = a/b	
Adjusted Debt to Equity Ratio	
a. Liabilities	
b. Adjusted Equity	
Adjusted Debt to Equity Ratio = a/b	

ASSET LIABILITY MANAGEMENT (continued)

DESCRIPTION	2007
Liquid Ratio	
a. Cash	
b. Trade Investments	
c. a + b	
d. Demand Deposits	
e. Short-term Deposits	
f. Short-term Borrowings	
g. Interest Payable on Funding Liabilities	
h. Account Payable and Other Short-term Liabilities	
i. d + e + f + g + h	
Liquid Ratio = c/i	

PROFITABILITY AND SUSTAINABILITY

DESCRIPTION	2007
Operational Self-Sufficiency Ratio	
a. Financial Revenue	
b. Financial Expense	
c. Impairment Losses on Loans	
d. Operating Expense	
e. b + c + d	
Operational Self-Sufficiency Ratio = a/e	
Financial Self-Sufficiency Ratio	
a. Financial Revenue	
b. Adjusted Financial Expense	
c. Adjusted Impairment Losses on Loans	
d. Adjusted Operating Expense	
e. b + c + d	
Financial Self-Sufficiency Ratio = a/e	
Return on Assets (ROA)	
a. Net Operating Income	
b. Taxes	
c. a - b	
d. Average Assets	
Return on Assets (ROA) = c/d	
Adjusted Return on Assets (AROA)	
a. Adjusted Net Operating Income	
b. Taxes	
c. a - b	
d. Adjusted Average Assets	
Adjusted Return on Assets (AROA) = c/d	
Return on Equity (ROE) = c/d	
a. Net Operating Income	
b. Taxes	
c. a - b	
d. Average Equity	
Return on Equity (ROE) = c/d	
Adjusted Return on Equity (AROE) = c/d	
a. Adjusted Net Operating Income	
b. Taxes	
c. a - b	
d. Adjusted Average Equity	
Adjusted Return on Equity (AROE) = c/d	

*Balancing Act***Direct Method – Statement of Cash Flows**

Term	2007
CASH FLOWS FROM OPERATING ACTIVITIES	
Cash Received from Interest, Fees, and Commissions on Loan Portfolio	
Cash Received from Interest on Investment	
Cash Received as Other Operating Revenue	
Value of Loans Repaid	
(Cash Paid for Financial Expenses on Funding Liabilities)	
(Cash Paid for Other Financial Expenses)	
(Cash Paid for Operating Expenses)	
(Cash Paid for Taxes)	
(Value of Loans Disbursed)	
Net (Purchase)/Sale of Trade Investments	
Deposits/(Withdrawals) from Clients	
Cash Received/(Paid) for Other Operating Assets & Liabilities	
NET CASH FROM OPERATING ACTIVITIES	
CASH FLOWS FROM INVESTING ACTIVITIES	
Net (Purchase)/Sale of Other Investments	
Net (Purchase)/Sale of Fixed Assets	
NET CASH FROM INVESTING ACTIVITIES	
CASH FLOW FROM FINANCING ACTIVITIES	
Cash Received/(Repaid) for Short- and Long-term Borrowings	
Issuance/(Repurchase) of Paid-in Capital	
(Dividends Paid)	
Donated Equity	
NET CASH FROM FINANCING ACTIVITIES	
Net Cash Received/(Paid) for Nonoperating Activities	
Net Change in Cash and Due from Banks	
Cash and Due from Banks at the Beginning of the Period	
Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	
Cash and Due from Banks at the End of the Period	

*Balancing Act***Indirect Method – Statement of Cash Flows**

Term	2007
CASH FLOWS FROM OPERATING ACTIVITIES	
Net Operating Income	
Depreciation and Amortization	
Impairment Losses on Loans	
(Cash Paid for Taxes)	
Value of Loans Repaid	
(Value of Loans Disbursed)	
(Increase)/Decrease in Trade Investments	
Increase/(Decrease) in Deposits	
(Increase)/Decrease in Receivables and Other Assets	
Increase/(Decrease) in Payables and Other Liabilities	
NET CASH FROM OPERATING ACTIVITIES	
CASH FLOWS FROM INVESTING ACTIVITIES	
(Increase)/Decrease in Other Investments	
(Increase)/Decrease in Book Value of Gross Fixed Assets	
NET CASH FROM INVESTING ACTIVITIES	
CASH FLOW FROM FINANCING ACTIVITIES	
Increase/(Decrease) in Short- and Long-term Borrowings	
Increase/(Decrease) in Paid-in Capital	
(Dividends Paid)	
Donated Equity	
NET CASH FROM FINANCING ACTIVITIES	
Net Cash Received/(Paid) for Nonoperating Activities	
Net Change in Cash and Due from Banks	
Cash and Due from Banks at the Beginning of the Period	
Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	
Cash and Due from Banks at the End of the Period	

SESSION 9: SUMMARY AND ACTION PLANNING

Session Summary

OBJECTIVES: By the end of the session participants will be able to:

- State the parts of the accounting cycle
- Trace a transaction from point of entry to financial statements
- Cite four key indicators for financial analysis

TIME: 1–2 hours

SUPPLIES: Flipchart
Markers
LED projector

PARTICIPANT MATERIALS

OVERHEADS: All overheads from the course should be available for use.

HANDOUTS: A9-H1 Action Plan
A9-H2 Where to Go for Additional Recommended Readings on Accounting

PREPARED FLIPCHARTS:
Directions for Summarizing
Directions for Action Plan

Session 9: Summary and Action Planning

COURSE SUMMARY

1. (3 minutes) Explain that providing a session summary would be contrary to the principle of active learning—participants will be responsible for summarizing the course themselves. (This strategy gives participants the opportunity to summarize what they have learned and to present their summary to others. It is a good way to get participants to recap the training on their own. You may substitute any summary activity of your choice as long as it maintains participatory learning principles and is sufficiently substantial to provide a solid “remembering” activity.)
2. (2 minutes) Divide the group randomly into subgroups of no more than five.
3. (5 minutes) Ask each subgroup to create its own summary of the session. Encourage the subgroups to create an outline, map, graph, or any other device that will enable them to communicate the summary to others. (Encourage participants to be creative—a skit, a rap song!) Invite participants to use any of the materials used or generated during the course (overheads, flipcharts, and so on.)

Use any one of these (or similar) questions to guide the participants:

- What were the major topics presented?
 - What were some of the key points raised in the course? On day 1? Day 2? Day 3? And so on.
 - What experiences did you have? What did you get out of them?
 - What Ideas and suggestions are you taking away from this course?
4. (30 minutes) The subgroups should discuss the course and develop a summary, then select someone to present the summary or think of a creative group presentation. Each presentation should be five minutes long.

PRESENTATIONS

5. (20 minutes) Have each group present its main points. Each should build on, not repeat, what the group before has said.
6. (5 minutes) Summarize, adding missed points and drawing conclusions.

ACTION PLANNING

7. (2 minutes) Tell participants that now it's time to build on what they have learned and talk about how they will apply these lessons to their work when they return to the office. Note that the best of intentions to act differently in the future can be abandoned easily when faced with the backlog of work facing them when they return.

8. (10 minutes) Pass out A9-H1. Ask participants (individually or by organization) to list two to three ideas and concepts they would like to apply to when back on the job. Then ask the group to predict and list obstacles they will have to overcome in applying what they have learned. Have them think about the circumstances that could lead to their first moment of faltering, a moment when they will revert to previously less effective ways of handling a situation or fail to follow through on their resolve to undertake a plan of action.
9. (3 minutes) Ask participants to form subgroups of two to four to discuss a specific back-to-the-job issue and obstacles. Groups can consist of participants who work for the same organization, or are in the same position or the same type of MFI.
10. (20 minutes) have participants discuss issues and obstacles briefly and (most important) come up with ideas to overcome the application and transfer problems that are expected. Give the group members sufficient time to resolve these issues.

Remind them that the application portion of the course is by far the most important part of training. If participants do not apply what they have learned then truly the goals of training cannot be achieved.

11. (15 minutes) Reconvene the large group and ask for volunteers to share their transfer problem and ideas for solution. Add as many suggestions as possible and try to instill confidence that participants will be able to overcome any negative or blocking scenario that may unfold.
12. (5–10 minutes) To sum up, revisit the original seminar goals and objectives on overheads A1-O1 and A1-O3 and ask whether participants feel the goals have been met. Then ask whether their expectations have been met (using flipcharts generated in session A1), and if not, which ones were not. Briefly discuss any issues that have arisen. Hand out A9-H2 and tell participants that these are additional resources on financial analysis and accounting.
13. (2 minutes) Thank participants for their work during this session and the entire course. Entertain any last urgent or unanswered questions. Bridge to the next session: Evaluation.

Handouts

Action Plan

FUNDAMENTALS OF ACCOUNTING FOR MICROFINANCE MANAGERS

A. I want to take the following actions upon my return to my MFI:

1.

2.

3.

4.

B. Obstacles that might prevent me from implementing the above are:

1.

2.

3.

4.

C. Actions to overcome anticipated implementation problems are:

1.

2.

3.

4.

Where to Go for Additional Recommended Readings on Accounting¹

Measuring Performance of Microfinance Institutions: A Framework of Reporting, Analysis and Monitoring

SEEP Network 2005

<http://www.seepnetwork.org>

Appraisal Guide for Microfinance Institutions

Washington, DC, USA: CGAP

- Technical Guide, March 2007 (2 volumes)
<http://www.cgap.org/p/site/c/template.rc/1.9.2972>
<http://www.cgap.org/p/site/c/template.rc/1.9.4394>
- Appraise Key Data Calculator
<http://www.cgap.org/p/site/c/template.rc/1.9.2968>

IAS (International Accounting Standards)

International Accounting Standards Board

<http://www.iasb.org>

IASPlus – News about International Financial Reporting

Powered by Deloitte

<http://www.iasplus.com>

Management Information Systems for Microfinance Institutions: A Handbook

Technical Tool Series No. 1

Waterfield, Charles; Ramsing, Nick

Washington, DC, USA: CGAP, 1998

<http://www.microfinancegateway.org/content/article/detail/1631>

External Audits of Microfinance Institutions: A Handbook

Technical Tool Series No. 3

Volume 1 and 2

Washington, DC, USA: CGAP, 1998

<http://www.cgap.org/p/site/c/template.rc/1.9.2999>
(vol 1)

<http://www.cgap.org/p/site/c/template.rc/1.9.2988>
(vol 2)

Cost Allocation For Multi-service Micro-finance Institutions

Occasional Paper No. 2, April 1998

Helms, Brigit S.

Washington, DC, USA: CGAP, 1998

<http://www.cgap.org/p/site/c/template.rc/1.9.2697>

Disclosure Guidelines for Financial Reporting by Microfinance Institutions

Washington, DC, USA: CGAP, 2001

<http://www.cgap.org/p/site/c/template.rc/1.9.2783>

Accounting for Dummies, 2nd edition

Tracy, John A.

IDG Books Worldwide, Inc., 2001,

ISBN: 0764553143

Microfinance Handbook: An Institutional and Financial Perspective

Ledgerwood, J.

Washington D.C., USA: SBP, World Bank, 1998,

ISBN: 0-8213-4306-8

http://www.wds.worldbank.org/pdf_content/0000949469903040625498/multi_page.pdf

Banking Services for the Poor: Managing for Financial Success: An Expanded and Revised Guidebook for Microfinance Institutions

Christen, R.P.

Cambridge, MA, USA: Accion International, 1997,

ISBN: 958-96092-0-1

¹ Please note these references are not in priority order

SESSION 10: COURSE EVALUATION AND CLOSURE

Session Summary

- OBJECTIVES:**
- To complete the training audit
 - To complete course evaluation forms
 - To issue certificates to participants
 - To officially close the workshop

TIME: 30 minutes (*Adjust time, depending on the circumstances.*)

SUPPLIES: LED projector or overhead projector } (*Optional background*)
Goals (A1-O1)
Certificates

PARTICIPANT MATERIALS

HANDOUTS: A10-H1 Training Audit
A10-H2 Accounting for Microfinance Institutions Course Evaluation

Session 10: Course Evaluation and Closure

SEMINAR EVALUATION

1. (3 minutes) Remind participants that the course has finished and it is sincerely hoped that they have met their goals. Say: To help trainers check how effective we were in training, we ask you to take five minutes to complete a quick training audit. Hand out A10-H1 and note that it is the same as the training needs audit at the beginning of the course—they should be encouraged by seeing how much better they can answer the questions now!
2. (20 minutes) Ask participants to evaluate the course. Encourage them to be objective in completing the evaluation form, since their input will be used to improve the course. Give out the course evaluation form (A10-H1) and ask them to complete it in the room. (Do not expect to receive them if participants are allowed to complete and return them later.)
3. (2 minutes) Collect the evaluation forms. Make a point not to look at any forms as they are collected—this often intimidates participants.

CONCLUDING REMARKS AND CERTIFICATES

4. (10 minutes) Have the representative of the host training institution make closing remarks. Issue certificates to the participants. Invite the training institution's representative to officially close the workshop, and once again thank the group for their participation.

Handouts

Training Audit

(Please use a pen.)

Name: _____ Organization: _____

Please mark your answers on this question sheet. If you are not reasonably sure of the answer please mark "I don't know" instead of guessing. Thank you—this will help the trainers.

1. Financial accounting for MFIs has to be different from "regular" accounting and cannot follow international accounting standards.

True or False (Circle one)

2. Which of the following statements describes a Balance Sheet?
Which of the following statements describes an Income Statement?

- a. Shows financial performance over a period of time _____
- b. Shows financial position at a certain point in time _____
- c. Both _____
- d. I don't know _____

3. Write in the correct order for the following steps in the Accounting Cycle:

- _____ Adjusted Trial Balance
- _____ Draft Financial Statements
- _____ Post to General Ledger
- _____ Closing Entries
- _____ Accounting Adjustments
- _____ General Journal
- _____ Trial Balance

4. Changing write-off policies could affect an MFI's profitability.

True or False (Circle one)

5. Identify which of the following are International Accounting Principles.

(Mark them Yes or No)

- _____ Accuracy
- _____ Prudence
- _____ Materiality
- _____ Transparency
- _____ Consistency
- _____ Matching

6. A balance sheet has three basic components: Assets, Liabilities, and Equity. Write in the letter of the following accounts next to one of these categories below. Just continue to next account if you don't know.

- | | |
|------------------------------|----------------------------------|
| a. Gross Loan Portfolio | f. Client Savings |
| b. Commercial Loans | g. Salary Expense |
| c. Impairment Loss Allowance | h. Provision for Loan Impairment |
| d. Investment Income | i. Grants |
| e. Buildings and Equipment | |

Assets _____

Liabilities _____

Equity _____

None of the above _____

7. Which of the following is the best measure of an MFI's profitability: _____

- a. Yield on portfolio
- b. Adjusted return on assets
- c. Repayment rate
- d. Income minus Expenses
- e. I don't know

8. To reflect the fair value of the portfolio, MFIs make entries to account for probable future loan losses. Such entries will affect: _____

- a. Balance Sheet
- b. Income (Profit and Loss) Statement
- c. Both of the above
- d. Neither of the above
- e. I don't know

9. Which two categories of accounts are affected by each of these transactions:
 – assets, liabilities, equity
 – revenues or expenses?

- a. Receive interest payment—
- b. Incur a liability—
- c. Receive a grant for next financial year's operations—
- d. Pay salaries—
- e. Write off a loan—

10. Please show the debits and credits for this transaction:

Receive cash of 55

For a principle payment of 50 and an interest payment of 5

Accounting for Microfinance Institutions Course Evaluation

(Please use a pen)

Please rate and comment on the following:

1 = Poor 2 = Fair 3 = Average 4 = Good 5 = Excellent

Overall Course
(not food or logistics)

1 2 3 4 5

Comments:

Length of Course

1 2 3 4

5

Comments:

Course Content

1 2 3 4

5

Comments:

Course Methods

1 2 3 4

5

Comments:

Course Materials

1 2 3 4

5

Comments:

The Balancing Act Game

1 2 3 4

5

Comments:

Trainer

1 2 3 4

5

Name _____

Comments:

Trainer

1 2 3 4

5

Name _____

Comments:

Course Organization

1 2 3 4

5

Comments:

Precourse Organization,
Communication, Advertising

1 2 3 4

5

Comments:

Facilities

1 2 3 4

5

Comments:

1. What I learned most from this course was:

2. What I still need to learn more about is:

3. I will apply the following in my organization:

4. I will have difficulty applying the following to my organization:

5. My overall feeling about the course is:

6. The course might have been more efficient if:

7. Any other comments (please use another page if necessary):

Case Study

Case Study

SAFE—“Our clients are SAFE with us”

SAFE was established in 2005 as a credit and savings organization. By July 2007, SAFE had 14,530 clients (of which 12,457 were active loan clients) and an outstanding loan portfolio of \$956,406. Client savings totaled \$595,517.

To serve the rapidly increasing number of clients, the number of SAFE’s staff had increased accordingly and by July 2007, SAFE had a total of 91 staff members (among them 65 loan officers).¹

Since its inception, SAFE has received approximately \$1.8 million from donors, including \$442,031 in the first half of 2007. However, management is seriously considering alternative sources of funding as the need for a variety of resources to fund its expansion plans looks imminent. Early in 2007, SAFE did raise paid-in capital in the amount of \$100,000. While there were no reserve requirements for deposit-taking MFIs yet, the SAFE board decided it would be wise to put half of this in reserves; it is currently developing its strategy for its capital. Commercial lending rates in 2007 averaged 26 percent per annum and the inflation rate was steady at 18 percent.

In February 2008, a new director was hired, responsible for the overall management of SAFE. One week after the new director arrived, she was asked to prepare a presentation to the board of directors of SAFE, highlighting its financial results over the past year. Specifically, she was asked to present:

- a Balance Sheet as at December 31, 2007
- an Income Statement for the 12-month period ended December 31, 2007, and
- a Cash Flow Statement

Unfortunately for the new director, SAFE’s finance manager had left about six months earlier and had not been replaced. Before leaving, she had prepared a semiannual Balance Sheet as at June 30, 2007, and a summary Income Statement for the period January 1–June 30, 2007. However, since her departure, proper accounting records had not been kept. Consequently, to develop year-end statements, the new director needed to record and summarize all the transactions in the last six months of 2007. By examining the bank statements and other records on hand, she was able to make a list of the transactions that occurred in the past six months. She also determined that no depreciation expense had been recorded and no interest accruals had been made for investments or debt for the year. In 2007, the average interest rate on short-term debt was 15 percent flat and the average interest rate SAFE earned on its investments was 10 percent flat. Interest is paid on client savings at 5 percent when a client leaves the organization or at year end. (While the director assumed that some clients had been due payments, the records indicated that none were paid.)

She began by listing transactions which occurred each month:

- Salaries and benefits \$32,000/month
- Travel and transport \$12,400/month
- Rent \$10,000/month
- Printing and materials \$ 4,700/month
- Repair and maintenance \$ 3,000/month

¹ SAFE also enjoys the services of a technical advisor provided free to SAFE by its donor. The advisor provides all technical backstopping to the head office and the branches. She is on contract with the donor for three years beginning January 1, 2005, and is paid directly by the donor at the rate of \$40,000 per year.

Case Study: SAFE—“Our clients are SAFE with us”

- Telephone \$ 3,000/month
- Courier and delivery \$ 1,000/month
- Utilities \$ 700/month
- Bank fees \$ 1,300/month

Next, she made a list of transactions by month:

Transactions – July, 2007

- July 1 Purchased a computer—paid \$4,000 in cash.
- July 3 Purchased motorcycles for use by credit officers—paid \$15,000: \$4,000 cash, and \$11,000 short-term credit.
- July 31 Collected savings of \$51,000
- July 31 Received loan payments of \$226,200, including \$174,000 principal and \$52,200 interest
- July 31 Disbursed 2,344 loans totaling \$290,000 with 30 percent flat annual interest on disbursed amount and a 2 percent up-front fee.

Transactions – August, 2007

- Aug 1 Incurred board meeting expenses of \$3,100, paid in cash
- Aug 7 Short-term deposit of \$10,000 matures—collected \$400 interest.
- Aug 9 Prepaid rent \$2,000 with cash
- Aug 31 Collected savings of \$57,000
- Aug 31 Received loan payments of \$222,300, including \$171,000 principal and \$51,300 interest
- Aug 31 Disbursed 2,509 loans totaling \$304,000 with 30 percent flat annual interest on disbursed amount and a 2 percent up-front fee.

Transactions – September 2007

- Sept 3 Paid down \$8,000 in short-term loans plus \$1,200 interest.
- Sept 6 Study tour—cost of \$5,000; paid \$1,500 cash, \$3,500 short-term credit.
- Sept 30 Collected savings of \$63,000
- Sept 30 Received loan payments of \$343,200, including \$264,000 principal and \$79,200 interest
- Sept 30 Disbursed 2,604 loans totaling \$341,000 with 30 percent flat annual interest on disbursed amount and a 2 percent up-front fee.
- Sept 30 Purchased a two-year term deposit \$40,000, interest at 7 percent flat per annum.

Transactions – October, 2007

- Oct 8 Received a \$25,000 donation for operations.
- Oct 10 Loan fund manager attended financial management training course—paid \$500 cash.
- Oct 31 Collected savings of \$61,000
- Oct 31 Received loan payments of \$330,200, including \$254,000 principal and \$76,200 interest
- Oct 31 Disbursed 2,734 loans totaling \$343,000 with 30 percent flat annual interest on disbursed amount and a 2 percent up-front fee.

Transactions – November, 2007

- Nov 4 Executive director attended conference and paid \$1,000 fee in cash.
- Nov 19 Paid \$700 insurance bill with cash.
- Nov 30 Collected savings of \$64,000
- Nov 30 Received loan payments of \$369,200, including \$284,000 principal and \$85,200 interest
- Nov 30 Disbursed 2,917 loans totaling \$374,000 with 30 percent flat annual interest on disbursed amount and a 2 percent up-front fee.

Transactions – December, 2007

- Dec 11 Promotional breakfast—paid \$775 cash for refreshments.
- Dec 31 Repaid a \$14,000 short-term loan plus \$2,000 interest.
- Dec 31 Collected savings of \$59,000
- Dec 31 Received loan payments of \$392,600, including \$302,000 principal and \$90,600 interest
- Dec 31 Disbursed 3,341 loans totaling \$401,000 with 30 percent flat annual interest on disbursed amount and a 2 percent up-front fee.
- Dec 31 Received donation of \$40,000

Finally, she made a list of adjusting entries to be made.

Adjusting Entries

- Make a provision for loan impairment to create an Impairment Loss Allowance equal to 2 percent of the gross loans outstanding (this was determined based on the quality of the outstanding portfolio).
- Record a depreciation expense (and increase the Accumulated Depreciation) of \$72,544 on existing assets and:
 - new computer 50 percent
 - new motorcycles 33.3 percent
- Record any accrued interest revenue on term deposits (record as other current assets); assume for simplicity that the end-of-year amount is the same for all year.
- Record any accrued interest expense on deposits and short-term liabilities (record as other short-term liabilities); assume amount at end-of-year was held all year—that is, ignore changes throughout the year.

Referring to the information given above and the summary Income Statement and Balance Sheet attached, use the following forms to develop a General Journal, General Ledger, Trial Balance, and the Financial Statements that the new director will need for her presentation.

SAFE INCOME STATEMENT

Ref.	Account Name	2005	2006	2007
I1	Financial Revenue	60,114	200,455	739,948
I2	Financial Revenue from Loan Portfolio	47,072	189,619	734,069
I3	Interest on Loan Portfolio	42,626	171,708	668,610
I4	Fees and Commissions on Loan Portfolio	4,446	17,911	65,459
I5	Financial Revenue from Investment	13,042	10,836	5,879
I6	Other Operating Revenue			
I7	Financial Expense	2,087	645	53,558
I8	Financial Expense on Funding Liabilities	2,087	645	53,558
I9	Interest and Fee Expense on Deposits			47,526
I10	Interest and Fee Expense on Borrowings	2,087	645	6,032
I11	Other Financial Expense			
I12	Net Financial Income	58,027	199,810	686,390
I13	Impairment Losses on Loans	-	-	31,208
I14	Provisions for Loan Impairment	-	-	31,208
I15	Value of Loans Recovered			
I16	Operating Expense	365,181	671,391	947,923
I17	Personnel Expense	145,288	288,145	389,940
I18	Administrative Expense	219,893	383,246	557,983
I19	Depreciation and Amortization Expense	36,437	63,916	79,544
I20	Other Administrative Expense	183,456	319,330	478,439
I21	Net Operating Income	(307,154)	(471,581)	(292,741)
I22	Net Nonoperating Income/(Expense)	-	-	-
I23	Nonoperating Revenue	-	-	-
I24	Nonoperating Expense			
I25	Net Income (Before Taxes and Donations)	(307,154)	(471,581)	(292,741)
I26	Taxes	-	-	
I27	Net Income (After Taxes and Before Donations)	(307,154)	(471,581)	(292,741)
I28	Donations	746,317	642,924	507,031
I29	Donations for Loan Capital	746,317	642,924	507,031
I30	Donations for Operating Expense	-	-	
I31	Net Income (After Taxes and Donations)	439,163	171,343	214,290

SAFE BALANCE SHEET

Ref.	Account Name	2005	2006	2007
	ASSETS			
B1	Cash and Due from Banks	267,439	302,067	215,686
B2	Trade Investments	17,000	47,319	38,270
B3	Net Loan Portfolio	201,470	617,263	1,529,198
B4	Gross Loan Portfolio	201,470	617,263	1,560,406
B5	Impairment Loss Allowance			31,208
B6	Interest Receivable on Loan Portfolio			
B7	Accounts Receivable and Other Assets			43,894
B8	Other Investments	18,219	28,283	40,000
B9	Net Fixed Assets	107,507	114,009	69,607
B10	Gross Fixed Assets	143,944	214,362	249,504
B11	Accumulated Depreciation and Amortization	36,437	100,353	179,897
B12	TOTAL ASSETS	611,635	1,108,941	1,936,655
	LIABILITIES			
B13	Demand Deposits	130,960	434,344	950,517
B14	Short-term Time Deposits			
B15	Short-term Borrowings	41,512	64,091	12,014
B16	Interest Payable on Funding Liabilities			49,328
B17	Accounts Payable & Other Short-term Liabilities			
B18	Long-term Time Deposits			
B19	Long-term Borrowings			
B20	Other Long-term Liabilities			
B21	TOTAL LIABILITIES	172,472	498,435	1,011,859
	EQUITY			
B22	Paid-in Capital*			50,000
B23	Donated Equity	746,317	1,389,241	1,896,272
B24	Prior Years		746,317	1,389,241
B25	Current Year	746,317	642,924	507,031
B26	Retained Earnings	(307,154)	(778,735)	(1,071,476)
B27	Prior Years		(307,154)	(778,735)
B28	Current Year	(307,154)	(471,581)	(292,741)
B29	Reserves			50,000
B30	Other Equity Accounts			
B31	Adjustments to Equity			
B32	TOTAL EQUITY	439,163	610,506	924,796
	TOTAL LIABILITIES + EQUITY	611,635	1,108,941	1,936,655

*Paid in Capital was 100,000; SAFE board allocated 50,000 to Reserves.