



**FINANCIAL ANALYSIS
FOR
MICROFINANCE INSTITUTIONS**

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Acknowledgments

CGAP would like to thank those who were instrumental in the development and design of the original “Financial Analysis for Microfinance Institutions” course and its update in 2008: Janis Sabetta, Brigit Helms, Jennifer Isern, Michael Goldberg, Ruth Goodwin-Groen, Lorna Grace, Patricia Mwangi, Brigida Octavio, Agata Szostek, MICRA, Indrajith Wijesiriwardana, Ann Wessling, Tiphaine Crenn, Djibril Mbengue, Corinne Riquet, and all CGAP training hubs and partners.

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.

CGAP also requests that all those who offer the “Financial Analysis” course use the following text in their marketing materials and course descriptions: “The Financial Analysis course is based on the materials developed by CGAP which are publicly available on <http://www.cgap.org>. CGAP is a leading

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.

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, FA3-O2 means that this is the second overhead of the third session in the Financial Analysis 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

In order to create a sustainable institution, MFI managers need to have the skills to analyze the financial health of their MFI. The Financial Analysis for Microfinance Institutions course provides participants with an understanding of the different ratios used by microfinance institutions, what they mean, and how they can be used to keep track of an institution's financial performance over time. The analysis is based on financial statements that reflect management needs for clear, organized financial information. Participants learn how to format financial statements for decision making, adjust for inflation and subsidies, measure portfolio quality, efficiency, and profitability, and choose strategies to reach sustainability.

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.

COURSE OUTLINE

Session 1: Welcome and Introduction

Session 2: Overview of Financial Statements and Other Managerial Reports

- The purpose and components of the three types of financial statements and a portfolio report and their importance
- Identifying relationships between each of the financial statements and between them and the portfolio report

Session 3: Accounting System

- Review of basic concepts of financial and management accounting
- The Chart of Accounts and its relationship to financial statements and analysis
- Tracing common financial transactions through chart of accounts to financial statements
- Identifying and accounting for non cash transactions

Session 4: Formatting Financial Statements

- Formatting income statements and balance sheets to fit the SEEP-recommended format
- Treating donor funds
- The importance of the cash flow statement

Session 5: Overview of Financial Analysis

- The reasons why one needs to analyze financial information
- Introduction to the eighteen SEEP ratios
- The importance of financial ratios for decision makers
- Strategies to overcome barriers preventing MFIs from getting good financial information

Session 6: Portfolio Quality

How to:

- Define and calculate portfolio-at-risk
- Calculate loan loss provision and reserves
- Assess the impact of loan loss on financial statements

Session 7: Analytical Adjustments

How to:

- Calculate adjusted operating expenses for an MFI
- Make adjustments for inflation
- Make adjustments for subsidized cost of funds
- Make adjustments to reflect in-kind donations
- Create adjusted financial statements

Session 8: Asset/Liability Management

- Define Asset/Liability Management
- Calculate the five recommended SEEP asset/liability management ratios
- Explain the significance of the ratios for an MFI

Session 9: Efficiency and Productivity

- Defining efficiency and productivity
- Examining types and components of efficiency and productivity ratios
- Calculating the SEEP efficiency and productivity ratios

Session 10: Sustainability and Profitability Analysis

- Defining sustainability and profitability
- Defining and computing profitability ratios, ROA, AROA, ROE, and AROE
- Defining and computing operational and financial self-sufficiency

Session 11: Putting It All Together

- Practicing how to calculate adjustments and ratios and the efficiency/productivity and sustainability/profitability ratios
- Use benchmarking to better understand ratios and MFI performances
- Practicing how to use all the ratios to make managerial decisions

Session 12: Action Plan, Audit, Evaluation, and Closure

Date of last substantive update: 2008

References for the Course

(updated in 2009)

KEY DOCUMENTS

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- World Council of Credit Unions. 2005. *International Credit Union Safety and Soundness Principles*. Madison, Wisc.: WOCCU. http://www.woccu.org/functions/view_document.php?id=SafetyOperGovPrinciples

ANALYTICAL ADJUSTMENTS

- MIX Macroeconomic data: <http://www.mixmarket.org/en/environment/environment.search.asp>

SESSION 1: WELCOME AND INTRODUCTION

Session Summary

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

- Know the other participants
- Establish their expectations
- State the training objectives
- Relate objectives to their own expectations

TIME: 96 minutes

SUPPLIES: Flipchart and markers, overhead projector
Index cards
Name tags and name tents
Prize(s)—folder, pen, key chain, and so on

TRAINER MATERIALS

FA1-M1 Precourse Skills Audit – Answers
FA1-M2 Suggested Duration of Sessions
FA1-M3 Sample Name Tents
FA1-M4 Summary of Main Messages

PARTICIPANT MATERIALS

OVERHEADS: FA1-O1 Goals
FA1-O2 Financial Analysis (*definition*)
FA1-O3 Sustainability
FA1-O4 Objectives
FA1-O5 I See, I Hear, I Do

HANDOUTS: FA1-H1 People Hunter
FA1-H2 Precourse Skills Audit
FA1-H3 Financial Analysis Goals and Objectives
FA1-H4 Organizational Information (*only if not returned with registration*)
FA1-H5 Measuring Performance of Microfinance Institutions: A Framework for Reporting, Analysis, and Monitoring; the SEEP Network and Alternative Credit Technologies, LLC (to be known as the Framework or FRAME). (*To be downloaded by trainers.*)
FA1-H6 Additional Resources: CGAP *Appraisal Guide for Microfinance Institutions* and companion *Resource Guide*

PREPARED FLIPCHARTS:

What we want to know about each other

Instructions for introductions

Welcome!

Blank sheet for posting, titled Questions/Clarifications

Financial Information →...→ Growth, Profitability, and Sustainability

Session 1: Welcome and Introduction

WELCOME

1. (4 minutes) Representative from the host or partner organization welcomes participants and opens workshop.
2. (4 minutes) Remarks from official guests.
3. (2 minutes) Introduction of and handover to trainers.

INTRODUCTION

4. (10 minutes) Open the session by making the following points to participants:

International best practice in microfinance around the world suggests good financial analysis, or FA, as it is often called, is the basis for successful and sustainable microfinance operations. Some would even say that without financial analysis your MFI will never achieve sustainability.

Say: The purpose of the course can be summed up in the two goals you see in the overhead (show FA1-O1, Goals):

- To master the tools needed to understand the financial position and the profitability and sustainability of your institution
- To use financial analysis to improve your institution's profitability and sustainability

Show FA1-O2, and read aloud the definition of financial analysis, noting that this is taken from FA1-H6, the Framework tool:

“Financial analysis is the art of interpreting financial statements and indicators— it requires managers to look at past performance, analyze it, and use the lessons learned to make today's decisions. Without analysis, creating financial statements is an accounting exercise.”—Framework, p. 97.

Tell the group that over the next four days they will be discussing financial analysis, which should provide their institutions with the tools needed to perform accurate and timely assessment of their operations and show them how to move toward financial sustainability. Show the book, *Measuring Performance of Microfinance Institutions: A Framework for Reporting, Analysis, and Monitoring*. Explain that it is the source for the preceding definition, and explain that the material in the course will be based primarily on its contents.

Ask: What do we mean by “profitability” and “sustainability”?

- Explain that profitability and sustainability reflect an MFI's ability to continue operating and grow in the future. Most reputable MFIs are striving for sustainability, regardless of their nonprofit or for-profit status; donors and investors alike look to fund sustainable institutions. Several factors can affect profitability and sustainability. Although startup or rapidly growing

institutions may have low profitability, they are building the basis for a sustainable future.

Show FA1-O3. Say: We can look at sustainability in terms of an equation:

- Sustainability is equal to coverage of financial expenses (for example, cost of funds and Inflation) plus loan loss and operating expenses (for example, personnel and administrative expenses), plus capitalization for growth from financial revenue.
- Explain that sustainability means ensuring that the institution will be able to serve clients in the future. Sustainability also means relying on commercially priced funds rather than donors for growth—this can include mobilization and use of savings, sale of shares to market-oriented investors, retained earnings from profitable operations, and gaining access to commercially priced loans.
- Tell the group that this definition of sustainability focuses on the financial, easily measurable aspects of sustainability—very appropriate for a financial analysis course! In this FA course they will not be addressing broader, institutional sustainability issues such as governance structure, management or staff development, and so forth. Note that nonfinancial institutional sustainability is, of course, critically important for the future of an MFI.

Explain that in this course, they will discuss reformatting typical balance sheets and income statements into a structure that forms an easy basis for analysis and allows for comparisons within and among institutions. Say: Please note that we will be talking only about reformatting financial statements for management purposes, not changing audited financial statements!

Tell the group that they will also learn about a number of ratios that analyze profitability and sustainability, efficiency and productivity, and asset liability management, as well as portfolio quality.

Case studies of MFIs will be the major learning tool used throughout the course. Of most importance, however, will be the application of these new techniques to their own institutions' financial statements.

Explain that you expect this course will assist their organizations to monitor all their costs and revenues, and to understand the relationships among organizational goals, costs, interest rates, and delinquency, as well as their impact on institutional *sustainability*.

Say: I hope that the financial statements you use for internal management decisions will be more transparent, and the ease of analysis will enable you to make more informed financial and operational decisions. Welcome, and let's get started.

ICE-BREAKING EXERCISE AND INTRODUCTIONS

5. (30 minutes) Ask participants what they would like to know about each other.

List the responses on a flipchart. The list should be narrowed down by the participants to three to five items, depending on the size of the group. (Less items for larger groups, more for smaller groups.) Try to ensure that the following responses are included: name, name of organization, nature of your job, time with job/organization, biggest challenge of job. Explain that they should not focus on expectations at this point, since later in the session there will be time dedicated specifically to sharing expectations.

Distribute FA1-H1 and tell participants that they are going to play an introduction game called People Hunter, based on the handout. (FA1-H1 may be used “as is,” or changed if more appropriate categories are relevant to the country of use.)

Explain that they will be “hunting,” or looking for, other people in the group who meet the criteria in each box of the handout game sheet. The exercise is designed to help them get to know each other a little better. Encourage participants to share their experiences. Add that for the group as a whole to benefit throughout all the sessions, they must all agree to participate actively. Ask: Do you all agree?

Tell group members that they have five minutes to circulate and find people who match the requirements of each box on the sheet. When they find a person who matches one of the boxes, they are to write that person’s name on the sheet in the appropriate box and move on to find someone else. A participant is only allowed to sign one box on any one sheet, even though he or she may meet the criteria of another box.

After five minutes, get the group’s attention. Tell participants that they will now have five minutes to interview the person with whom they are speaking. The interview should be based on the earlier list of responses of what they wanted to know about each other. They should then be prepared to introduce that person to the rest of the group.

Have each member of the group take a maximum of two minutes (Note: as trainer, you must keep time to introduce the person interviewed to the entire group.) After introductions are made, pass out name tags and name tents (FA1-M3) and ask participants to fill them out. Consider the option of giving a prize or congratulations to the person who is the best “hunter” by asking for a show of hands for how many people gathered 5 names, 10 names, and so on.

EXPECTATIONS

6. (7 minutes) Pass out index cards and ask participants to list their major expectations of the workshop. Collect the cards. (For detailed information on what to do with the cards, see Trainer Notes below.)

7. (15 minutes) Pass out FA1-H2, Precourse Skills Audit. Explain that this is a questionnaire about the course content to help you better tailor the course to their level. Ask participants to complete it as best they can, answering as they understand and use the concepts in their organizations. If they do not know an answer, they should just leave it blank. Tell them that they will have 15 minutes to complete the audit.

Make a point to allay any fears about "failing" or of results going to employers. Consider making a joke such as "I hope you don't all have the right answers—I would be out of a job!"

8. (5 minutes) Collect the audit. (See Trainer Notes for next steps in applying information from the audit to form groups.)

The trainers should have prepared a course schedule (see FA1-M2 as a guide) that can be distributed now (if it is not already in the participants' notebooks.) Post the "Expectation" flipcharts. Match expectations to the schedule, and discuss in which session expectations fit. At this point, be sure to also discuss those expectations that clearly will not be met (for example, liquidity and risk management) and refer participants to other courses and/or resources to help get those expectations met outside this course. (Note: This is an opportunity to promote related *Skills for Microfinance Managers* courses such as Accounting, Interest Rate Setting, Internal Control/External Audit, and so on.) Keep the flipcharts posted and tell participants that the remaining expectations will be revisited at the end of day four to see how well they have been met.

9. (5 minutes) Present FA1-O4 and relate it to the course goals, expectations, and schedule. Hand out FA1-H3. Consider asking a participant to volunteer to read an objective and then briefly point out where the objective is included in the schedule. (Reading as a training technique encourages participation and involvement; it also gives participants a chance to listen to another voice besides yours!)

10. (3 minutes) Explain the course methodology by telling participants that the course is highly participatory, based on proven adult education and learning techniques. It builds on what members of the group already know. Let them know that the course is not lecture-based, which they may find to be different from what they are used to, and participants may need reassurance that learning is going to take place!

For the flow of the sessions, for example, explain why "Statement" sessions 2 and 4 come before "Analysis," even though the course is called Financial Analysis. Be sure to tell them why it is necessary to review accounting briefly before proceeding to analysis. Say that these discussions and reviews are necessary to have the same starting point for standardizing different types of financial statements and for comparison. Remind people that statements come first, then calculation and interpretation of financial ratios.

Show the previously prepared flipchart that illustrates this flow. (Keep this chart posted throughout workshop on a side wall. Tell the group that sometimes this is lightheartedly referred to as the “mantra”!)

Financial Information → Financial Formatting → Financial Analysis → Financial Management → GROWTH, PROFITABILITY and SUSTAINABILITY

COURSE RULES AND COMMENTS

11. (3 minutes) Present the “rules” to the group (with a summary on a flipchart for the wall entitled “Don’t Forget!”).

Tell them that all questions are good questions! There are no stupid questions. The only stupid question is the one that goes unasked.

Stress that 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.

Point out the posted flipchart titled “Questions/Clarifications.” Suggest that as participants have questions during the course, they should write them there and you will try to answer them as the course progresses. (Keep the flipchart posted for participants to record questions throughout the workshop.)

Appoint stretch monitors if applicable.

Last but not least, tell them to HAVE FUN!!!

Review logistical arrangements. (For example, break times, where facilities are, who is in charge of logistics, ticket confirmations, and so on.) Distribute and collect handout FA1-H4, Organization Information, if not previously completed, and if desired (optional).

This information can be used later on in the session on ratios. It is also used to collect data for the trainers to reference during the course, to learn about participants and to know more about the level of the MFIs in the country. It is also good baseline data to have on an MFI when impact evaluations are conducted.

12. (3 minutes) Post overhead FA1-O5 with quote. Explain the quote in terms of the course philosophy and methodologies. Participants will be asked to DO many exercises because we feel that is the best way to learn.
13. (2 minutes) Distribute copies of the SEEP Framework (see FA1-H5) for instructions on downloading. DO NOT distribute FA1-H5 unless you expect the participants to have to download the SEEP Framework on their own. Explain once again that the formats and ratios presented in this course are from this guide. During the course we may refer to it as the SEEP Framework or the Frame. Show a copy of the *CGAP Appraisal Guide for Microfinance Institutions* and the companion *Resource Guide* and explain that there is some additional information in the CGAP books on the ratios and their use (see FA1-H6 for instructions for downloading. Again, do not distribute FA1-H6).

14. (3 minutes) Close the session; Take any questions, then bridge to next session by saying, “Now we will begin by reviewing financial statements.”
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Trainer Notes

- For the “Expectations” portion of the session, the trainer should review cards or responses while participants are taking the precourse skills audit (step 7). List points from the expectations on two separate flipcharts. On one flipchart, put the most common expectations and those most likely to be met. You do not need to list all at this point, but you should try to group expectations into main categories that reflect general ideas. On the other flipchart, list the most exceptional expectations or those least likely to be met. It is important to let participants know which expectations will not be covered in the course. Both flipcharts will be reviewed in step 8.
 - Precourse skills audit: The audit will be used to help select/balance small groups, and also to help participants to assess how well their understanding of key topics has changed during the four days of the workshop. As soon as possible (by the next break), you must categorize and grade participants and designate groups of four to six people who have different levels of knowledge and ability. You must also ensure that participants from the same organization are not in the same groups. It may also be useful to have a mix of participants from different countries. Finally, you should prepare and post a flipchart with group numbers one through five or six, and the names of group members.
 - Important! Due to the nature of this course it may be helpful to introduce the “stretch monitor.” This concept allows participants input into the pace of the program and enables them to set short breaks. At the end of step 11, Course Rules and Comments, tell the participants that they will be responsible for their not getting overtaxed during the workshop. Ask for two to three volunteers to take on this responsibility—or you can make the whole group 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 the same as the stretch monitors. Also tell the group that even you, as trainer, don’t have the power to override the stretch monitors and that you have to remain silent while the group performs its exercise. Make sure you prompt one of the volunteers to stretch shortly into the session so that everyone can see what happens.
 - When introducing FA1-H5 and FA1-H6, 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 on) 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.
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 in the list of references on page ix.
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Precourse Skills Audit – Answers

1. Which of the following statements describes a Balance Sheet?
 - 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.

2. Please circle the action or actions for improving efficiency *indicators*:
 - a. Increase loan portfolio outstanding
 - b. Reduce staff salaries
 - c. Reduce other administrative costs
 - d. All of the above**
 - e. I don't know.

3. 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.

4. Which of the following is, or are, meaningful measures of portfolio-at-risk?

I	II
<u>Amount of late payments</u>	<u>Outstanding amount of loans with one or more payments late</u>
Gross loan portfolio	Gross loan portfolio

 - a. Both of the above
 - b. Neither of the above
 - c. Only I
 - d. Only II**
 - e. I don't know.

5. A balance sheet is comprised of three basic components: Assets, Liabilities, and Equity. On which part of the balance sheet would you find each of the items below? Please mark A for Assets; L for Liabilities; E for Equity or N for none of these.

a. Investment income	Assets: c, e
b. Salary expense	Liabilities: d, f
c. Loan portfolio	Equity: none
d. Deferred income	None of the above: a, b
e. Buildings and equipment	
f. Client savings	

6. To reflect the fair value of the portfolio, MFIs account for probable future impairment losses on loans in their financial records. Circle the financial statement(s), if any that will be affected by such entries:
 - a. Balance Sheet
 - b. Income (Profit and Loss) Statement
 - c. Both of the above**
 - d. Neither of the above
 - e. I don't know.

7. Inflation has an effect on the equity of an MFI. Is this statement, true or false?

True
 False
 Don't know

Suggested Duration of Sessions

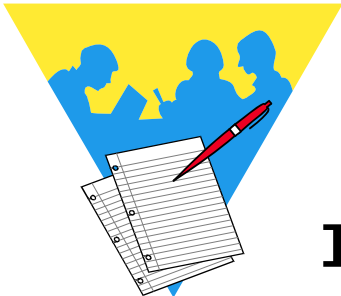
(To be adjusted based on the trainer's knowledge of participants and market)

FINANCIAL ANALYSIS COURSE


	<i>Minutes</i>	
	<i>Min</i>	<i>Max</i>
1 Welcome and Introduction	96	96
2 Overview of Financial Statements and Other Managerial Reports	77	84
3 Accounting System	40	40
4 Formatting Financial Statements	172	267
5 Overview of Financial Analysis	49	51
6 Portfolio Quality	207	229
7 Analytical Adjustments	205	244
8 Asset/Liability Management	122	137
9 Efficiency and Productivity	175	205
10 Sustainability and Profitability Analysis	229	239
11 Putting It All Together	390	395
12 Action Plan, Audit, Evaluation, and Closure	74	74
Total minutes	1,836	2,061
Total hours (<i>divide by 60</i>)	30.6	34.35
Total 6-hour days	5.1	5.73
Total 6.5-hour days	4.71	5.28

Sample Name Tents

participated
time
comes
agoes
away



I hear, I forget
I see, I remember
I do, I understand



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.

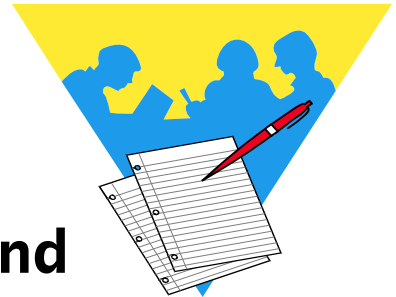
Participant Needs Assessment



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



Summary of Main Messages

(The main concepts participants need to take away, in addition to the session objectives.)

SESSION	MAIN MESSAGES
1. Introduction	<ul style="list-style-type: none"> ⇒ Sustainability is distinct from self-sufficiency. ⇒ Financial analysis helps an MFI to improve profitability and sustainability (mantra). ⇒ How the course is structured so we learn how to do financial analysis ⇒ Comfort with experiential methodology
2. Overview of Financial Statement	<ul style="list-style-type: none"> ⇒ Financial analysis requires organized financial information. ⇒ Financial statements, portfolio reports, and other nonfinancial data reports can tell the sustainability story. ⇒ SEEP-format financial statement (FS) components are not different from host country's FS components. ⇒ SEEP formats are consistent with International Accounting Standards (IAS). ⇒ SEEP formats are management reports; they are not meant to replace audited financial statements (see FS guidelines). ⇒ SEEP formats are easier for MFI financial analysis and to progress to profitability and sustainability. ⇒ SEEP formats are just one example of best practices in microfinance. ⇒ An important aspect of the SEEP formats is the separation of grant income on the I/S from operating income, and donor equity on the Balance Sheet (B/S) from retained earnings or current year income.
3. Accounting System	<ul style="list-style-type: none"> ⇒ Chart of accounts is the foundation for profitability and sustainability (mantra). ⇒ The whole accounting system builds from the chart of accounts. ⇒ All MFIs will not use the exact same chart of accounts. ⇒ Difference between financial and managerial accounting—this course is based on financial accounting. ⇒ How accounting transactions affect the Income Statement (I/S) and B/S
4. Formatting the Financial Statement	<ul style="list-style-type: none"> ⇒ Reinforce main messages of session 2. ⇒ Best-practice MFI financial statement formats are essential for good, meaningful financial analysis and monitoring and are in accordance with IFRS. ⇒ Cash Flow Statement is important for operations and understanding profitability. ⇒ Separating donor funds from earned income is necessary to understand profitability and sustainability.

SESSION	MAIN MESSAGES
<p>5. Overview of Financial Analysis</p>	<ul style="list-style-type: none"> ⇒ Financial analysis is an investment that will give a future return. ⇒ No one ratio or indicator tells it all. ⇒ These 18 ratios/indicators cover the main points that affect profitability and sustainability. ⇒ Each ratio can be defined directly from the financial statements. ⇒ Most ratios can be calculated using the adjusted financial statements. ⇒ There are many other ratios that are also very useful. ⇒ Ratio analysis is most useful when consistently tracked over time. ⇒ Financial analysis measures financial performance, not other goals, but it can help indirectly. ⇒ Ratios enable us to compare different MFIs' performance.
<p>6. Portfolio Quality</p>	<ul style="list-style-type: none"> ⇒ The loan portfolio is the major asset generating MFI income. ⇒ High portfolio quality and on-time loan review generate more income. ⇒ For all the ratios measuring loan portfolio quality, ask what is in the numerator and denominator. ⇒ Only those with portfolio in the ratio measure its quality. ⇒ Portfolio-at-risk (PAR) is the best ratio for measuring quality of the portfolio. ⇒ Arrears rate overestimates portfolio quality. ⇒ Aging of the portfolio allows risk analysis. ⇒ PAR has limitations (rapid growth, write-offs, rescheduling, and village banking). ⇒ MFIs must have an impairment loss allowance (ILA) and provision for loan impairment (PLI) for accurate financial statements. ⇒ Establish ILA based on historical portfolio performance, but also on that which also reflects current portfolio performance. ⇒ PLI is an expense and affects sustainability, but is necessary to reflect the risk of holding a loan portfolio. ⇒ MFIs should have a write-off policy that is documented, and approved by the management and the board of the MFI.
<p>7. Analytical Adjustments</p>	<ul style="list-style-type: none"> ⇒ Analytical adjustments for subsidized cost of funds, in-kind subsidy, inflation, and portfolio-at-risk are needed to reflect the true performance of MFIs and enable benchmarking across a wide range of institutions. ⇒ Analytical adjustments are not adjustments to audited financial statements. They are used for management review to enhance transparency of financial information. ⇒ Analytical adjustments increase costs and reduce sustainability prospects, but present a more accurate financial picture. ⇒ If an adjustment calculation produces a negative number, the adjustment is not applied.

SESSION	MAIN MESSAGES
8. Asset/Liability Management	<ul style="list-style-type: none"> ⇒ Process of planning, monitoring, and controlling the volumes, maturities, rates, and yields of assets and liabilities ⇒ The MFI uses funds to create assets that generate more revenues than the cost of funds. ⇒ The MFI must make sure that it has sufficient funds available (liquid) to meet any short-term obligations. ⇒ The MFI should seek to borrow funds to increase “productive” assets and thereby increase revenues and net profit.
9. Profitability and Sustainability	<ul style="list-style-type: none"> ⇒ Profitability and sustainability ratios reflect the MFI’s ability to continue operating and grow in the future. ⇒ Self-sufficiency is just the first step toward sustainability. ⇒ Sustainability is profitability with growth. ⇒ At a minimum, use adjusted return on assets (AROA) to track profitability. ⇒ Return on equity (ROE) is the most important profitability ratio. ⇒ Different stakeholders will focus on different profitability ratios. ⇒ Decisions on asset allocation affect profitability. ⇒ Improve profitability by lowering costs and increasing yield. ⇒ Sustainability can be negatively impacted by the MFI focusing solely on efficiency, portfolio quality, or profitability, but it can also be negatively impacted if any one of these areas is excluded.
10. Efficiency and Productivity	<ul style="list-style-type: none"> ⇒ Seven efficiency ratios cover the minimum needed to analyze efficiency. ⇒ Many other ratios are available—use others as you want or need. ⇒ For those ratios that are annual concepts—for example, operating efficiency—partial-year ratios need to be annualized. ⇒ Improve efficiency through lowering costs and increasing productivity. ⇒ Tradeoffs between efficiency, growth, profitability, and sustainability
11. Pulling It All Together	<ul style="list-style-type: none"> ⇒ Financial performance is a matter of the MFI’s choice! ⇒ Pace of progress towards sustainability is a result of MFI management decisions. ⇒ Rigorous financial analysis addresses all the interrelated factors that determine an MFI’s performance. ⇒ Good management decisions require comprehensive financial analysis. ⇒ Comparison with MFI industry benchmarks helps MFIs assess relative performance under similar circumstances.

Overheads

THE COMPLETE SET OF OVERHEADS IS IN A SEPARATE POWERPOINT FILE ENTITLED "CGAP FINANCIAL ANALYSIS OVERHEADS."

FA1-01

Goals



- To master the tools needed to understand the financial position and determine the **PROFITABILITY** and **SUSTAINABILITY** of your institution
- To use financial analysis to improve your institution's **PROFITABILITY** and **SUSTAINABILITY**

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FA1-02

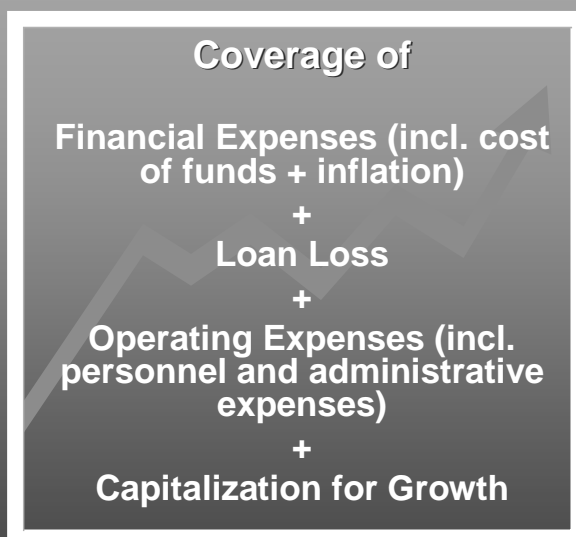


...is the art of interpreting financial statements and indicators—it requires managers to look at past performance, analyze it, and use the lessons learned to make today's decisions.

Source: SEEP Framework 2005, p. 97.
© CGAP/World Bank, 2009



Sustainability Equals



from Financial Revenue



Objectives

- To identify components, purpose, relationships, and importance of main financial statements
- To format income statements and balance sheets in such a way that the effect of donor funds can be easily identified
- To analyze financial statements to monitor profitability and sustainability, asset/liability management, portfolio quality, efficiency, and productivity
- To adjust costs for inflation, subsidised cost of funds and in-kind donations/subsidies, impairment loss allowances, and write-offs
- To identify critical factors for moving toward financial profitability and sustainability

FA1-05



I hear and I forget



I see and I remember



I do and I understand

Handouts

PEOPLE HUNTER

You are to find someone who has or did the following. When found, write that person's name in the box. A participant's name may appear only once on your sheet.

Has the same birth month as you	Has worked at their institution for two years or more
Has the same name as yours	Comes from the same place as you
Graduated from school the same year as you	Has the same number of children as you
Has the same ratio of clients per loan officer as you	Can define sustainability
Is not married	Knows when your MFI started operations
Has the same hobby as you do	Has a private business in addition to his or her job
Has been to the United States	Is the same height as you

Precourse Skills 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. Which of the following statements describes a Balance Sheet?
 - 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.

2. Please circle the action or actions for improving efficiency indicators:
 - a. Increase loan portfolio outstanding
 - b. Reduce staff salaries
 - c. Reduce other administrative costs
 - d. All of the above
 - e. I don't know.

3. 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.

4. Which of the following is, or are, meaningful measures of portfolio-at-risk?

I	II
<u>Amount of Late Payments</u>	<u>Outstanding Amount of Loans with One or More Payments Late</u>
Gross Loan Portfolio	Gross Loan Portfolio

- a. Both of the above
- b. Neither of the above
- c. Only I
- d. Only II
- e. I don't know.

5. A balance sheet is comprised of three basic components: Assets, Liabilities, and Equity. On which part of the balance sheet would you find each of the items below? Please mark A for Assets, L for Liabilities, E for Equity, or N for none of these.

- | | | |
|----------------------------|-------------------|-------|
| a. Investment income | Assets | _____ |
| b. Salary expense | Liabilities | _____ |
| c. Loan portfolio | Equity | _____ |
| d. Deferred income | None of the above | _____ |
| e. Buildings and equipment | | |
| f. Client savings | | |

6. To reflect the fair value of the portfolio, MFIs account for probable future impairment losses on loans in their financial records. Circle the financial statement(s), if any, that will be affected by such entries:

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

7. Inflation has an effect on the equity of an MFI. Is this statement true or false?

True False Don't know (Circle one)



Financial Analysis

Goals

- ✓ To master the tools needed to understand the financial position and determine the **PROFITABILITY** and **SUSTAINABILITY** of your institution
- ✓ To use financial analysis to improve your institution's **PROFITABILITY** and **SUSTAINABILITY**.

Objectives

- ✓ To identify components, purpose, relationships, and importance of main financial statements
- ✓ To format income statements and balance sheets in such a way that the effect of donor funds can be easily identified
- ✓ To analyze financial statements to monitor profitability and sustainability, asset/liability management, portfolio quality, efficiency, and productivity
- ✓ To adjust costs for inflation, subsidized cost of funds, in-kind subsidies, inflation, impairment loss allowances, and write-offs
- ✓ To identify critical factors for moving toward financial profitability and sustainability

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
------	--------------	--------

Describe your savings products. Withdrawal frequency, minimum balances, interest, and so on.

Describe your financing structure. For example: Do you have commercial loans? Equity investors?

What management reports are produced by your organization? And how often?

Report

Frequency

What type of analysis is conducted in the organization? And how often?

Ratio/financial indicator

Frequency

What results from the analysis? Who takes action?

**Measuring Performance of Microfinance Institutions: A
Framework for Reporting, Analysis and Monitoring; the
SEEP Network and Alternative Credit Technologies, LLC
(to be known as the Framework or FRAME)**

To be downloaded by trainers from <http://www.seepnetwork.org> and distributed to participants.

Additional Resources

CGAP, *Appraisal Guide for Microfinance Institutions*, March 2008

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

CGAP, *Appraisal Guide for Microfinance Institutions: Resource Guide*, March 2008

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

SESSION 2: OVERVIEW OF FINANCIAL STATEMENTS AND OTHER MANAGERIAL REPORTS

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, a portfolio report, and other nonfinancial data reports
- State the importance of these documents for financial analysis and assessing institutional performance
- Identify relationships between each of the financial statements and between them and the portfolio report

TIME: 77–84 minutes

SUPPLIES: Flipchart and markers
LED projector or overhead projector

TRAINER MATERIALS

FA2-M1 Introductory Passage
FA2-M2 Various Financial Statements (*cut in half*)

PARTICIPANT MATERIALS

OVERHEADS: FA2-O1 Information (*quote*)
FA2-O2 SEEP Income Statement
FA2-O3 Sample Balance Sheet
FA2-O4 SEEP Balance Sheet
FA2-O5 SEEP Direct Cash Flow Statement
FA2-O6 SEEP Indirect Cash Flow Statement
FA2-O7 SEEP Portfolio Report
FA2-O8 SEEP Nonfinancial Data Report
FA2-O9 Relationship Between Statements

FA2-O10 Data Source Summary

Optional

HANDOUTS: FA2-H1 Discussion Questions
FA2-H2 Technical Notes – Financial Statements and Managerial Reports
FA2-H3 How Financial Statements Are Linked

PREPARED FLIPCHART:
Prepared Questions

Session 2: Overview of Financial Statements and Other Managerial Reports

INTRODUCTION

1. (3 minutes) Greet the group and ask participants to relax (close their eyes) and imagine the scene. Begin to read FA2-M1, Introductory Passage, “In the credit department....”). The purpose is to merely set the atmosphere for the session and to focus the participants’ attention. Think of this as a light-hearted way to begin!
2. (5 minutes) Ask for reactions. Can they relate to the scenario? What are the underlying problems facing this MFI? Possible answers might include confusion, staffing issues, unclear policies, weak financial capacity, unclear systems, no liquidity management, and so forth.
3. (5 minutes) Then ask participants to brainstorm: What can be done to overcome such situations? Explain that brainstorming means throwing out ideas with no evaluation; nothing is wrong or right—it’s just to get ideas out.

Responses may include new staff, training, policies, procedures, information, and financial systems. Focus the group on information and how it is the basis of financial analysis and better management.

4. (2 minutes) Show FA2-O1, Information, and relate this to the scenario and to the course. Keep things lighthearted and fun! Tell participants that this course is about getting the information—specifically financial information—needed to make informed decisions for their institutions. In this course they will look at how to analyze that information to prevent situations like those they just heard about from occurring. The goal is to have good information to make good management decisions for the future growth and sustainability of their MFIs.
5. (1 minute) Begin the process by introducing and reviewing some basic accounting and financial concepts. Ask participants with experience please bear with this, and invite them to take a leadership role in this exercise to help those less familiar with financial statements. Say: We hope you will see financial statements in a fresh perspective. We look forward to all of you helping each other.

FAMILIARIZATION WITH TYPICAL AND MFI FINANCIAL REPORTS

6. (3 minutes) Tell the group that they will participate in an exercise to review the purpose, components, and relationship among financial statements prepared for internal management purposes. Explain that they will each be given half of a financial statement or report and will have to find other group members who hold the other half. People with the same type of report or statement will then form small groups. (Ensure the groups have a place to sit when the time comes.) Tell them that if there is more than one type of their financial statement, they should just make sure they have a match by print type. Then explain that groups will

have 10 minutes to prepare a three-minute presentation that answers the following questions about their statement or report, Refer to the following questions already written on a flipchart:

- What is the name and definition of your statement/report?
 - How and when it is prepared?
 - What are its relationships to other financial statements or reports?
7. (10–15 minutes) Hand out statements cut in half vertically, using the various financial statements in FA2-M2. (You must make sure you have the right number of halves to match the number and size of groups desired, and that those halves are mixed when being handed out, to ensure that participants seated next to each other are not in the same group.)
 8. (3–5 minutes) Ask participants to get up and walk around to find people who have the other half of the statement they are holding. The activity should produce small groups, one group for each of the financial statements: SEEP Income Statement (I/S), typical Balance Sheet (B/S), SEEP Balance Sheet, SEEP Direct Cash Flow Statement, SEEP Indirect Cash Flow Statement, SEEP Portfolio Report, and/or the good local MFI (if possible) Portfolio Report example, and SEEP Nonfinancial Data Report (depending on the number of participants).
 9. (10 minutes) Once groups are formed, tell them to quickly sit in the assigned areas. Give each group FA2-H1, Discussion Questions. (These are the same as those previously written on the flipchart, but since groups may move around, the flipchart may not be visible.) Tell the group to prepare answers to the questions for a brief presentation to the entire group. Be prepared to work with the groups to ensure that they understand the questions and can give a good presentation.

PRESENTATIONS

10. (20 minutes) Allow three minutes for each group to present. Call up groups in order: B/S, I/S, and so on. As a particular statement or report is being presented, show the relevant statement on the overhead (FA2-O2 through FA2-O8) for the large group to see, since participants will only have seen the statement for their own small group.

Summarize and add any notable key points that have been omitted and show FA2-O9 to highlight the relationships among the statements. Hand out FA2-H3.

Be sure to note at this point in the discussion that these formats for financial and other statements are NOT the only correct way to format statements for internal MFI management purposes; they are only one way. These formats are suggested as per the Framework document discussed in session 1.

Explain that common standards are needed and recommended to allow for more transparency in tracking, comparing, and reporting. The purpose of the Framework is to provide microfinance practitioners with a means to develop financial statements and reports so that those statements and reports can be

used for meaningful analysis and monitoring and are in accordance with international financial reporting standards (IFRS). These should assist MFI managers in developing a consistent performance monitoring system, based on international standards, that can assist managers in making decisions, informing boards of directors, and reporting to donors, investors, and other interested parties.

SEEP B/S EXERCISE

11. (10 minutes) Show how a typical local format of a B/S fits into the SEEP format by using materials and flipcharts. The goal of the exercise is to make participants understand that the SEEP-format Balance Sheet has exactly the same information as their own—it is just structured differently to aid in financial analysis.

Place components of the host country Balance Sheet on a flipchart. Write components on separate pieces of paper and tape in place.

On another flipchart, write the outline of the SEEP Balance Sheet. Ask participants how to move components from one format to another. Take components off the typical B/S one by one and place them in the proper place on the SEEP B/S, leaving “net current assets” and “financed by.” (Consider having a volunteer participant do this.) Make the point that even though the formats are different, the components are the same. Remind participants of the Balance Sheet balancing: $\text{Assets} = \text{Liabilities} + \text{Equity}$.

Tell the group that CGAP finds this format the most useful for internal MFI management because it is easier to undertake ratio analysis from this format and it also more obviously shows the full amount of donor funds. Make sure they understand that this does not mean that their own internal management formats are not useful—they merely have a different purpose.

Take the time to emphasize that CGAP is NOT trying to change the way participants structure audited accounts or keep records for tax purposes. Explain that there are often legal requirements for audited financial statements, as well as international and national accounting policies that must be followed. MFIs must comply with such requirements. However, for internal financial analysis purposes, MFI managers need a format that lends itself to better and more accurate analysis of financial information. This SEEP format is now the standard internationally, based on years of work among MFIs, networks, and experts to reach consensus on measuring MFIs' performance, thus making it possible to compare their performance. The industry continues to progress, however, so these and the other formats may evolve and change over time.

Remind them that this structure is the basis for the rest of the Balance Sheets in the course. It provides a common understanding of the basic elements of every MFI, so they can both analyze their own financial performance and compare their institution with other MFIs in the region.

CONCLUSION

12. (5 minutes) Summarize the session by saying that an organization needs all of the statements and reports together to support good financial analysis.

Optional: If time, present overhead FA2-O10, Data Source Summary, to show how various inputs from the MFI's systems provide the data that create the financial statements that they will consider in this course. Provide a very brief comment on the purpose of each data source and point out those that will be revisited during the course (such as chart of accounts and financial statements, the portfolio management report, and the nonfinancial data report).

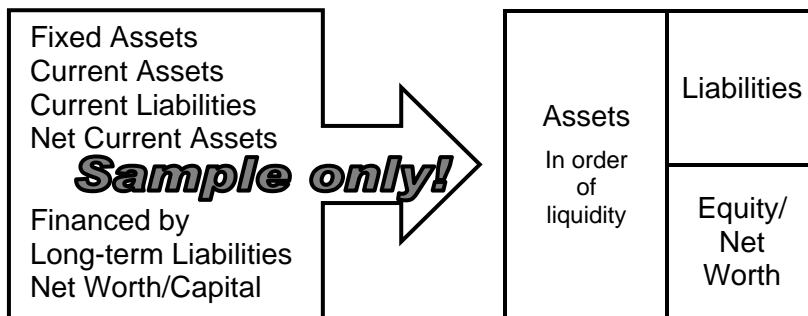
Explain to the group that, using this input, they can analyze their financial statements and calculate the financial ratios used to analyze the performance of their MFIs. While always important, financial analysis is particularly critical if their MFIs are in fast-growth stages and/or beginning to consider sources of funding other than the usual donors.

Finish by telling participants that this course will look at a number of ratios in detail that will enable monitoring of institutional progress with respect to profitability and sustainability, efficiency and productivity, and asset liability management and portfolio quality. Bridge to the next session by telling them that before they move on to the ratios, they will first be reviewing some basic accounting concepts and then looking at each statement in more detail.

Trainer Notes

- For step 10 summary to class: It is important to ensure that participants get the right answer, so the trainer should refer to FA2-H2, Technical Notes. **Add points if necessary.**
- For step 11, note that East Africa is the sample shown below, but this format should not be followed elsewhere. Trainers must use a typical local format Balance Sheet.

SAMPLE ELEMENTS OF A BALANCE SHEET



Introductory Passage

In the credit department, several loan officers are sifting through their account registers to see which clients have paid and which haven't.

Two other loan officers are meeting with clients. One client is complaining that she paid her loan off weeks ago and is demanding to know why her account has not been credited. The second client is complaining that even though his loan has been approved, he now has had to wait more than three weeks for the contract and paperwork to be prepared.

In the accounting department, stacks of paper are everywhere. Some junior staff are working on reconciling savings account balances with the general ledger. The senior accounting staff are working to reconcile bank accounts from months ago and trying to prepare a trial balance for the upcoming board meeting—a task that unfortunately will not be completed in time.

In the executive director's office, the senior managers are holding their weekly operations meeting. The chief financial officer announces that they have run their bank account down and will need to suspend loan disbursement for the week.

The executive director lists the information requested by a new board member for the upcoming donor meeting—the latest financial statements in the format recommended in *Measuring Performance of Microfinance Institutions: A Framework for Reporting, Analysis, and Monitoring* (SEEP, 2005), the number of clients categorized by loan size, and a "portfolio-at-risk" report. The staff just shrug their shoulders when asked to put together this information by Friday.

Adapted from: *MIS Handbook for Microfinance Institutions*, CGAP 1998

SEEP Income Statement

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 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)

Cut here →

Balance Sheet

FIXED

ASSETS

CURRENT

ASSETS

Loans

to Members

Debtors

and Prepayments

Cash and

Bank Balance

CURRENT

LIABILITIES

Member

Savings

Creditors

and Accruals

NET

CURRENT ASSETS

FINANCED

BY

Deferred

Grant Income

Capital

Grant

Income

and Expenditure
Account

Revolving

Loan Fund

Cut here →

SEEP 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

Cut here →

SEEP Direct Cash Flow Statement

Cash Flows from	Operating Activities
Cash Received from Interest, Fees,	and Commissions on Loan Portfolio
Cash Received from Interest	on Borrowings
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 and 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 Flows from	Financing Activities
Net 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

Cut here →

SEEP Indirect Cash Flow Statement

Cash Flows from	Operating Activities
Net Income	(Before Taxes and Donations)
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 Flows 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
Effect of Exchange Rate Changes on	Cash and Cash Equivalents
Cash and Due from Banks at	the End of the Period

Cut here →

SEEP Portfolio Report

Account Name	No. of Loans (for period)	Value of Portfolio	No. of Loans (for period)	Value of Portfolio
Portfolio Activity				
Loans Disbursed				
Loans Outstanding				
Movement in Impairment Loss Allowance				
Impairment Loss Allowance, Beginning of Period				
Impairment Loss Allowance, End of Period				
Loans Written Off				
Provision for Loan Impairment				
Loans in Recovery or Recovered				
Portfolio Aging Schedule				
	No. of Loans	Value of Portfolio	Loss Allowance Rate (%)	Impairment Loss Allowance
Current Portfolio				
Portfolio – 1 payment past due				
Portfolio – 2 payments past due				
Portfolio – 3 payments past due				
Portfolio – 4 payments past due				
Portfolio – more than 4 days past due				
Renegotiated Portfolio 1–30 days				
Renegotiated Portfolio >30 days				
Total Loans Outstanding				

Cut here →

SEEP Nonfinancial Data Report

Account Name		End of current period	End of previous period
Operational Data			
Number of	Active Clients		
Number of	New Clients during Period		
Number of	Active Borrowers		
Number of	Voluntary Depositors		
Number of	Deposit Accounts		
Number of	Savers Facilitated		
Number of	Personnel		
Number of	Loan Officers		
Macroeconomic Data			
Inflation	Rate		
Market	Rate for Borrowing		
Exchange Rate (Local	Currency: U.S. Dollar, Euro, or other)		
Gross National	Income (GNI) per capita		

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Overheads

THE COMPLETE SET OF OVERHEADS IS IN A SEPARATE POWERPOINT FILE ENTITLED "CGAP FINANCIAL ANALYSIS OVERHEADS."

The information you have is not
the information you want.

The information you want is not
the information you need.

The information you need is not
the information you can obtain.

The information you can obtain
costs more than you want to pay.

SEEP Income Statement

Financial Revenue	Operating Expense
Financial Revenue from Loan Portfolio	Personnel Expense
Interest on Loan Portfolio	Administrative Expense
Fees and Commissions on Loan Portfolio	Depreciation and Amortization Expense
Financial Revenue from Investments	Other Administrative Expense
Other Operating Revenue	Net Operating Income
Financial Expense	Net 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)

Sample Balance Sheet

FA2-O3

FIXED ASSETS	
CURRENT ASSETS	
Loans to Members	
Debtors and Prepayments	
Cash and Bank Balance	
CURRENT LIABILITIES	
Member Savings	
Creditors and Accruals	
NET CURRENT ASSETS	
FINANCED BY	
Deferred Grant Income	
Capital Grant	
Income and Expenditure Account	
Revolving Loan Fund	

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SEEP Balance Sheet

FA2-O4

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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FA2-05

SEEP Direct Cash Flow Statement

CASH FLOWS FROM OPERATING ACTIVITIES	CASH FLOWS FROM INVESTING ACTIVITIES
Cash Received from Interest, Fees, and Commissions on Loan Portfolio	Net (Purchase)/Sale of Other Investments
Cash Received from Interest on Borrowings	Net (Purchase)/Sale of Fixed Assets
Cash Received as Other Operating Revenue	NET CASH FROM INVESTING ACTIVITIES
Value of Loans Repaid	CASH FLOWS FROM FINANCING ACTIVITIES
(Cash Paid for Financial Expenses on Funding Liabilities)	Net Cash Received /(Repaid) for Short- and Long-term Borrowings
(Cash Paid for Other Financial Expenses)	Issuance/(Repurchase) of Paid-in Capital
(Cash Paid for Operating Expenses)	(Dividends Paid)
(Cash Paid for Taxes)	Donated Equity
(Value of Loans Disbursed)	NET CASH FROM FINANCING ACTIVITIES
Net (Purchase)/Sale of Trade Investments	Net Cash Received/(Paid) for Nonoperating Activities
Deposits/(Withdrawals) from Clients	Net Change in Cash and Due from Banks
Cash Received/(Paid) for Other Operating Assets and Liabilities	Cash and Due from Banks at the Beginning of the Period
NET CASH FROM OPERATING ACTIVITIES	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents
	Cash and Due from Banks at the End of the Period

Source: SEEP Network 2005.

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FA2-06

SEEP Indirect Cash Flow Statement

CASH FLOWS FROM OPERATING ACTIVITIES	CASH FLOWS FROM FINANCING ACTIVITIES
Net Operating Income	Increase/(Decrease) in Short- and Long-term Borrowings
Depreciation and Amortization	Increase/(Decrease) in Paid-in Capital
Impairment Losses on Loans	(Dividends Paid)
(Cash Paid for Taxes)	Donated Equity
Value of Loans Repaid	NET CASH FROM FINANCING ACTIVITIES
(Value of Loans Disbursed)	Net Cash Received/(Paid) for Nonoperating Activities
(Increase)/Decrease in Trade Investments	Net Change in Cash and Due from Banks
Increase/(Decrease) in Deposits	Cash and Due from Banks at the Beginning of the Period
(Increase)/Decrease in Receivables and Other Assets	Effect of Exchange Rate Changes on Cash and Cash Equivalents
Increase/(Decrease) in Payables and Other Liabilities	Cash and Due from Banks at the End of the Period
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	

Source: SEEP Network 2005.

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SEEP Portfolio Report

From January – December 2004

FA2-07

Account Name	Number of Loans	Value of Portfolio		
Portfolio Activity				
Loans Disbursed	32,148	159,603,437		
Loans Outstanding	14,587	55,609,309		
Movement in Impairment Loss Allowance				
Impairment Loss Allowance, Beginning of Period		1,230,473		
Impairment Loss Allowance, End of Period		1,270,673		
Loans Written Off	147	448,954		
Provisions for Loan Impairment		489,154		
Loans in Recovery or Recovered	14	49,182		
Portfolio Aging Schedule 2004				
Category	Number of Loans	Value of Portfolio	Loss Allowance Rate (%)	Impairment Loss Allowance
Current Portfolio	8,729	51,155,003	–	–
Portfolio-at-Risk 1–30 days	2,110	2,224,372	10	222,437
Portfolio-at-Risk 31–60 days	2,022	1,112,186	25	278,047
Portfolio-at-Risk 61–90 days	927	556,093	50	278,047
Portfolio-at-Risk 91–180 days	556	166,828	75	125,121
Portfolio-at-Risk more than 180 days	204	244,681	100	244,681
Renegotiated Portfolio 1–30 days	28	55,609	50	27,805
Renegotiated Portfolio more than 30 days	11	94,536	100	94,536
Loans Outstanding	14,587	55,609,308		1,270,673

Source: SEEP Network 2005.

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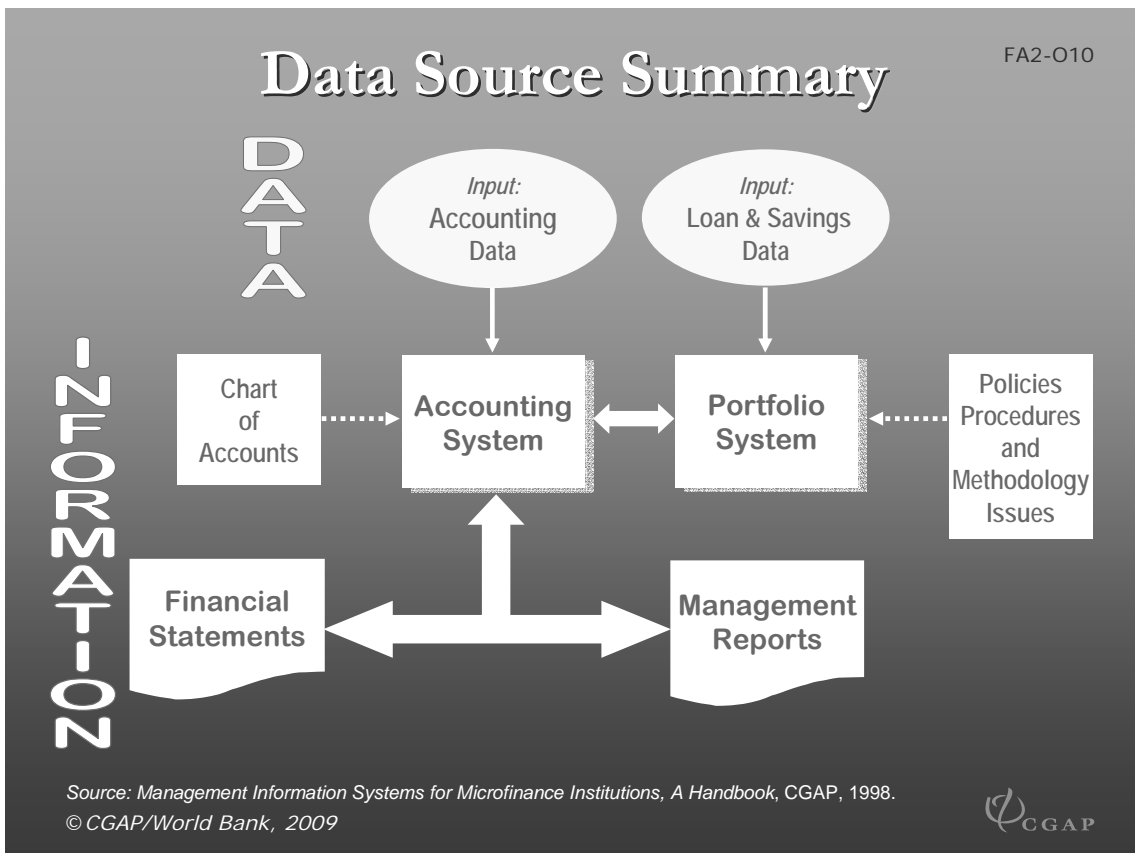
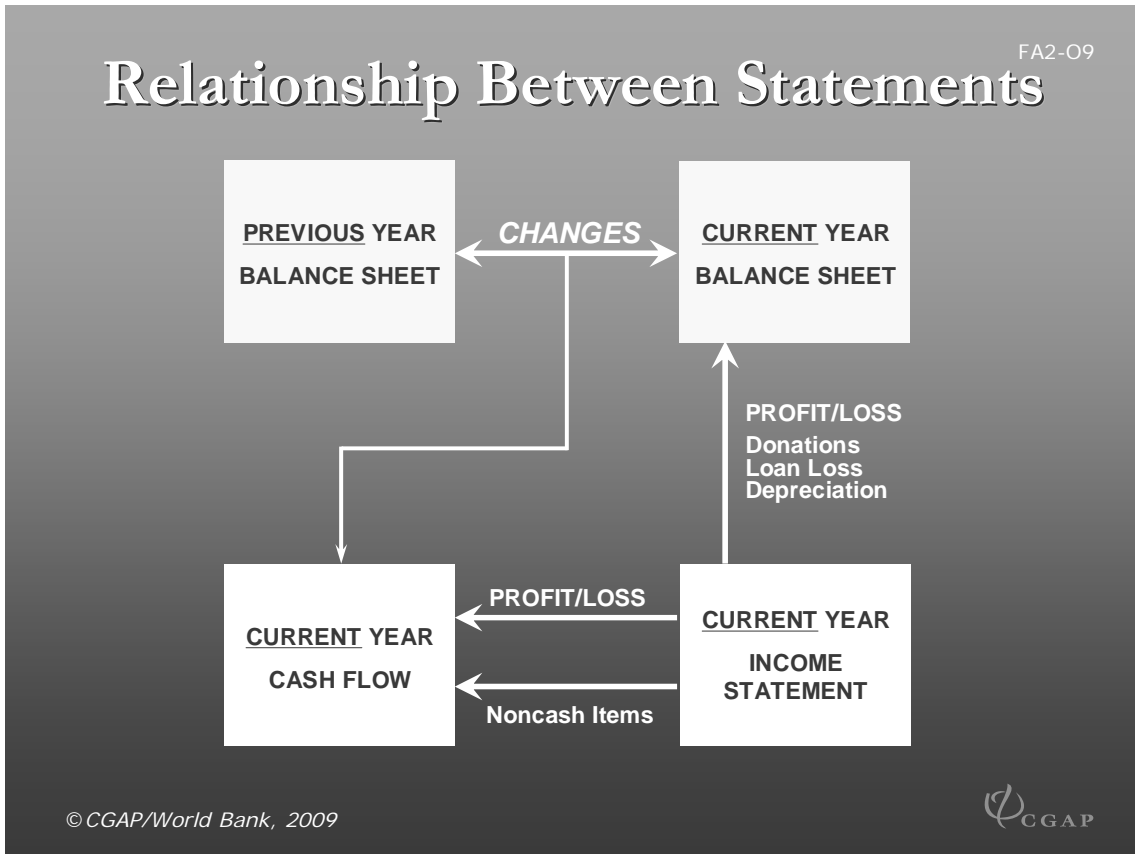
SEEP Nonfinancial Data Report

FA2-08

Account Name	End of Current Period	End of Previous Period
Operational Data		
Number of Active Clients		
Number of New Clients during Period		
Number of Active Borrowers		
Number of Voluntary Depositors		
Number of Deposit Accounts		
Number of Savers Facilitated		
Number of Personnel		
Number of Loan Officers		
Macroeconomic Data		
Inflation Rate		
Market Rate for Borrowing		
Exchange Rate (Local Currency: U.S. Dollar, Euro, or other)		
Gross National Income (GNI) per capita		

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Handouts

Technical Notes – Financial Statements and Managerial Reports

INCOME STATEMENT

- The Income Statement is a flow statement that represents activity over a given period, such as a day, month, quarter, or year. The Income Statement may also be referred to as a profit and loss statement because it illustrates the overall net profit or loss for that period (nonprofit MFIs may also use the terms “net surplus” or “deficit”). The Income Statement summarizes all the revenue and expense transactions for a defined period, usually the financial year to date. The Income Statement may have two columns of data showing present and past period performance to facilitate comparison.
- The presentation of the Income Statement is normally divided between revenue accounts and expense accounts. It also usually includes some division of operating accounts and nonoperating accounts. Operating accounts include all revenue and expenses that are directly related to the MFI’s core business of making loans, accepting deposits, borrowing funds, and providing other financial services. Nonoperating accounts include all revenue and expenses that result from activities outside the MFI’s core financial business, such as training or the sale of merchandise. Although many MFIs have ongoing support from donors, donations and grant funds from donors are considered to be nonoperating revenue.
- All donations for loan capital and operating expenses are included in the Income Statement.
- Revenue refers to money received (or to be received if accrual accounting is used) by an organization for goods sold and services rendered during an accounting period.
- Revenue for an MFI includes interest earned on loans to clients, fees earned on loans to clients, interest earned on deposits with a bank, and so on.
- Expenses represent the costs incurred for goods and services used in the process of earning revenue. Direct expenses for an MFI include financial costs, operating expenses, and provision for loan impairment.
- Relates to the Balance Sheet through the transfer of cash donations and net profit (loss), as well as depreciation, and in the relationship between the Provision for Loan Impairment and the allowance.
- Relates to the portfolio—uses historical default rates (and the current reserve) to establish the Provision for Loan Impairment.
- Relates to cash flow through the net profit/loss as a starting point on the Cash Flow Statement
- By recording the net profit/loss earned, the Income Statement measures the financial performance from which indicators on efficiency and profitability can be extracted.

BALANCE SHEET

- The Balance Sheet is a stock statement. In other words, it captures the financial position or financial structure of an MFI at a moment in time. A Balance Sheet is usually produced monthly or quarterly (at a minimum, annually), although MFIs with an

adequate management information system can usually produce a Balance Sheet on a daily or weekly basis. The Balance Sheet summarizes the ending balance of all asset, liability, and equity accounts.

- Recording donations, grants, and in-kind contributions is important for MFIs.
- Main components are Assets, Liabilities, and Equity in balance, specifically $\text{Assets} = \text{Liabilities} + \text{Equity}$
- Assets represent what the organization has, or what is owned by the organization or owed to it by others. Assets are those items in which an organization has invested its funds for the purpose of generating future receipts of cash.
- Liabilities represent what is owed by the organization to others. For example, a loan that has been granted to the organization or obligations that the organization has to provide goods and services in the future.
- Equity represents the capital or net worth of the organization. Equity includes capital contributions of any investors or donors, retained earnings, and the current year surplus.
- Prepared at least annually, often more frequently—monthly and quarterly
- Depends on transfer of data from the Income Statement. Namely, Net Surplus (deficit) current year; the amount of income (or loss) generated in the current year; recording Donated Equity/current year from cash donations on the Income Statement.
- The expense for Provision for Loan Impairment is also considered in recording the Allowance for Loan Impairment.
- Relates to Loan Portfolio Data for data on gross loan balances and savings collected
- The changes between Balance Sheets from year to year are the major inputs into the Cash Flow Statement.
- It is useful to compare Balance Sheets from previous periods in order to determine if the organization is growing and how well it is managing its financial resources, for trend analysis, and for analyzing the relative distribution of assets, liabilities, and equity.

CASH FLOW STATEMENT

- As its name states, the Cash Flow Statement is a flow statement that represents the inflows and outflows of cash during a specified period. Of the three main financial statements, the Cash Flow (or sources and uses of funds) is the statement MFIs are least likely to create. A monthly Cash Flow Statement is a valuable liquidity management tool, as without sufficient cash, MFIs cannot disburse loans, pay employees, and settle debts.
- The Cash Flow Statement summarizes each transaction or event that causes cash to increase (the sources of cash) or decrease (the uses of cash). Increases in cash, however, are not sources; rather, the sources of cash are the events that cause the cash increase. Similarly, decreases in cash are not uses; the events causing cash to decrease are the uses. For example, the increase in the Gross Loan Portfolio is not the use of cash; rather, the use is the disbursement of loans to clients.
- A Cash Flow Statement can be constructed using the direct method, showing all the cash transactions in and out of the cash and due from banks account. Alternatively, it

can be created through the indirect method, which deduces the movement of cash based on the changes in specific income statement and balance sheet accounts.

- The direct method for preparing a Cash Flow Statement is the most intuitive of the methods. It reconstructs the Income Statement by tracing the movement of cash and adds other events not included on the Income Statement that have caused an inflow or outflow of cash.
- The indirect method is deductive. It begins with the net income (after taxes and before donations) and then adds back all other sources of cash (such as loan payments) and subtracts all other uses (such as loan disbursements) that can be deduced by changes in Balance Sheet accounts.
- One tricky aspect of a deductive Cash Flow Statement is adding back “noncash” expenses, such as Impairment Losses on Loans¹ and Depreciation and Amortization. These are expenses that appear on the Income Statement, but are not the result of any cash event; because no cash flowed into or out of the MFI, the amount of these expenses must be added back to the Cash Flow Statement.
- The sources of cash can include events that cause the following changes:
 - A decrease in assets other than cash, such as receiving loan repayments from clients
 - An increase in liabilities, such as accepting a deposit or borrowing from a bank
 - An increase in paid-in capital, such as selling shares to investors or members
 - An increase in retained earnings through generating Net Income (After Taxes and Donations)
- The uses of cash can include events that cause the following changes:
 - Increases in assets other than cash, such as making loans to clients
 - Decreases in liabilities, such as repaying a deposit or paying the principal on borrowed funds
 - Decreases in paid-in capital, such as repurchasing shares or reimbursing member shares
 - Decreases in retained earnings through generating a net loss (after taxes and donations) or payment of dividends to shareholders
- A Cash Flow Statement classifies these inflows and outflows of cash into the following three major categories:
 - Operating Activities: the cash receipts, and payments related to the MFI’s ongoing provision of financial services, including lending and deposit services
 - Investing Activities: the cash receipts or outlays for acquiring or selling fixed assets or financial investments
 - Financing Activities: the borrowing and repayment of borrowings, the sale and redemption of paid-in capital, and the payment of dividends

¹ Impairment Losses on Loans contains both a “cash event,” namely the Value of Loans Recovered, and a “non-cash event,” the Provision for Loan Impairment. However, the Value of Loans Recovered is already included in the indirect Cash Flow Statement under Value of Loans Repaid. Therefore, the entire Impairment Losses on Loans is added back.

- For financial institutions, the distinction between operating activities and financing activities may be a bit confusing. Operating activities include most activities that would appear as Operating Income and Operating Expenses on the Income Statement, as well all lending activity that appears on a Portfolio Report. For example, accepting and repaying deposits is considered an operating activity because these actions are financial services, whereas borrowing is considered a financing activity. All interest paid on deposits and borrowings, however, is considered an operating activity.
- Several accounts in a Cash Flow Statement are similar to those in an Income Statement, particularly if an MFI uses cash accounting. For instance, “Cash received from Income, Fees, and Commissions on Loan Portfolio” is the same as “Revenue Financial Revenue from Loan Portfolio” if the MFI uses cash accounting. If an MFI accrues interest, these two accounts may not be the same.
- Shows clearly how an organization obtains cash (sources of funds) and how it spends cash (uses of funds), including the borrowing and repayment of debt, capital transactions, and other factors that affect the cash position
- Relates to other statements through the Balance Sheet—from the increases and decreases in assets and liabilities from one balance sheet to the next, as well as through the Income Statement.

PORTFOLIO REPORT AND ACTIVITY REPORT

- A portfolio report and activity report link the loan portfolio information of the three previously discussed statements—Income Statement, Balance Sheet, and Cash Flow Statement. The purpose of the portfolio report is to represent in detail an MFI’s microlending activity, present the quality of the loan portfolio, and provide detail on how the MFI has provisioned against potential losses. Unlike other statements, the design of this report varies from MFI to MFI. The content, however, should be consistent and must include the following:
 - Portfolio activity information
 - Movement in the Impairment Loss Allowance
 - A Portfolio Aging Schedule
- The closely linked Movement in Impairment Loss Allowance and the Portfolio Aging Schedule are related to an MFI’s assessment of the default risk associated with its loan portfolio.
- Impairment Loss Allowance is a contra asset account that reduces the value of the Gross Loan Portfolio. The value of that allowance is determined by first creating a Portfolio Aging Schedule.
- All MFIs should have a policy for calculating and creating an Impairment Loss Allowance and writing off loans. The generally accepted method for MFIs to assess default risk is based on the timeliness of principal payments on loans. The assumption is that the longer a loan remains past due, the more at risk the outstanding balance of the loan will become. This remaining outstanding balance is referred to as the portfolio-at-risk. Understanding the difference between arrears and portfolio-at-risk is important. Arrears measure the sum of all past due payments, whereas portfolio-at-risk is the total value of loans outstanding that have one or more past due payments—a much larger amount. The word delinquency may refer to either, which leads to confusion.

- MFIs create a Portfolio Aging Schedule by segregating their loans into groups based on their “age,” or how many days have passed since the first payment was missed. Each of these categories is multiplied by a loss allowance (or provisioning) rate, which represents the perceived chance of the loan not being repaid. The portfolio-at-risk for each age is then multiplied by the appropriate loss allowance rate. The sum of these calculations is the amount the MFI should set aside in the Impairment Loss Allowance. If the existing Impairment Loss Allowance is less than what is required, the MFI will need to increase it, usually monthly or quarterly, by Provision for Loan Impairment.
- MFIs should also have a policy on writing off loans. Both the Gross Loan Portfolio and the Impairment Loss Allowance are reduced by the outstanding balance of the loan for the amount of the write-off, which reduces the MFI’s total assets. This action is the financial representation of the management’s belief that the loan is unlikely to be repaid. Of course, the MFI should continue to seek to recover these loans until all legal and other efforts have failed. If the write-off exceeds the value of the Impairment Loss Allowance, the MFI must first increase the Impairment Loss Allowance by increasing Impairment Losses on Loans before reducing the Gross Loan Portfolio and the Impairment Loss Allowance.

NONFINANCIAL DATA REPORT

- In addition to the information collected in the preceding reports, important operational and macroeconomic data must be captured to calculate key financial ratios. In order to provide tools that will give managers and others a complete picture of an MFI’s financial condition, the Nonfinancial Data Report includes data on products and clients served by the institution, as well as data on the resources used to serve them.
- Managers may want to expand this report to include other items of interest.

Adapted from *Measuring Performance of Microfinance Institutions: A Framework for Reporting, Analysis, and Monitoring*. The SEEP Network Financial Services Working Group and Alternative Credit Technologies, LLC 2005.

How Financial Statements Are Linked

Income Statement	Balance Sheet	Cash Flow Statement	Portfolio Report	Relationship
Provision for Loan Impairment	Impairment Loss Allowance		Value of Loans Written Off	Impairment Loss Allowance (end of current period) = Impairment Loss Allowance (end of previous period) + Provision for Loan Impairment - value of loans written off
Depreciation and Amortization Expense	Accumulated Depreciation and Amortization	Depreciation and Amortization		Accumulated Depreciation and Amortization (end of current period) = Accumulated Depreciation and Amortization (end of previous period) + Depreciation and Amortization expense
Donations	Donated Equity, Current Year	Donated Equity		Donated Equity (end of current period) = Donated Equity (end of previous period) + Donations
Net Income (After Taxes and Before Donations)	Retained Earnings, Current Year			Net Income (After Taxes and Before Donations) = Retained Earnings, Current Year
	Cash and Due from Banks	Net Change in Cash and Due from Banks; Exchange Rate Gains/(Losses) on Cash and Cash Equivalents		Cash and Due from Banks (end of current period) = Cash and Due from Banks (end of previous period) + Net Change in Cash and Due from Banks + Exchange Rate Gains/(Losses) on Cash and Cash Equivalents
	Gross Loan Portfolio	Value of Loans Disbursed; Value of Loans Repaid	Value of Loans Outstanding; Value of Loans Written Off; Value of Loans Disbursed	Gross Loan Portfolio (end of current period) = Gross Loan Portfolio (end of previous period) + Value of Loans Disbursed - Value of Loans Repaid - Value of Loans Written Off

SESSION 3: ACCOUNTING SYSTEM

Session Summary

- OBJECTIVE:** By the end of the session the participant will be able to:
- Review basic concepts of financial accounting
 - Discuss Chart of Accounts for MFIs and their relationship to financial statements and analysis
 - Trace common financial transactions through chart of accounts to financial statements
 - Identify and account for noncash transactions

TIME: 40 minutes

SUPPLIES: Flipchart and markers
LED projector or overhead projector
Overhead transparencies and overhead markers
FA2–O9, Relationship Between Statements (*for reference*)
Large, handwritten Balance Sheet (B/S) and Income Statement (I/S) to be posted in training room to assist discussion for the rest of the course

PARTICIPANT MATERIALS

OVERHEADS: FA3-O1a–b Sample Chart of Accounts
FA3-O2a–b Sample Chart of Accounts – Asset Accounts Only

HANDOUTS: FA3-H1 Sample Chart of Accounts
FA3-H2 List of Transactions
FA3-H3 Transaction Worksheet
FA3-H4 Transaction Worksheet – Answers

PREPARED FLIPCHART:
Balance Sheet equation and/or diagram

Session 3: Accounting System

INTRODUCTION

1. (2 minutes) Tell the participants that because they now know the purpose, components, and relationships among the financial statements, they will spend this session reviewing the basic concepts of accounting—how the financial information gets into the financial statements.

Stress that this is not an accounting course. Explain that if participants want to learn more about accounting, they should attend the *Skills for Microfinance Managers* accounting course.

RECORDING FINANCIAL TRANSACTIONS

2. (3 minutes) Ask participants to briefly explain the steps to record a financial transaction in the accounting system of their MFIs—for example, when a loan is disbursed. Preselect an accountant or finance manager volunteer for this exercise to avoid any embarrassment.

Have the group note the basics, which include Journal entry→General Ledger →(Draft Trial Balance—optional)→Adjusting/Closing Entry→Trial Balance→Financial Statements. You may want to list the first and last steps and then ask participants to fill in the middle.

Ask: How do you classify these entries? Take answers until someone mentions a Chart of Accounts.

Tell the group that since this is an important starting point for organizing financial information, they will take a few moments to discuss the Chart of Accounts.

CHART OF ACCOUNTS

3. (5 minutes) Tell the group that they will now be learning about a Chart of Accounts. Ask the following questions, discuss them briefly, and restate correct answers. You may want to record the right answers on a flipchart for reference as the discussion continues. Possible answers from the CGAP MIS Handbook for MFIs are given below each question.

Possible answers from the MIS Handbook for MFIs include:

- What is a Chart of Accounts?
Provides the foundation and structure for recording and reporting of all financial transactions for the institution. Using the Chart of Accounts, transactions are posted to different asset, liability, equity, revenue (income) or expense accounts. The Chart of Accounts 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. (FA2–O9 may be used for reference.)

- What is its purpose? Why is it important?

To classify financial information so one 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, ratios, and indicators used in management reports are based at least in part on transactions posted to the Chart of Accounts. Management should therefore determine what information they wish to track and ensure that the Chart of Accounts provides the required information, ratios, and indicators.

In other words, it is a critical foundation for analyzing your MFI and moving toward sustainability.

Consider using this simple exercise to illustrate for the group how the Chart of Accounts clarifies information. Write out five transactions with a date and account number. Show how in the General Journal the transactions are arranged by date, then the ledgers are arranged by account number.

4. (8 minutes) Show FA3–O1 and hand out FA3–H1. Point out that FA3–H1 is for illustrative purposes only. It is not a “best practice” Chart of Accounts. A real MFI

would have many more accounts under each category. Recap main points from answers above or ensure they have been highlighted in the discussion.

Emphasize that the structure and level of detail of the Chart of Accounts will determine the type of information management will be able to access and analyze in the future.

Explain that most of the financial indicators used in management reports are based on information that will be extracted based on the Chart of Accounts; they are the starting point. Management needs to determine the financial indicators they intend to track and ensure that the Chart of Accounts is established to support the generation of those indicators.

Stress to the group that management must be clear about what it needs. In particular, being able to differentiate between the grant income given by donors from the operational income earned from the MFI's products and services is fundamentally important. Operational income is the basis for financial analysis, not grant income, and the importance of accurately tracking it cannot be overstated. Furthermore, the level of detail is critical to good analysis. Too sketchy a chart will not provide precise enough information to generate some indicators, but attempting to track too much detail might overwhelm the accounting department.

Show FA3–02 and note that it is an example of a Chart of Accounts for the assets in the Balance Sheet.

- Explain that management must bear in mind that different end users of the information generated have different needs. In addition, internal management and auditors, tax code, donors, and regulatory demands will all influence how the Chart of Accounts is set up. In general, requirements from funding agencies, regulatory authorities, and auditors are less detailed and can be met if management needs are met.
 - Some Chart of Accounts and report formats may be legislated; therefore MFIs are obligated to follow the mandated requirements in these areas.
5. (1 minute) Refer once again the sample Chart of Accounts (FA3–O1, FA3–O2 and FA3–H1). Consider highlighting particular groupings of accounts, such as 103, 104, 105; 203 and 204; 404 and 405; 205 and 410.) Remind participants these are only samples and not to be copied! A Chart of Accounts should be developed for their MFIs based on their operations, structure, management needs, and any regulatory requirements. (Refer to the “mantra” on the flipchart.)

REVIEW OF ACCOUNTING ACTIVITY FOR I/S AND B/S

6. (3 minutes) Ask participants to participate in a quick accounting review activity to show how financial transactions affect the Income Statement and Balance Sheet. Ask: What do we mean by double-entry accounting?

Possible answer: 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). Each transaction affects either assets, liabilities, and/or equity (sometimes through revenue or expenses—explained in session 4: The Income Statement. The accounting equation states that $\text{Assets} = \text{Liabilities} + \text{Equity}$. (A flipchart of the Balance Sheet equation or diagram may be helpful here.) For every account affected by a transaction there is an equal effect on other accounts that keeps the accounting equation balanced. Therefore, an increase in a business's assets must be offset by either a decrease in another asset, or an increase in liabilities or equity.

Exercise: Recording Transactions

- Tell participants that they will now have an opportunity to see for themselves how this works in practice by recording transactions in an exercise. Give each participant handout FA3–H2, List of Transactions. Remind participants that each of these transactions has two effects, either on the Income Statement or Balance Sheet (this is called double-entry bookkeeping).
 - Explain the exercise and work through one example for the group as a sample.
 - Either using a blank overhead or on a flipchart, follow the format used on FA3-H3, Transaction Worksheet. (Refer to the Balance Sheet equation on the flipchart.) This will help participants focus on the movement of the transaction and not get bogged down in recording details of credits and debits. The large Balance Sheet and Income Statement previously posted in the training room are particularly useful for this exercise.
7. (10 minutes) Divide the group into subgroups of three. Pass out FA3–H3 and ask participants to complete as much as possible in 10 minutes. Tell them that they should tackle at least questions 1, 2, and 3 since they represent a variety of cases: a noncash transaction, one that affects the Income Statement, another that affects the Balance Sheet, cash donation, and so forth. Remind them not to get involved in recording debits and credits.
 8. (2 minutes) Pass out FA3–H4, Answers to Transaction Problems, and ask the subgroups to check their own work. Be sure to point out that the answers do show debits and credits—denoted by D and C—for the accountants in the group who feel uncomfortable without it!!
 9. (5 minutes) Referring to the exercise just finished, remind participants that it is important that they understand how financial transactions affect the Income Statement and Balance Sheet. Show FA2–09 again to review the interplay between the Chart of Accounts and the I/S and B/S. Knowing this accounting information will be useful when they begin to analyze the efficiency, asset/liability management (ALM), and profitability indicators, and will help them to gain a better understanding of the relationship of the components involved in financial analysis to sustainability.

CONCLUSION

10. (2 minutes) Take any questions and summarize production, use, need, and relationships of financial statements, and any questions that might form part of a review of statements and accounting. Remind participants that if they want to learn more about accounting, they should come to the CGAP Accounting course!

Trainer Notes

For FA3-H3, Transaction Worksheet exercise: There is no donation transaction here, in order to avoid the IAS 20 discussion that will come in session 4. See FA4-M2, Technical Notes on IAS 20.

Overheads

THE COMPLETE SET OF OVERHEADS IS IN A SEPARATE POWERPOINT FILE ENTITLED "CGAP FINANCIAL ANALYSIS OVERHEADS."

Sample Chart of Accounts

for illustrative purposes only

FA3-O1a

ASSETS		LIABILITIES	
101	Cash and Due from Banks	201	Demand Deposits
102	Trade Investment	202	Short-term Time Deposits
103	Gross Loan Portfolio	203	Short-term Borrowings
104	Impairment Loss Allowance	204	Interest Payable on Funding Liabilities
105	Interest Receivables on Loan Portfolio	205	Accounts Payable and Other Short-term Liabilities
106	Account Receivables and Other Assets		
114	Other Investment	212	Long-term Time Deposits
115	Fixed Assets	213	Long-term Borrowings
116	Accumulated Depreciation	214	Other Long-term Liabilities
117	Other Assets		
		EQUITY	
		301	Paid-in Equity
		302	Donated Equity – Prior Years
		303	Donated Equity – Current Year
		304	Retained Earnings – Prior Years
		305	Retained Earnings – Current Year
		306	Reserves
		307	Other Equity Accounts

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FA3-O1b

Sample Chart of Accounts *(continued)*

REVENUE		EXPENSES	
401	Interest on Loan Portfolio	501	Interest and Fee Expense on Deposits
402	Fees and Commissions on Loan Portfolio	502	Interest and Fee Expense on Borrowings
403	Financial Revenue from Investments	503	Other Financial Expense
404	Other Operating Revenue	511	Provision for Loan Impairment
411	Nonoperating Revenue	521	Personnel Expense
421	Donations for Loan Capital	522	Depreciation and Amortization Expense
422	Donations for Operating Expense	523	Other Administrative Expense
		531	Nonoperating Expense
		541	Taxes

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Sample Chart of Accounts – Asset Accounts Only

FA3-O2a

1000	Cash and Equivalents	1300	Reserve for Possible Losses
1001	Cash in Vault	1310	(Impairment Loss Allowance)
1005	Petty Cash	1320	(Interest Loss Allowance)
1010	Cash in Banks	1400	Interest and Fees Receivables
1011	Cash in Bank – Operating	1410	☒ Interest Receivables, Current Loans
1012	Cash in Bank – Lending	1420	☒ Interest Receivables, Nonperforming Loans
1013	Cash in Bank – Savings	1440	☒ Interest Receivables, Rescheduled Loans
1050	Reserves in Central Bank	1450	Commissions Receivables
1100	Short-term Investment	1459	Other Loan Fees Receivables
1200	Loan Portfolio	1500	Receivables
1210	Portfolio/Type A	1510	Accounts Receivable
1220	Portfolio/Type B	1520	Travel Advances
1240	Restructured Loans	1525	Other Advances to Employees
		1530	☒ Other Receivables

Notes: () are contra accounts. Contra accounts are negative in value and reduce the value of their associated accounts.

☒ Indicates accounts related to accrual systems.

(This is only one example from the CGAP MIS Guide, 1998. There are many others available.)

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Sample Chart of Accounts – Asset Accounts Only (continued)

FA3-O2b

1600	Long-term Investments	1800	Other Assets
1610	Investment A	1810	Prepaid Expenses
1612	Investment B		
1700	Property and Equipment		
1710	Buildings		
1711	(Depreciation, Buildings)		
1720	Land		
1730	Equipment		
1731	(Depreciation, Equipment)		
1740	Vehicles		
1741	(Depreciation, Vehicles)		
1750	Leasehold Improvements		
1751	(Depreciation, Leasehold Improvements)		
1790	Accumulated Inflation Adjustment on Property and Equipment		

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Handouts

SAMPLE CHART OF ACCOUNTS

(for illustrative purposes only)

ASSETS	
101	Cash and Due from Banks
102	Trade Investment
103	Gross Loan Portfolio
104	Impairment Loss Allowance
105	Interest Receivables on Loan Portfolio
106	Account Receivables and Other Assets
114	Other Investment
115	Fixed Assets
116	Accumulated Depreciation
117	Other Assets

LIABILITIES	
201	Demand Deposits
202	Short-term Time Deposits
203	Short-term Borrowings
204	Interest Payable on Funding Liabilities
205	Accounts Payable and Other Short-term Liabilities
212	Long-term Time Deposits
213	Long-term Borrowings
214	Other Long-term Liabilities

EQUITY	
301	Paid in Equity
302	Donated Equity – Prior Years
303	Donated Equity – Current Year
304	Retained Earnings – Prior Years
305	Retained Earnings – Current Year
306	Reserves
307	Other Equity Accounts

REVENUE	
401	Interest on Loan Portfolio
402	Fees and Commissions on Loan Portfolio
403	Financial Revenue from Investments
404	Other Operating Revenue
411	Nonoperating Revenue
421	Donations for Loan Capital
422	Donations for Operating Expense

EXPENSES	
501	Interest and Fee Expense on Deposits
502	Interest and Fee Expense on Borrowings
503	Other Financial Expense
511	Provision for Loan Impairment
521	Personnel Expense
522	Depreciation and Amortization Expense
523	Other Administrative Expense
531	Nonoperating Expense
541	Taxes

List of Transactions

Record conceptually how these transactions affect the statements we have been discussing. Name which accounts are affected, and how—increases or decreases.

Example: Paid travel expense of \$2,000

Answer: Recorded as a decrease in Cash/Assets on the Balance Sheet and as an expense on the Income Statement.

1. Write off loans of \$500
2. Client withdraws \$250 from her savings account
3. Purchased computer equipment for \$5,000—paid \$2,500 in cash and \$2,500 in supplier credit
4. Long-term investment of \$5,000 matured, with \$75 interest income
5. Disbursed three loans of \$1,000 each, with a 1% fee for each loan that is paid up front. Each loan had a monthly payment of principal and interest over a 10-month term.

Transactions Worksheet

NO.	TRANSACTION	EFFECTS ON INCOME STATEMENT ACCOUNTS	EFFECTS ON BALANCE SHEET ACCOUNTS
1	Write off loans of \$500		
2	Client withdraws \$250 from her savings account		
3	\$5,000 purchase of computers <ul style="list-style-type: none"> ▪ Paid cash \$2,500 ▪ Given supplier credit \$2,500 		
4	\$5,000 long-term investment matured <ul style="list-style-type: none"> ▪ \$75 interest on investment 		
5	Three loans disbursed at \$1,000 each <ul style="list-style-type: none"> ▪ Up-front fee of 1% ▪ Payment of <ul style="list-style-type: none"> – principal – interest 		

Transactions Worksheet – Answers

NO.	TRANSACTION	EFFECTS ON INCOME STATEMENT ACCOUNTS	EFFECTS ON BALANCE SHEET ACCOUNTS
1	Write off loans of \$500		Decrease Gross Loan Portfolio – C Decrease Loan Impairment allowance (negative asset account) – D
2	Client withdraws \$250 from her savings account		Decrease Cash – C Decrease Voluntary Savings – D
3	\$5,000 purchase of computers <ul style="list-style-type: none"> ▪ Paid cash \$2,500 ▪ Given supplier credit \$2,500 		Increase in Fixed Assets by \$5,000 – D Decrease in Cash by \$2,500 – C Increase in Short-term Debt by \$2,500 – C
4	\$5,000 long-term investment matured <ul style="list-style-type: none"> ▪ \$75 interest on investment 	Increase in Investment Income – C	Increase in Cash – D Decrease in Long-term Investment – C Increase in Cash – D
5	Three loans disbursed at \$1,000 each <ul style="list-style-type: none"> ▪ Up-front fee of 1% ▪ Payment of <ul style="list-style-type: none"> – principal – interest 	Increase in Fee Income – C Increase in Interest Income – C	Increase in Outstanding Portfolio – D Decrease in Cash – C Increase in Cash – D Increase in Cash – D Decrease in Outstanding Portfolio – C Increase in Cash – D

SESSION 4: FORMATTING FINANCIAL STATEMENTS

Session Summary

- OBJECTIVE:** By the end of the session participants will be able to:
- Format financial statements (Income Statements, Balance Sheets, and Cash Flow Statements) according to the sample formats suggested in the Framework developed by the SEEP Network
 - Explain why this format is useful for financial analysis
- TIME:** 172–267 minutes
- SUPPLIES:** Flipchart, markers, tape, and Blu Tak
LED projector or overhead projector
10 blank SEEP-formatted statements enlarged on A3 paper/flipchart
10 pieces of formatted statements usage terms (*same size as blank spaces in A3 sheet*)

TRAINER MATERIALS

- FA4-M1 SEEP Income Statement – Definitions Worksheet
- FA4-M2 SEEP Balance Sheet – Definitions Worksheet
- FA4-M3 SEEP Income Statement – Definitions
- FA4-M4 SEEP Balance Sheet – Definitions
- FA4-M5 Technical Materials on IAS 20
- FA4-M6 Technical Materials on IAS 1
- FA4-M7 Technical Materials on Cash Flow

PARTICIPANT MATERIALS

- OVERHEADS:**
- FA2-O9 Financial Statements Relationships
 - FA4-O1 Is It Really Free?
 - FA4-O2 SEEP Income Statement
 - FA4-O3 SEEP Balance Sheet
 - FA4-O4a–f Income Statement – Definitions
 - FA4-O5a–f Balance Sheet – Definitions
 - FA4-O6 Summary of New Features/Differences
 - FA4-O7a–b GROW Income Statement (SEEP Format) form
 - FA4-O8a–b GROW Income Statement
 - FA4-O9a–c GROW Balance Sheet (SEEP Format) form
 - FA4-O10a–c GROW Balance Sheet
 - FA4-O11 Three Ways MFIs Treat Cash Donations
 - FA4-O12a–g Direct Cash Flow Statement Detail
 - FA4-O12h–j Indirect Cash Flow Statement Detail

FA4-O13a–b SEEP Direct Cash Flow Statement form
 FA4-O13c–d SEEP Indirect Cash Flow Statement form

FA4-O14a–b GROW Direct Cash Flow Statement	Optional
FA4-O14c–d GROW Indirect Cash Flow Statement	

HANDOUTS:

FA4-H1 SEEP Income Statement – Definitions
 FA4-H2 SEEP Balance Sheet – Definitions
 FA4-H3 Conventional Balance Sheet Sample
 FA4-H4 Conventional Income Statement Sample
 FA4-H5a GROW Case Study (*use colored paper for GROW handouts for easier reference*)
 FA4-H5b GROW Original Income Statement
 FA4-H5c GROW Original Balance Sheet
 FA4-H6 GROW Income Statement (SEEP Format) form
 FA4-H7 GROW Income Statement
 FA4-H8 GROW Balance Sheet (SEEP Format) form
 FA4-H9 GROW Balance Sheet
 FA4-H10 Technical Notes
 FA4-H11a Direct Cash Flow Statement Details
 FA4-H11b Indirect Cash Flow Statement Details
 FA4-H12a SEEP Direct Cash Flow Statement form
 FA4-H12b SEEP Indirect Cash Flow Statement form

FA4-H13a GROW Direct Cash Flow Statement	Optional
FA4-H13b GROW Indirect Cash Flow Statement	

Session 4: Formatting Financial Statements

INTRODUCTION

1. (2 minutes) Explain that session 2 was an overview of the financial statements, identifying relationships among the Income Statement, Balance Sheet, and Cash Flow Statements. Session 3 outlined the basics of how accounting directly determines information in financial statements. Tell participants that their objectives now are to understand and use the new formats for presenting financial information.

2. (3 minutes) Ask participants: Why are we so interested in financial statements?

Elicit as the answer: The purpose of financial statements is to provide an accurate picture of the financial position of any business. As managers, participants need an accurate picture of their business to make good decisions.

Explain that the format of typical financial statements does not always give an MFI the picture it needs in order to make decisions, because it is not a typical financial institution.

3. (3 minutes) Ask participants: If you saw the financial statements of a bank, what would be the big difference between them and the internal management financial statements of an MFI (apart from the fact that the MFI is much smaller)?

Bring out this key answer: Donor money and/or subsidized money. Show FA4-O1 and briefly explain that most MFIs are dependent on donor funds but do not realize to what extent, and that donor money is not limitless—it may end at any time.

Explain that this is why they will now be creating financial statements that will help them clearly see the impact of donor funds on their financial position and its relationship to sustainability.

4. (2 minutes) Tell the group that only when a manager has good data, organized in a way that shows the true financial position of the institution, will financial analysis have meaning. Financial statements should be formatted in a way to facilitate the presentation of financial information adjusted to reflect the specific context of MFIs. Using statements formatted this way enables managers to present financial information in a way that facilitates calculation of standard ratios, to undertake trend analysis within their institutions, and to make meaningful comparisons with other MFIs in the region and around the world.

Explain that CGAP does NOT expect MFIs to change their audited financials but suggests that their format will provide managers with useful information for decision making. Tell the group that this point is worth repeating again! They should also understand that they are in accordance with the International Financial Reporting Standards (IFRS).

INCOME STATEMENT AND BALANCE SHEET FORMATS

5. (2 minutes). Introduce the Income Statement and Balance Sheet formats from the SEEP Framework, and show them as overheads and/or flipcharts FA4-O2 and FA4-O3. Remind participants that they looked at differences in session 2. Emphasize that they have already seen how the SEEP Balance Sheet has the same information as a typical Balance Sheet, only in a different format—but do not discuss the different format at this point.

6. (20–30 minutes) Explain to participants that the group will take some time to digest the new formats. Divide the group into small groups of three to five. (If the level of understanding appears high, make subgroups five; if low, three. The idea is to get everyone in the subgroup to participate.) Give each small group a SEEP Income Statement – Definitions Worksheet (FA4-M1) and a SEEP Balance Sheet – Definitions Worksheet (FA4-M2). Distribute cut-up pieces from the “definition” side of FA4-M3 and FA4-M4.

Have them fill in the blank spaces of FA4-M1 and FA4-M2, using the cut-up definition pieces from FA4-M3 and FA4-M4. You will need to walk around the small groups and check on their progress, helping them where needed.

7. (5 minutes) After most of the group has completed the activity, call for attention, and pass out FA4-H1 and FA4-H2, SEEP Income Statement – Definitions and SEEP Balance Sheet – Definitions. Ask groups to compare their work with the actual SEEP definitions.
8. (10–15 minutes) Reconvene the large group and lead a discussion of formats, showing FA4-O4a–f and FA4-O5a–f and using FA4-H1 and FA4-H2. Ask: What have you learned from this exercise? Distribute handouts of the sample formats (FA4-H3 and FA4-H4) and have participants compare what they see in the overheads with the SEEP formats (FA4-O4 and FA4-O5) and with the handouts of the sample formats (FA4-H3 and FA4-H4). Ask: What surprised you about the exercise? What interesting things do you note when comparing the statement suggested in the SEEP Framework with the sample Balance Sheet and sample Income Statement? It is imperative that participants understand the format and why you are asking them to use it. Probe until participants arrive at the main points of FA4-O6.

Do not shorten this step: this is the processing after the activity and is critical to participants’ thinking about the format.

9. (2 minutes) Summarize the main points of the discussion, using FA4-O6, Summary of New Features/Differences.
 - Income Statement – Donor funds are treated “below the line.” That is, donor money is only included after the net income.
 - Balance Sheet – There are five separate sources of equity from the Income Statement:

- Retained earnings/losses—current year and prior years (not including cash donations)
- Donations—current year and prior years
- Reserves
- Other equity accounts
- Paid-in capital, including net nonoperational income (Net nonoperational income is calculated by subtracting nonoperational expenses from nonoperational revenue.)

The separating out of equity sources 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. At the end of the discussion, hand out FA4-H9 to the participants.

10. (3 minutes) Ask: Why would we want to separate donor funds and show the separate sources of equity? Look for this answer: to see our progress toward sustainability.
11. (5–10 minutes) Summarize and resolve any issues. Reiterate that CGAP is NOT asking them to change their audited financials, and does not expect them to. The purpose of this exercise is for MFI managers to understand the fundamental concepts of good financial analysis. Grasping their true operating financial position begins with the statements. They then have the ability to use that approach when working with potential funders and when reporting to the Microfinance Information Exchange (MIX).

DERIVING THE SEEP FORMAT FROM TYPICAL FINANCIAL STATEMENTS

12. (15 minutes) Briefly introduce the GROW case study (on colored paper), explaining that GROW is a typical NGO-type microfinance institution. It is a good example because its financial statements are not easy to analyze. In particular, information about its sources of funds is unintentionally buried in different parts of the financial statements. GROW's financial statements disguise the extent to which it is dependent on donor funds or is self-sustaining.

Distribute the GROW Case Study with Original Income Statement and Original Balance Sheet (FA4-H5a, b and c). Ask the group to take 10 minutes to read and become familiar with the case and the financial statements. Take five minutes for comments, asking: What do you think of GROW?

13. (20–30 minutes) Pass out FA4-H6, GROW Income Statement (SEEP Format), and using the overhead FA4-O7a–b, lead the group through the process of completing entries in the SEEP-formatted Income Statement for 2001 and 2002, referring to GROW's Original Income Statement (FA4-H5b).

With respect to the donations all being recorded on the Income Statement, either simply state it is required by IAS, or take more time if participants have more questions. (See FA4-M5, Trainer Notes on IAS 20.) Whatever method you

choose, be sure that things have been explained clearly and that the group understands fully before you move forward.

When the statement is completed, ask the group for their impressions or reactions to the format.

14. (10–15 minutes) Now ask the participants to complete the same exercise individually for 2003 and 2004.
15. (5–10 minutes) Reconvene the group and go over the answers, using FA4-O8a–b and fielding questions. Pass out FA4-H7, GROW Income Statement, and explain that it will be used in session 6, Portfolio Quality, as GROW's financial statements.

You may want to have a short break or energizer at this point before going on to the next step.

16. (30–60 minutes) Repeat steps 13 through 15 (demonstration or group work, assignment and review) for formatting the Balance Sheet. Use FA4-H5c (GROW Original Balance Sheet), FA4-H8 (GROW Balance Sheet [SEEP Format] form), FA4-H9 (GROW Balance Sheet), and FA4-O9a–c and FA4-O10a–c. Review the answers and take final questions. If necessary, refer back to the flipchart used in session 2 (see Trainer Notes from session 2, point 2), showing relationships between typical and SEEP formats.

There will inevitably be questions about SEEP's format showing all of that year's cash donations on the I/S, and then taking operating profit and cash donations to the B/S separately. Explain to the group that the goal for MFI managers for internal management purposes in their Balance Sheet is to separate operating profit from grants and donations and to be able to clearly see the full amount of grants received. Given these goals, there are three alternatives that MFIs typically use, as shown in FA4-O10 and FA4-H10. Each MFI can do what it wants internally, but the audited reports should comply with IAS and local accounting standards. Options A and B fully comply with IAS, following the recommended "income" approach. Option C does not fully comply with IAS but it would comply with the "capital" approach if all the donations went straight to equity, like the grants for loan fund and fixed assets.

Show visually how this would happen, using FA4-O11. Reference FA4-M5 on IAS 20 for more detailed background. You may want to include the optional additional pages to FA4-H10 if you think that this will help participants better understand the issues.

Be prepared to explain why deferred income is a liability. Tell them that, again, this is an IAS 20 issue. A grant cannot be recognized as income until the conditions have been met. If the conditions are never met, the grant will have to be returned, so it is accounted for as if it were borrowed funds—for example, as a liability—until the conditions are met. Here, too, you may want to include the optional added pages to FA4-H10 if you think they will help the group's understanding.

CASH FLOW

Note: Points 17, 18, 21 (and optional 19 and 20) are JUST AN INTRODUCTION to the cash flow. It is important to keep to the time allocated because this course focuses on ratio analysis.

17. (5 minutes) Ask participants: Do you include a cash flow as an integral part of your standard financial reports? If the answer is yes, then elicit how many use one, how often, how is it formatted, and so forth. If no, try to discover why not. Encourage a brief discussion. Be sure to point out that you are not referring to a cash flow projection of future liquidity, but an analysis of the past year that is an additional financial report.
18. (5 minutes) Explain that many MFIs include this statement as an integral part of their standard financial management reports. It has gone by many different names in the past and has many different formats. Now it is internationally accepted as being called the Cash Flow Statement.

Tell the group that the Cash Flow Statement 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.

Remind the group that, as discussed in session 2 on Cash Flow Statements, all cash flows are classified by operating, investing, and financing activities, but can use either the direct method or the indirect method. Tell them that they are now going to look at both of them (or just one if time is short).

Before they look at these cash flow statements, emphasize that though the Framework recommends these cash flow formats, MFIs that will create Cash Flow Statements should first check their own accounting practices before deciding on a format.

Show FA4-O12a–g, Direct Cash Flow Statement Detail, and pass out FA4-H11a. Referring to the overhead, explain that the direct method starts from cash receipts and cash payments, and then shows all the major classes of gross cash receipts and gross cash payments. This method is very straightforward and recommended by IAS. Stress that IFRS recommends the direct format, but the indirect format is still widely used.

Next show FA4-O12h–j, Indirect Cash Flow Statement Detail, and pass out FA4-H11b. Again referring to the overhead, 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, 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.

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. (15 minutes) **Optional:** If there is time, consider quickly working through either the direct or indirect method cash flow format for 2002 line by line, using FA4-O13a–b and/or FA4-O13c–d, to show where all the numbers come from in the newly formatted GROW financial statements. Try to actively encourage participants to fill in the form by giving answers and explanations. (The answers for the facilitator are provided in FA4-O14a–b and/or FA4-O14c–d and FA4-H13a and/or FA4-H13b.)

If there is no time, tell participants that they are not expected to work through the direct or indirect method cash flow format for 2002 themselves, but blank worksheets are provided in FA4-H12a and FA4-H12b. If they want to try, it is a good homework exercise and you can work through their questions later!

Ask participants to comment on GROW’s position with respect to its sources of funds. The answer should be “dependency on donor financing.”

20. (10 minutes) **Optional:** Show the completed cash flow for three years (FA4-O14a–b and/or FA4-O14c–d) and pass out FA4-H13a and FA4-H13b. Give participants time to look at the cash flow and see if they can pick out the major cash issues for GROW. Lead a brief discussion, asking:
- What does this show us about where GROW has spent its cash? (Answer: There have been huge administrative costs and fast growth in the portfolio.) Ask participants to remember this when they discuss efficiency ratios.
 - What does it show us about where GROW’s cash has come from? Answer: They have improved the cash flow from operations significantly—particularly if the direct method is used and forced savings from the clients are included—but GROW is still very dependent on donor financing in order to have the cash to continue lending. (You may want to discuss the danger of dependence on forced savings.)

Sum up by saying that the purpose here is to show how the sustainability story can be told through the cash flow. As in the I/S and B/S, it is important to separate out donations.

21. (5 minutes) Recap Cash Flow Statements and clarify any issues.

22. (5 minutes) Ask a participant to summarize the main points of the entire session on formatting financial statements.
23. (10 minutes) Ask: Why do we take so much time to format our statements? Why are we doing this? Follow up the group's answers by asking how they will apply these formats back in their MFIs.

Take some time with these last two questions. It is very important that participants understand the importance of adapting and using these formats in their respective MFIs. Make sure that all understand that the main point of taking the time is to have an accurate financial picture of their MFIs.

24. (5 minutes) Close the session and bridge to the next by saying, "Now we have the data organized in a way that enables us to undertake meaningful financial analysis—which is the topic of the next session."
25. (1 minute) **Optional:** You can assign participants homework by giving them additional forms (FA-H6, FA4-H8, FA-H12a, and FA4-H12b) and asking them to complete the exercise for their financial statements on their own. If so, be sure to have made extra copies of the blank formats.

Trainer Notes

- Before handing out FA4-M3, FA4-M4, copy and enlarge to appropriate size depending on whether you are doing the exercise on A4 paper or on flipcharts. Cut on lines so that each definition is on one piece of paper. Include blank pieces when you distribute to groups. Ensure there are enough copies to suit the exercise.
- For FA4-H5 through FA4-H9, color-code the different parts of the GROW case study and related handouts in advance, using different colored papers for each, for easier reference.
- The I/S and B/S definitions exercise is a fun exercise that can be simplified by first doing the income statement and then the balance sheet. It can also be made into a competition with a prize for accuracy (speed often loses). If desired, the definition pieces can be secured to the handouts or flipcharts with tape or Blu Tak, but wait until the forms are complete, as pieces may need to be moved if redefined.
- The class exercise in completing the blank SEEP-formatted income statement can be accomplished in a number of ways:
 - The easiest method is for the trainer to ask for someone in the group to give him/her the figure for the first line item (for example: What is the interest and fee revenue from the loan portfolio in 2002? Answer: It equals 4,719. The trainer can refer to FA4-H7 to verify the answer.) The trainer then fills in the amount on the overhead, answers any questions, and continues through the statements in the same way line by line. However, this approach needs to keep moving or energy levels can really drop.
 - Alternatively, participants could be asked to work through sections of the I/S or in groups, and then review the answers in entirety.
 - The trainer should be prepared to explain the derivation if requested. (See FA4-H7). GROW uses accrual basis for income and expenses. This is in compliance with IAS 1 for audited financial statements. See FA4-M5, Technical Materials on IAS 1. Host country regulations may also influence the accounting approach.

Trainer Instructions

- If the participants are interested to learn more about IAS 20 and accounting for grants, you may want to hand out FA4-M5 as supplemental reading. Please note that FA4-M5 goes into much more detail than you will ever use during the course, but it will provide you with the information you may need to deal with any questions that might arise on these points.
 - For cash flow, note that steps 17, 18, and 21 (and optional 19 and 20) are just an introduction to cash flow. It is important to keep to the time allocated because this course focuses on ratio analysis and not cash flow questions.
 - Supplement your discussion points if necessary, using the Technical Materials on Cash Flow (FA4-M7).
 - Decide in advance whether to include optional steps 19 and 20 or allocate that time to step 18. You can choose to have further discussion outside the scheduled training time for interested participants.
-

SEEP Income Statement – Definitions Worksheet

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	

SEEP Income Statement – Definitions Worksheet

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)	

SEEP Income Statement – Definitions Worksheet

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)	

SEEP Balance Sheet – Definitions Worksheet

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 (Long-term) Investments	
Net Fixed Assets	
Fixed Assets	
Accumulated Depreciation and Amortization	

SEEP Balance Sheet – Definitions Worksheet

Total Assets	
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	
Paid-in Capital	

SEEP Balance Sheet – Definitions Worksheet

Donated Equity	
Donated Equity – Prior Years	
Donated Equity – Current Year	
Retained Earnings	
Retained Earnings – Prior Years	
Retained Earnings – Current Year	
Reserves	
Other Equity Accounts	
Adjustment to Equity	
Total Equity	
Total Liabilities + Equity	

SEEP Income Statement – Definitions

Financial Revenue	The total value of all revenue earned from the provision of financial services
Financial Revenue from Loan Portfolio	Revenue from interest, fees, commissions, and other fees earned on the loan portfolio, including not only interest paid in cash but also interest accrued but not yet paid
Interest on Loan Portfolio	Interest earned on the loan portfolio
Fees and Commissions on Loan Portfolio	Penalties, commissions, and other fees earned on the loan portfolio
Financial Revenue from Investment	Revenue from interest, dividends, and other payments generated by financial assets other than the loan portfolio, such as interest-bearing deposits, certificates of deposit, and treasury obligations
Other Operating Revenue	All other revenue from the provision of financial services, including transaction fees, premiums, membership fees, passbooks, and smartcards
Financial Expense	The total value of all financial expenses incurred from operations
Financial Expense on Funding Liabilities	Total interest and fee expense on deposits and borrowings
Interest and Fee Expense on Deposits	Interest and fees incurred on all deposits taken by the MFI
Interest and Fee Expense on Borrowings	Interest and fees incurred on all borrowings that fund the loan portfolio
Other Financial Expense	Other financial expense related to financial services, including interest on nonfunding liabilities, such as mortgages, and loans linked to fixed assets, such as vehicles

← Cut along **ALL** dotted lines and distribute definitions only.

SEEP Income Statement – Definitions

Net Financial Income	The net value of financial earnings from financial services
Impairment Losses on Loans	Previously known as net loan loss provision expense, is now provision for loan impairment net of the value of loans recovered
Provisions for Loan Impairment	Previously known as the loan loss provision expense, the noncash expense calculated as a percentage of the value of the loan portfolio that is at risk of default
Value of Loans Recovered	Total value of principal recovered on all loans previously written off—includes principal on partially recovered loans and those recovered in full
Operating Expense	The total value of all operating expenses, including personnel and administrative expenses incurred in providing financial services
Personnel Expense	Includes staff salaries, bonuses, and benefits, as well as employment taxes and the cost of employee recruitment and initial orientation, but not the cost of ongoing or specialized training for existing employees, which is an administrative expense
Administrative Expense	Nonfinancial expenses, excluding personnel directly related to the provision of financial services or other services, that form an integral part of an MFI's financial services relationship with its clients
Depreciation and Amortization Expense	The noncash expense that allocates the purchase cost of an MFI's fixed assets over their useful economic life. The depreciation expense is used to create or increase accumulated depreciation and amortization on the balance sheet. Amortization is used for other tangible assets, such as software.
Other Administrative Expense	All administrative expenses other than depreciation expense—examples include rent, utilities, supplies, advertising, transportation, communications, and consulting fees.
Net Operating Income	The net earnings from the provision of financial services
Net Nonoperating Income/(Expense)	The net earnings from products and services not directly related to core microfinance operations

← Cut along **ALL** dotted lines and distribute definitions only.

SEEP Income Statement – Definitions

Nonoperating Revenue	All revenue not directly related to core microfinance operations, such as revenue from business development services, training, consulting services, management information system sales, or sale of merchandise
Nonoperating Expense	All expenses not directly related to the core microfinance operation, such as the cost of providing business development services or training—also includes any exceptional losses and expenses
Net Income (Before Taxes and Donations)	All net earnings from the institution's operations before the inclusion of taxes and donations
Taxes	Includes all taxes paid on net income or other measure of profit as defined by local tax authorities
Net Income (After Taxes and Before Donations)	All net earnings from the institution's operations, net of taxes, and before the inclusion of donations
Donations	Value of all donations recognized as revenue during the period, whether restricted or not
Donations for Loan Capital	Value of all donations used to fund the loan portfolio. Many MFIs are accustomed to applying donations for loan capital directly to the balance sheet. This framework requires that they are first booked as nonoperating revenue to increase transparency.
Donations for Operating Expense	Value of all donations used to pay for operations other than funding the loan portfolio—includes paying personnel and administrative expenses and purchasing fixed assets
Net Income (After Taxes and Donations)	All net earnings from the institution's operations, net of taxes, and after the inclusion of donations

← Cut along **ALL** dotted lines and distribute definitions only.

SEEP Balance Sheet – Definitions

Cash and Due from Banks	Cash on hand, near cash, and other highly liquid instruments paying little or no interest—may include non-interest-bearing bank balances and deposits
Trade Investments	Any financial assets acquired or incurred primarily for the purpose of selling or repurchasing in the near term
Net Loan Portfolio	The gross loan portfolio less the impairment loss allowance
Gross Loan Portfolio	All outstanding balances of principals due within or at 12 months for all outstanding client loans—includes current, delinquent, and renegotiated loans, but not loans that have been not written off
Impairment Loss Allowance	Previously known as the Loan Loss Allowance, the portion of the gross loan portfolio that has been expensed (provisioned for) in anticipation of losses due to default
Interest Receivable on Loan Portfolio	Interest receivable on the gross loan portfolio net of any expense to reduce accrued interest if the collection of the accrued interest is considered uncertain
Accounts Receivable and Other Assets	Accounts receivable, notes receivables, and other receivables, net of any allowances for doubtful or uncollectible accounts
Other (Long-term) Investments	Includes investments that have a fixed maturity or payments that the MFI intends to hold to maturity
Net Fixed Assets	The cost or value of all physical property and other tangible assets that the MFI currently uses less accumulated depreciation expense
Fixed Assets	The cost or value of all physical property and property improvements, furniture, and equipment that the MFI currently uses (including all donated equipment that the MFI owns)—may also include other tangible assets, such as software
Accumulated Depreciation and Amortization	The sum of all depreciation expenses for fixed assets and the amortization of other tangible assets that have not yet been retired and removed from the Balance Sheet

← Cut along **ALL** dotted lines and distribute definitions only.

SEEP Balance Sheet – Definitions

Total Assets	The value of all asset accounts net of all contra asset accounts
Demand Deposits	Deposits mobilized from the general public and members that the MFI is liable to repay on demand
Short-term Time Deposits	Deposits mobilized from the general public and members that the MFI is liable to repay on a fixed date within 12 months of the statement date
Short-term Borrowings	The principal balance due within or at 12 months from the statement date for all funds received through a loan or other contractual debt agreement
Interest Payable on Funding Liabilities	Interest accrued on liability accounts that fund financial operations—does not include borrowing for purchasing or improving real estate or other fixed assets such as vehicles
Accounts Payable and Other Short-term Liabilities	Other short-term liabilities due within 12 months, including tax and salary liabilities, payroll withholdings, and other accounts payable—should also include any short-term portion of deferred revenue
Long-term Time Deposits	Deposits mobilized from the general public and members that the MFI is liable to repay with a fixed maturity date greater than 12 months from the statement date
Long-term Borrowings	The principal balance due in more than 12 months for all funds received through a loan or other contractual agreement and all subordinated debt
Other Long-term Liabilities	Other long-term liabilities due in more than 12 months, including long-term deferred revenue, pension liabilities, and liabilities that do not directly fund the financial operations of the MFI portfolio, such as mortgages on real estate and other loans for fixed asset purchases
Total Liabilities	The total value of all liability accounts
Paid-in Capital	The value of capital paid by shareholders or members net of any shares repurchased or capital repaid

← Cut along **ALL** dotted lines and distribute definitions only.

SEEP Balance Sheet – Definitions

Donated Equity	The total value of all donations received and recognized as revenue
Donated Equity – Prior Years	The cumulative value of donations from prior fiscal years
Donated Equity – Current Year	The value of donations from the current fiscal year
Retained Earnings	The total value of net income (after taxes and before donations) from current and prior periods, net of any dividends paid to shareholders or members
Retained Earnings – Prior Years	The cumulative value of net income (after taxes and before donations) from prior periods, net of dividends paid to shareholders or members
Retained Earnings – Current Year	The value of net income (after taxes and before donations) from the current fiscal year
Reserves	Reserves such as those imposed by law, statute, or board decision
Other Equity Accounts	Other equity accounts, including all revaluations and adjustments. For MFIs required to use inflation-based accounting, this account should be used to offset the net inflation expense. The MFI should disclose any substantial item in this account.
Adjustment to Equity	Adjustments to the Balance Sheet to account for subsidized funds, in-kind subsidies, and inflation
Total Equity	Total value of all equity accounts
Total Liabilities + Equity	Total value of all liabilities and equity accounts

← Cut along **ALL** dotted lines and distribute definitions only.

Technical Materials on IAS 20

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.¹ *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.

CGAP RECOMMENDATIONS ON MFI AUDITED FINANCIAL STATEMENTS

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

¹ 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.

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.

Technical Materials on IAS 1

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.

Technical Materials on Cash Flow

The purpose of these trainer notes is:

- To let you know the decisions on the new cash flow format for the FA course (it is advisable to read the relevant section from the Framework manual)
- To give some technical background on cash flow statements
- To comment on the cash flow statements in the FA course

THE NEW CASH FLOW FORMAT DECISIONS AND WHY

There is no one definitive SEEP Cash Flow Statement format for management purposes like the Income Statement and Balance Sheet in the SEEP Framework for Reporting, Analysis, and Monitoring.

In the SEEP Framework, two types of cash-flow formats are presented and recommended for MFIs to use.

The main reason for this decision is that there is a much wider range of practice in the use of cash flows in microfinance than in the other basic statements.

The practice ranges from no use at all, to following national audit practices, to mix-and-match versions using the wide range of possible options. Furthermore, the CGAP FA course focuses on encouraging MFIs to follow good management and accounting practices internally and to understand why they are good practices. In the case of the Cash Flow Statement, it is very important for participants to understand the different methods and how the alternatives can help them as managers.

IAS principles, banking, and microfinance practice will be the basis for designing examples to be used in the courses.

There are now two standard examples of cash flow formats in the FA course (per the Framework):

1. The direct method—recommended by IAS 7 and used by some MFIs
2. The indirect method—recognized by IAS 7 and used widely by banks and by some MFIs

There are also examples of the options MFIs may choose to classify two of the key elements of their cash flows within these basic formats. There is no one right way for managers to prepare cash flow reports for internal purposes—it will depend on what each manager finds useful.

- The loan portfolio may be classified under operating activities or under investing activities (see points 5 and 6 below).
- Client savings may be classified under operating activities or under financing activities (see points 5 and 6 below).

CASH FLOW STATEMENTS

1. Brief history of the Cash Flow Statement and its value to users

The Cash Flow Statement was not required by the majority of countries for external financial reporting until around 1987, and the international accounting standard only became effective in 1994. So this is a recent development in accounting history. Cash Flow Statements allow users to evaluate the financial structure of a business, determine ability to generate cash (as opposed to profit), evaluate amount and timings to determine ability to adapt to changing circumstances, enable modeling to assess the present value of future cash flows, and enhance comparability of operating performance after eliminating the effects of different accounting treatments. Is it relevant to MFIs? Yes, in addition to the value provided to managers, cash flow statements are particularly relevant to those MFIs that may approach commercial banks and private investors for funding.

According to *Accounting for Dummies*:

...the accounting profession had turned a deaf ear to calls from the investment community for routine cash flow statements from businesses. Accountants had presented a funds flow statement, ...but that report proved to be a disaster—the term “funds” included more assets than just cash and represented a net amount after deducting short-term liabilities from assets. The reluctance to require cash flow statements came from fears that the cash flow from profit figure would usurp net income—people would lose confidence in the net income line. Those fears were unfounded: Although the income statement continues to get most of the fanfare (because it shows the magic bottom-line number of net income), the cash flow statement does get its share of attention, and deservedly so.

The author of the Interpretation and Application of IAS has another perspective: “One reason why the financial statement preparer community did not more quickly embrace a cash flow concept is that the accounting profession had long had a significant aversion to the cash basis measurement of enterprise operating performance. This was largely the result of its commitment to accrual basis accounting, which recognizes revenues when earned and expenses when incurred, and which views cash flow reporting as a back door approach to cash-basis accounting. By focusing instead on funds, which most typically was defined as net working capital, items such as receivables and payables were included, thereby preserving the essential accrual basis characteristic of the flow measurement. On the other hand, this failed to give statement users meaningful insight into the entities’ sources and uses of cash per se.”

The international accounting standard, which became effective in 1994, embraces the somewhat simpler U.S. approach but offers greater flexibility, thus effectively incorporating the U.K. view without adding to the structural complexity of the Cash Flow Statement itself. Today, the clear consensus of national and international accounting standard setters is that the Statement of Cash Flows is a necessary component of complete financial reporting.

2. Objectives of the Cash Flow Statement

IAS 7 states: “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.”

As its name states, the Cash Flow Statement is a flow statement that represents the inflows and outflows of cash during a specified period. Of the three main financial statements, the cash flow (or sources and uses of funds) is the statement MFIs are least likely to create. A

monthly Cash Flow Statement is a valuable liquidity management tool, and without sufficient cash, MFIs cannot disburse loans, pay employees, and settle debts.

The Cash Flow Statement summarizes each transaction or event that causes cash to increase (the sources of cash) or decrease (the uses of cash). Increases in cash, however, are not sources; rather, the sources of cash are the events that cause the cash increase. Similarly, decreases in cash are not uses; the events causing cash to decrease are the uses. For example, the increase in the Gross Loan Portfolio is not the use of cash; rather, the use is the disbursement of loans to clients.

The sources of cash can include events that cause the following changes:

- A decrease in assets other than cash, such as receiving loan repayments from clients
- An increase in liabilities, such as accepting a deposit or borrowing from a bank
- An increase in paid-in capital, such as selling shares to investors or members
- An increase in retained earnings through generating net income (after taxes and donations)

The uses of cash can include events that cause the following changes:

- Increases in assets other than cash, such as making loans to clients
- Decreases in liabilities, such as repaying a deposit or paying the principal on borrowed funds
- Decreases in paid-in capital, such as repurchasing shares or reimbursing member shares
- Decreases in retained earnings through generating a net loss (after taxes and donations) or payment of dividends to shareholders

A Cash Flow Statement classifies these inflows and outflows of cash into the following three major categories:

- Operating activities—the cash receipts and payments related to the MFI's ongoing provision of financial services, including lending and deposit services
- Investing activities—the cash receipts or outlays for acquiring or selling Fixed Assets or financial investments
- Financing activities—the borrowing and repayment of borrowings, the sale and redemption of paid-in capital, and the payment of dividends

For financial institutions, the distinction between operating activities and financing activities may be a bit confusing. Operating activities include most activities that would appear as operating income and operating expenses on the Income Statement, as well all lending activity that appears on a portfolio report. For example, accepting and repaying deposits is considered an operating activity because these actions are financial services, whereas borrowing is considered a financing activity. All interest paid on deposits and borrowings, however, is considered an operating activity. The table below presents examples of the items included in each of these categories.

Several accounts in a Cash Flow Statement are similar to those in an Income Statement, particularly if an MFI uses cash accounting. For instance, cash received from income, fees, and commissions on loan portfolio is the same as financial revenue from loan portfolio if the

Classification	Receipts	Payment
Operating activities	<ul style="list-style-type: none"> ▪ Principal repayments ▪ Interest and fee receipts on the Gross Loan Portfolio and investments ▪ Other receipts for the provision of financial services ▪ Funds received from accepting deposits 	<ul style="list-style-type: none"> ▪ Loan disbursements ▪ Purchase of trade investments ▪ Interest and fee payments ▪ Payment to personnel or for administrative expenses ▪ Taxes paid ▪ Funds repaid to depositors
Investing activities	<ul style="list-style-type: none"> ▪ Proceeds from the sale of an investment ▪ Proceeds from the sale of fixed assets 	<ul style="list-style-type: none"> ▪ Purchase of other investments ▪ Purchase of fixed assets
Financing activities	<ul style="list-style-type: none"> ▪ Funds received from borrowings ▪ Receipt of paid-in capital from the sale of shares or membership 	<ul style="list-style-type: none"> ▪ Principal repaid on borrowings ▪ Repurchase of paid-in capital ▪ Payment of dividends

MFI uses cash accounting. If an MFI accrues interest, these two accounts may not be the same.

3. Benefits of cash flow information

IAS 7, point 4, states:

A cash flow statement, when used in conjunction with the rest of the financial statements, provides information that enables users to evaluate the changes in net assets of an enterprise, its financial structure (including its liquidity and solvency) and its ability to affect the amounts and timing of cash flows in order to adapt to changing circumstances and opportunities. Cash flow information is useful in assessing the ability of the enterprise to generate cash and cash equivalents and enables users to develop models to assess and compare the present value of the future cash flows of different enterprises. It also enhances the comparability of the reporting of operating performance by different enterprises because it eliminates the effects of using different accounting treatments for the same transactions and events.

Historical cash flow information is often used as an indicator of the amount, timing and certainty of future cash flows. It is also useful in checking the accuracy of past assessments of future cash flows and in examining the relationship between profitability and net cash flow and the impact of changing prices.

In plain language, this means that Cash Flow Statements, when used together with the other financial statements, answer four important questions:

- a. What are the major amounts, timing, and nature of cash flows, are they over a series of statements, and how much control does the institution have over them?
- b. How does the present value of this institution's cash flow compare to similar institutions?
- c. 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?

- d. 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?)

All of these points are increasingly important to MFI managers as their institutions grow. So the Cash Flow Statement is also becoming increasingly important.

4. Presentation of a Cash Flow Statement

IAS 7, point 10, states: “The cash flow statement should report cash flows during the period classified by operating, investing and financing activities.”

Point 11 continues, “Classification by activity provides information that allows users to assess the impact of those activities on the financial position of the enterprise and the amount of its cash and cash equivalents. This information may also be used to evaluate the relationships among those activities.”

In other words, Cash Flow Statements need to classify the cash flows into operating, investing, and financing activities, so that they provide more useful information about the types of activities that are generating and using the cash. But what do these categories include?

5. What are operating activities?

IAS 7, point 14, states: “Cash flows from operating activities are primarily derived from the principal revenue-producing activities of the enterprise. Therefore, they generally result from the transactions and other events that enter into the determination of net profit or loss.”

In other words, operating activities include delivering or producing goods for sale and providing services—the income-earning activities. The cash flow from operating activities will tell the reader whether the MFI generated sufficient cash flows to maintain the operating capability of the MFI without needing to use external sources of financing.

Application to Microfinance

This definition from IAS 7 of “the principal revenue-producing activities of the enterprise” indicates that we should include the cash flows from the portfolio in operating activities. IAS 7, points 15 and 19, recommend that financial institutions classify the loan portfolio as an operating activity. This is particularly applicable to microfinance because the loans are very short-term, (in contrast to larger financial institutions that make up to 30-year loans). Some MFIs choose not to follow this IAS recommendation and classify the loan portfolio as an investing activity. For their reasons, see point 6 below.

There is some debate in microfinance about whether savings should be classified as an operating or a financing activity, and also whether compulsory savings should be treated the same as voluntary savings. IAS 7, points 15 and 19, recommend that financial institutions classify savings as an operating activity. Those in favor of classifying both types of savings as an operating activity follow this IAS principle. Furthermore, in microfinance, savings (especially compulsory savings) are an integral part of the methodology, so it is argued that there should be no debate about classifying savings as an operating activity. However, some MFIs choose not to follow this IAS recommendation and classify all savings as a financing activity. For their reasons and the problems involved, see point 6 below. Still other MFIs classify compulsory savings as an operating activity and voluntary savings as a financing activity.

6. What are investing activities?

IAS 7, point 16, states:

The separate disclosure of cash flows arising from investing activities is important because the cash flows represent the extent to which expenditures have been made for resources intended to generate future income and cash flows. Examples of cash flows arising from investing activities are:

- a. cash payments to acquire property, plant and equipment, intangibles and other long-term assets. These payments include those relating to capitalized development costs and self-constructed property, plant and equipment;
- b. cash advances and loans made to other parties (other than advances and loans made by a financial institution)

If you look at the cash flow from the investing activities of an institution, you will be able to see what resources have been allocated to generating future income and cash flows.

Application to Microfinance

IAS 7 recommends that loans made by a financial institution do not fit under investing activities—lending is an operating activity for financial institutions, not an investing activity, and in microfinance it is no different. However, many in the financial and microfinance sectors 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, they include their loan portfolio as an investing activity. This makes some sense for large financial institutions for which a significant percentage of the loan portfolio is large loans for up to 30 years. These could be considered a type of investing activity. However, this argument is less plausible for microfinance institutions making small, short-term loans.

Considering yet a third view, it is suggested by some finance professionals that the examination of savings and the loan portfolio in cash flow for financial institutions is not critical. Why? Because cash is the core business of financial institutions and it is easy to access. Thus, it is felt that the flow of funds from savings and loans distorts the financial picture, particularly if not reported as net flows. They argue that cash available from savings and the loan portfolio is not cash available from operations. We would not want to use all of our savings for operations, except on a very temporary basis, nor cash in our assets to pay our day-to-day costs. In this argument, taking loans and savings into operations activities confuses the issue of analyzing the true operations that provide adequate cash to run the day-to-day business.

7. What are financing activities?

IAS 7, point 17, states:

The separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of capital to the enterprise. Examples of cash flows arising from financing activities are:

- a. cash proceeds from issuing shares or other equity instruments;...

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

Application to Microfinance

One of the major sources of financing for an MFI is donor funds. Even though they are not mentioned specifically in IAS, they are always included under financing activities.

As outlined in point 5 above, one of the debates in microfinance is whether savings should be an operating or a financing activity. IAS recommends that savings is an operating activity. Those in favor of classifying savings as a financing activity say that MFIs that require compulsory savings or have voluntary savings services do so in order to be able to lend them out again. In other words, the savings are a source of financing for the MFIs, so they should be classified as a financing activity. This argument for voluntary savings is consistent with many of the major international banks that classify savings as a financing activity. But compulsory savings is very different matter. Most MFIs that require compulsory savings have no license to collect savings. (They are often allowed to continue this activity on the understanding that it is an integral part of their lending—a type of cash guarantee.) If those MFIs classify compulsory savings as a financing activity, then they are declaring that their compulsory savings activity is not an integral part of their methodology but a financing activity, and they could be considered to be violating the law.

8. How do you report cash flows from operating activities?

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 which may be useful in estimating future cash flows and which 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 (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 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 encourage 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 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.

9. 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, point 22, specifies two exceptions where netting of cash flows is allowed. Items with quick turnovers, large amounts, and short maturities may be presented as net cash flows. These include:

1. Cash receipts and payments on behalf of customers, when the cash flows reflect the activities of the customers rather than those of the bank—for example, the acceptance and repayment of demand deposits
2. Cash flows relating to deposits with fixed maturity dates
3. Placements and withdrawals of deposits from other financial institutions
4. Cash advances and loans to banks' customers and repayments thereon

Application to Microfinance

Rather than follow this point 22 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:

1. Any MFI that chooses to show the gross cash flows will show huge cash flows because cash is the business of microfinance. MFIs' business is to lend cash and be paid back!

MFI's do not have a unique ability to generate cash; rather, it is the nature of their business.

2. The term of the loans will directly affect the size of the cash flows; the shorter the term, the greater the cash flows.

10. 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 criticism, and passing judgment based on a financial statement isn't totally fair because it doesn't 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

The key question is: Does this MFI have enough cash to operate? You can't answer that question by just examining the Cash Flow Statement, or any of the financial statements, for that matter. Every business needs a buffer of cash to protect against unexpected developments and to take advantage of unexpected opportunities. If you were the boss of this MFI, how much working cash balance would you want? Not an easy question to answer! Don't forget that 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.

The primary differences between the Income Statement and the Cash Flow Statement are as follows:

- The Cash Flow Statement excludes or eliminates the effects of noncash expenses (such as depreciation and amortization or impairment losses on loans)
- The Cash Flow Statement includes cash transactions and events that are neither revenue nor expense, but increase or decrease assets or liabilities (such as loans disbursed or purchases of fixed assets)

If an MFI uses cash accounting, many of the revenue and expense accounts of the Income Statement have the same value as the operating sources and uses of cash on the Cash Flow Statement. If an MFI uses accrual accounting, many of the revenue and expense accounts will be slightly more or less than the cash flow statement accounts, because the MFI recognized revenue and expenses before they were actually received or paid.

COMMENTS ON CASH FLOW IN THE FA COURSE

If you think that the cash flow will be too much for your participants to process, then you are free to exclude it. However, the feedback we have been getting is that participants are usually very interested in it because it is new for them. If you opt to use it, then you will need to be prepared to answer their questions.

In the short amount of time available to address the cash flow in the course, it is more important that participants learn to understand what the numbers tell the reader than to actually calculate the numbers. There are usually people who have heard of or seen cash flow before, but do not understand what it is telling them. There was even one finance manager who prepared quarterly cash flows, but did not know what they meant!

Please note that GROW is using accrual accounting. For an MFI that uses accrual accounting, the direct method cash flow starts with information on receipts and disbursements from the MFI's cash book/account. Unfortunately, in the FA course we do not have the cash book or the list of transactions to be able to separate out the cash from the accruals in the cash flow. (We do in the Accounting course.) Therefore, the numbers in the direct method cash flow are not perfect. However, the results are good enough to give a clear picture of GROW's cash flows.

The formats could be useful to participants if they want to take them back to apply in their MFI.

Material in these notes is adapted from:

Accounting for Dummies, by John A. Tracy, CPA, published by IDG Books Worldwide

International Accounting Standards 2000, published by the International Accounting Standards Committee

IAS 2001 Interpretation and Application, by Epstein and Mirza, published by John Wiley & Sons, Inc.

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

Internal e-mail communication among a number of CGAP staff and technical consultants

Overheads

THE COMPLETE SET OF OVERHEADS IS IN A SEPARATE POWERPOINT FILE ENTITLED "CGAP FINANCIAL ANALYSIS OVERHEADS."

FA4-01



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SEEP Income Statement

FA4-02

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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SEEP Balance Sheet

FA4-O3

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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SEEP Income Statement – Definitions

FA4-O4a

ACCOUNT NAME	DEFINITION
Financial Revenue	The total value of all revenue earned from the provision of financial services
Financial Revenue from Loan Portfolio	Revenue from interest, fees, commissions, and other fees earned on the loan portfolio—this includes not only interest paid in cash but also interest accrued but not yet paid
Interest on Loan Portfolio	Interest earned on the loan portfolio
Fees and Commissions on Loan Portfolio	Penalties, commissions, and other fees earned on the loan portfolio
Financial Revenue from Investments	Revenue from interest, dividends, and other payments generated by financial assets other than the loan portfolio, such as interest-bearing deposits, certificates of deposit, and treasury obligations
Other Operating Revenue	All other revenue from the provision of financial services, including transaction fees, premiums, membership fees, passbooks, and smartcards

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FA4-O4b

SEEP Income Statement – Definitions *(continued)*

ACCOUNT NAME	DEFINITION
Financial Expense	The total value of all financial expenses incurred from operations
Financial Expense on Funding Liabilities	Total Interest and fee expense on deposits and borrowings
Interest and Fee Expense on Deposits	Interest and fees incurred on all deposits taken by the MFI
Interest and Fee Expense on Borrowings	Interest and fees incurred on all borrowings that fund the loan portfolio
Other Financial Expense	Other financial expense related to financial services, including interest on nonfunding liabilities—for example, mortgages or loans linked to fixed assets such as vehicles

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FA4-O4c

SEEP Income Statement – Definitions *(continued)*

ACCOUNT NAME	DEFINITION
Net Financial Income	The net value of financial earnings from financial services
Impairment Losses on Loans	Previously known as Net Loan Loss Provision Expense, is now provision for loan impairment net of the value of loans recovered
Provision for Loan Impairment	Previously known as the Loan Loss Provision Expense, the noncash expense calculated as a percentage of the value of the loan portfolio that is at risk of default
Value of Loans Recovered	Total value of principal recovered on all loans previously written off—includes principal on partially recovered loans and those recovered in full

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FA4-O4d

SEEP Income Statement – Definitions *(continued)*

ACCOUNT NAME	DEFINITION
Operating Expense	The total value of all operating expenses, including personnel and administrative expenses incurred in providing financial services
Personnel Expense	Includes staff salaries, bonuses, and benefits, as well as employment taxes and the cost of employee recruitment and initial orientation, but not the cost of ongoing or specialized training for existing employees, which is an administrative expense
Administrative Expense	Nonfinancial expenses excluding personnel directly related to the provision of financial services or other services that form an integral part of an MFI's financial services' relationships with its clients
Depreciation and Amortization Expense	The noncash expense that allocates the purchase cost of an MFI's fixed assets over their useful economic life. The depreciation expense is used to create or increase accumulated depreciation and amortization on the Balance Sheet. Amortization is used for other tangible assets, such as software.
Other Administrative Expense	All administrative expenses other than depreciation expense—examples include rent, utilities, supplies, advertising, transportation, communications, and consulting fees

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FA4-O4e

SEEP Income Statement – Definitions *(continued)*

ACCOUNT NAME	DEFINITION
Net Operating Income	The net earnings from the provision of financial services
Net Nonoperating Income/(Expense)	The net earnings from products and services not directly related to core microfinance operations
Nonoperating Revenue	All revenue not directly related to core microfinance operations, such as revenue from business development services, training, consulting services, management information system sales, or sale of merchandise
Nonoperating Expense	All expenses not directly related to the core microfinance operation, such as the cost of providing business development services or training—also includes any exceptional losses and expenses
Net Income (Before Taxes and Donations)	All net earnings from the institution's operations before the inclusion of taxes and donations
Taxes	Includes all taxes paid on net income or other measure of profit as defined by local tax authorities

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FA4-O4f

SEEP Income Statement – Definitions *(continued)*

ACCOUNT NAME	DEFINITION
Net Income (After Taxes and Before Donations)	All net earnings from the institution's operations, net of taxes, and before the inclusion of donations
Donations	Value of all donations recognized as revenue during the period, whether restricted or not
Donations for Loan Capital	Value of all donations used to fund the loan portfolio. Many MFIs are accustomed to applying donations for loan capital directly to the Balance Sheet. This framework requires that they are first booked as nonoperating revenue to increase transparency.
Donations for Operating Expense	Value of all donations used to pay for operations other than funding the loan portfolio—includes paying personnel and administrative expenses and purchasing fixed assets
Net Income (After Taxes and Donations)	All net earnings from the institution's operations, net of taxes, and after the inclusion of donations

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FA4-O5a

SEEP Balance Sheet – Definitions

ACCOUNT NAME	DEFINITION
ASSETS	
Cash and Due from Banks	Cash on hand, near cash, and other highly liquid instruments paying little or no interest—may include non-interest-bearing bank balances and deposits
Trade Investments	Any financial assets acquired or incurred primarily for the purpose of selling or repurchasing in the near term
Net Loan Portfolio	The gross loan portfolio less the impairment loss allowance
Gross Loan Portfolio	All outstanding balances of principals due within or at 12 months for all outstanding client loans—includes current, delinquent, and renegotiated loans, but not loans that have been not written off
Impairment Loss Allowance	Previously known as the Loan Loss Allowance, the portion of the gross loan portfolio that has been expensed (provisioned for) in anticipation of losses due to default

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SEEP Balance Sheet – Definitions *(continued)* FA4-O5b

ACCOUNT NAME	DEFINITION
Interest Receivable on Loan Portfolio	Interest receivable on the gross loan portfolio net of any expense to reduce accrued interest if the collection of the accrued interest is considered uncertain
Accounts Receivable and Other Assets	Accounts receivable, notes receivables, and other receivables, net of any allowances for doubtful or uncollectible accounts
Other (Long-term) Investments	Includes investments that have a fixed maturity or payments that the MFI intends to hold to maturity
Net Fixed Assets	The cost or value of all physical property and other tangible assets that the MFI currently uses less accumulated depreciation expense
Fixed Assets	The cost or value of all physical property and property improvements, furniture, and equipment that the MFI currently uses (including all donated equipment that the MFI owns)—may also include other tangible assets, such as software
Accumulated Depreciation and Amortization	The sum of all depreciation expenses for fixed assets and the amortization of other tangible assets that have not yet been retired and removed from the Balance Sheet
Total Assets	The value of all asset accounts net of all contra asset accounts

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SEEP Balance Sheet – Definitions *(continued)* FA4-O5c

ACCOUNT NAME	DEFINITION
LIABILITIES	
Demand Deposits	Deposits mobilized from the general public and members that the MFI is liable to repay on demand
Short-term Time Deposits	Deposits mobilized from the general public and members that the MFI is liable to repay on a fixed date within 12 months of the statement date
Short-term Borrowings	The principal balance due within or at 12 months from the statement date for all funds received through a loan or other contractual debt agreement
Interest Payable on Funding Liabilities	Interest accrued on liability accounts that fund financial operations—does not include borrowing for purchasing or improving real estate or other fixed assets such as vehicles
Accounts Payable and Other Short-term Liabilities	Other short-term liabilities due within 12 months, including tax and salary liabilities, payroll withholdings, and other accounts payable—should also include any short-term portion of deferred revenue

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FA4-O5d

SEEP Balance Sheet – Definitions *(continued)*

ACCOUNT NAME	DEFINITION
Long-term Time Deposits	Deposits mobilized from the general public and members that the MFI is liable to repay with a fixed maturity date greater than 12 months from the statement date
Long-term Borrowings	The principal balance due in more than 12 months for all funds received through a loan or other contractual agreement and all subordinated debt
Other Long-term Liabilities	Other long-term liabilities due in more than 12 months, including long-term deferred revenue, pension liabilities, and liabilities that do not directly fund the financial operations of the MFI portfolio, such as mortgages on real estate and other loans for fixed asset purchases
Total Liabilities	The total value of all liability accounts

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FA4-O5e

SEEP Balance Sheet – Definitions *(continued)*

ACCOUNT NAME	DEFINITION
EQUITY	
Paid-in Capital	The value of capital paid by shareholders or members net of any shares repurchased or capital repaid
Donated Equity	The total value of all donations received and recognized as revenue
Donated Equity – Prior Years	The cumulative value of donations from prior fiscal years
Donated Equity – Current Year	The value of donations from the current fiscal year
Retained Earnings	The total value of net income (after taxes and before donations) from current and prior periods, net of any dividends paid to shareholders or members
Retained Earnings – Prior Years	The cumulative value of net income (after taxes and before donations) from prior periods, net of dividends paid to shareholders or members
Retained Earnings – Current Year	The value of net income (after taxes and before donations) from the current fiscal year

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SEEP Balance Sheet – Definitions *(continued)*

ACCOUNT NAME	DEFINITION
Reserves	Reserves such as those imposed by law, statute, or board decision
Other Equity Accounts	Other equity accounts, including all revaluations and adjustments. For MFIs required to use inflation-based accounting, this account should be used to offset the net inflation expense. The MFI should disclose any substantial item in this account.
Adjustment to Equity	Adjustments to the Balance Sheet to account for subsidized funds, in-kind subsidies, and inflation
Total Equity	Total value of all equity accounts
Total Liabilities + Equity	Total value of all liabilities and equity accounts



Summary of New Features/Differences

INCOME STATEMENT

- Donor funds are treated “below the line.”
- Donor money is recorded after the net income (after taxes).

BALANCE SHEET

There are three separate sources of equity from the income statement:

- Retained earnings/losses – current year (minus cash donations)
- Donations – current year
- Other capital accounts – including net nonoperational revenue

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.

FA4-O7a

GROW Income Statement (SEEP Format)

As of December 31
(All amounts in local currency)

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
I1	Financial Revenue				
I2	Financial Revenue from Loan Portfolio				
I3	Interest on Loan Portfolio				
I4	Fees and Commissions on Loan Portfolio				
I5	Financial Revenue from Investments				
I6	Other Operating Revenue				
I7	Financial Expense				
I8	Financial Expense on Funding Liabilities				
I9	Interest and Fee Expense on Deposits				
I10	Interest and Fee Expense on Borrowings				
I11	Other Financial Expense				
I12	Net Financial Income				
I13	Impairment Losses on Loans				
I14	Provision for Loan Impairment				
I15	Value of Loans Recovered				

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FA4-O7b

GROW Income Statement (SEEP Format) (continued)

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
I16	Operating Expense				
I17	Personnel Expense				
I18	Administrative Expense				
I19	Depreciation and Amortization Expense				
I20	Other Administrative Expense				
I21	Net Operating Income				
I22	Net Nonoperating Income/(Expense)				
I23	Nonoperating Revenue				
I24	Nonoperating Expense				
I25	Net Income (Before Taxes and Donations)				
I26	Taxes				
I27	Net Income (After Taxes and Before Donations)				
I28	Donations				
I29	Donations for Loan Capital				
I30	Donations for Operating Expense				
I31	Net Income (After Taxes and Donations)				

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FA4-O8a

GROW Income Statement

As of December 31
(All amounts in local currency)

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
I1	Financial Revenue	3,922	4,719	6,342	10,082
I2	Financial Revenue from Loan Portfolio	3,922	4,719	6,342	10,082
I3	Interest on Loan Portfolio	3,922	4,719	6,342	10,082
I4	Fees and Commissions on Loan Portfolio				
I5	Financial Revenue from Investments				
I6	Other Operating Revenue				
I7	Financial Expense	434	371	292	823
I8	Financial Expense on Funding Liabilities	434	371	292	823
I9	Interest and Fee Expense on Deposits				
I10	Interest and Fee Expense on Borrowings	434	371	292	823
I11	Other Financial Expense				
I12	Net Financial Income	3,488	4,348	6,050	9,259
I13	Impairment Losses on Loans	(16)	145	231	430
I14	Provision for Loan Impairment	186	157	261	472
I15	Value of Loans Recovered	(202)	(12)	(30)	(42)

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FA4-O8b

GROW Income Statement (continued)

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
I16	Operating Expense	2,210	2,760	3,295	4,562
I17	Personnel Expense	1,456	1,851	2,116	3,009
I18	Administrative Expense	754	909	1,179	1,553
I19	Depreciation and Amortization Expense	112	170	234	387
I20	Other Administrative Expense	642	739	945	1,166
I21	Net Operating Income	1,294	1,443	2,524	4,267
I22	Net Nonoperating Income/(Expense)	27	18	117	312
I23	Nonoperating Revenue	27	18	117	312
I24	Nonoperating Expense				
I25	Net Income (Before Taxes and Donations)	1,321	1,461	2,641	4,579
I26	Taxes			20	31
I27	Net Income (After Taxes and Before Donations)	1,321	1,461	2,621	4,548
I28	Donations	408	1,030	320	350
I29	Donations for Loan Capital	372	915	249	316
I30	Donations for Operating Expense	36	115	71	34
I31	Net Income (After Taxes and Donations)	1,729	2,491	2,941	4,898

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FA4-O9a

GROW Balance Sheet (SEEP Format)

As of December 31
(All amounts in local currency)

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
ASSETS					
B1	Cash and Due from Banks				
B2	Trade Investments				
B3	Net Loan Portfolio				
B4	Gross Loan Portfolio				
B5	Impairment Loss Allowance				
B6	Interest Receivable on Loan Portfolio				
B7	Accounts Receivable and Other Assets				
B8	Other Investments				
B9	Net Fixed Assets				
B10	Fixed Assets				
B11	Accumulated Depreciation and Amortization				
B12	TOTAL ASSETS				

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FA4-O9b

GROW Balance Sheet (SEEP Format) *(continued)*

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
LIABILITIES					
B13	Demand Deposits				
B14	Short-term Time Deposits				
B15	Short-term Borrowings				
B16	Interest Payable on Funding Liabilities				
B17	Accounts Payable and Other Short-term Liabilities				
B18	Long-term Time Deposits				
B19	Long-term Borrowings				
B20	Other Long-term Liabilities				
B21	TOTAL LIABILITIES				

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FA4-O9c

GROW Balance Sheet (SEEP Format) *(continued)*

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
EQUITY					
B22	Paid-in Capital				
B23	Donated Equity				
B24	Prior Years				
B25	Current Year				
B26	Retained Earnings				
B27	Prior Years				
B28	Current Year				
B29	Reserves				
B30	Other Equity Accounts				
B31	Adjustments to Equity				
B32	TOTAL EQUITY				
TOTAL LIABILITIES + EQUITY					

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FA4-O10a

GROW Balance Sheet

As of December 31
(All amounts in local currency)

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
ASSETS					
B1	Cash and Due from Banks	719	363	801	1,781
B2	Trade Investments				
B3	Net Loan Portfolio	13,025	18,172	24,012	43,024
B4	Gross Loan Portfolio	13,327	18,606	24,690	44,132
B5	Impairment Loss Allowance	(302)	(434)	(678)	(1,108)
B6	Interest Receivable on Loan Portfolio	187	196	288	425
B7	Accounts Receivable and Other Assets	5	5	26	10
B8	Other Investments				
B9	Net Fixed Assets	429	1,464	2,321	2,748
B10	Fixed Assets	640	1,845	2,938	3,752
B11	Accumulated Depreciation and Amortization	(211)	(381)	(617)	(1,004)
B12	TOTAL ASSETS	14,365	20,200	27,448	47,988

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FA4-O10b

GROW Balance Sheet *(continued)*

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
LIABILITIES					
B13	Demand Deposits				
B14	Short-term Time Deposits				
B15	Short-term Borrowings		6,962	10,454	17,156
B16	Interest Payable on Funding Liabilities	6	15	25	62
B17	Accounts Payable and Other Short-term Liabilities	607	423	428	342
B18	Long-term Time Deposits				
B19	Long-term Borrowings	8,061	4,618	5,417	12,797
B20	Other Long-term Liabilities				
B21	TOTAL LIABILITIES	8,674	12,018	16,324	30,357

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FA4-O10c

GROW Balance Sheet *(continued)*

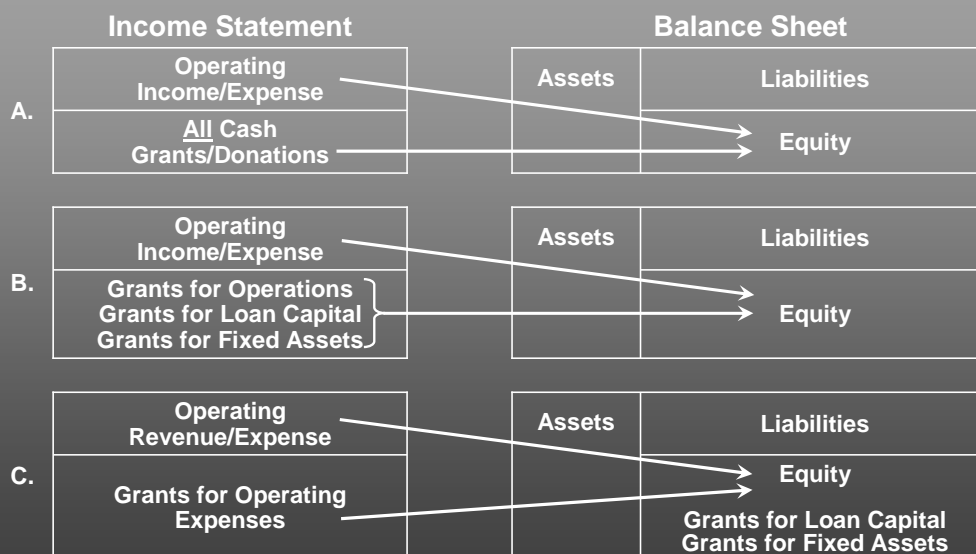
Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
EQUITY					
B22	Paid-in Capital				
B23	Donated Equity	1,584	2,614	2,934	3,284
B24	Prior Years	1,176	1,584	2,614	2,934
B25	Current Year	408	1,030	320	350
B26	Retained Earnings	4,107	5,568	8,189	12,737
B27	Prior Years	2,786	4,107	5,568	8,189
B28	Current Year	1,321	1,461	2,621	4,548
B29	Reserves			1	1,610
B30	Other Equity Accounts				
B31	Adjustments to Equity				
B32	TOTAL EQUITY	5,691	8,182	11,124	17,631
	TOTAL LIABILITIES + EQUITY	14,365	20,200	27,448	47,988

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Three Ways MFIs Treat Cash Donations

- Goals: 1. Grants are separated from Operating Income.
2. Grants are fully disclosed in Equity.



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Direct Cash Flow Statement Detail

REF.	ACCOUNT NAME	DEFINITION
C1	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	The total value of all financial revenue <i>received in cash</i> from the (BS) Gross Loan Portfolio. If an MFI uses cash accounting, this account is the same as (IS) Financial Revenue from Loan Portfolio. It does not include fees described in (IS) Other Operating Revenue.
C2	Cash Received from Interest on Investments	Total value of all financial revenue <i>received in cash</i> from (BS) Trade Investments and (BS) Other Investments. If an MFI uses cash accounting, this account is the same as (IS) Financial Revenue from Investments.
C3	Cash Received as Other Operating Revenue	Total value of all other operating revenue <i>received in cash</i> for the provision of financial services. If an MFI uses cash accounting, this account is the same as (IS) Other Operating Revenue.
C4	Value of Loans Repaid	The value of all loan principals repaid <i>in cash</i> by the MFI's clients during the period. This includes payments related to current and past-due loans as well as recoveries of written-off loans.

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Direct Cash Flow Statement Detail *(continued)*

FA4-O12b

REF.	ACCOUNT NAME	DEFINITION
C5	(Cash Paid for Financial Expenses on Funding Liabilities)	The total value of all interest and fee expense <i>paid in cash</i> on deposits and borrowings. If the MFI uses cash accounting, this account is the same as (IS) Financial Expense on Funding Liabilities.
C6	(Cash Paid for Other Financial Expenses)	The total value of any other financial expense <i>paid in cash</i> . Most MFIs' other financial expenses are noncash (such as inflation expense), and are therefore not included in this account.
C7	(Cash Paid for Operating Expenses)	The total value of personnel and administrative expense <i>paid in cash</i> to support the provision of financial services. This account does not include noncash expenses, such as depreciation. If the MFI uses cash accounting, this account is the same as (IS) Personnel Expenses plus (IS) Other Administrative Expenses.

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Direct Cash Flow Statement Detail *(continued)*

FA4-O12c

REF.	ACCOUNT NAME	DEFINITION
C8	(Cash Paid for Taxes)	The total value of taxes <i>paid in cash</i> . This includes taxes paid on net income or other measures of revenue or profit. Taxes related to employment or purchases, such as a value-added tax, are included in (IS) Operating Expenses. If the MFI uses cash accounting, this account is the same as (IS) Taxes.
C9	(Value of Loans Disbursed)	The value of all loans disbursed <i>in cash</i> during the period.
C10	Net (Purchase)/Sale of Trade Investments	Cash paid for the purchase (net of cash received for the sale) of (BS) Trade Investments. If purchases exceed sales, this number will be negative. These purchases may include certificates of deposit, including interest-bearing deposits, and treasury bills, and because they are typically used in liquidity management, they are therefore considered an operating activity. This account should be the same as the change in (BS) Trade Investments (BS).

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FA4-O12d

Direct Cash Flow Statement Detail *(continued)*

REF.	ACCOUNT NAME	DEFINITION
C11	Deposits/(Withdrawals) from Clients	Cash deposits/(withdrawals) made by the institution's clients as (BS) Demand Deposits or (BS) Short-term Time Deposits, or (BS) Long-term Time Deposits held at the institution, calculated as $(B13^1 - B13^0) + (B14^1 + B14^0) + (B18^1 - B18^0)$.
C12	Cash Received/(Paid) for Other Operating Assets and Liabilities	Any cash receipt of payment that increases (BS) Accounts Receivable and Other Assets or (B1S) Accounts Payable and Other Short-term Liabilities and (BS) Other Long-term Liabilities. Examples include disbursements of repayment of advances or loans to employees and cash payouts of pensions. This account does not include payments for services that increase assets—such as prepaid rent or insurance—that are included in (C7) Cash Paid for Operating Expenses.
C13	Net Cash from Operating Activities	Sum of all cash flows arising from the principal revenue-producing activities of the institution and other activities that are neither investing nor financing activities.

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FA4-O12e

Direct Cash Flow Statement Detail *(continued)*

REF.	ACCOUNT NAME	DEFINITION
C14	Net (Purchase)/Sale of Other Investments	Cash paid for the purchase (net of cash received from the sale) of (BS) Other Investments. If purchases exceed sales, this will be a negative number. This account may include bonds or shares that an institution plans to hold for longer than one year. This number should be the same as the change in (BS) Other Investments (end of period – beginning of period).
C15	Net (Purchase)/Sale of Fixed Assets	Cash payments to acquire property, buildings, and equipment less any cash proceeds from the sale of property, buildings, and equipment. This number should be the same as the change in (BS) Fixed Assets (end of period – beginning of period).
C16	Net Cash from Investing Activities	Sum of all cash flows arising from the acquisition and disposal of long-term assets and other investments not included in cash equivalents
C17	Net Cash Received /(Repaid) for Short- and Long-term Borrowings	Cash proceeds/payments from borrowing or issuing notes. This number should be the same as the change in (BS) Short-term Borrowings and (BS) Long-term Borrowings.

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Direct Cash Flow Statement Detail *(continued)*

FA4-O12f

REF.	ACCOUNT NAME	DEFINITION
C18	Issuance/(Repurchase) of Paid-in Capital	Cash proceeds (payments) from issuing (repurchasing) shares or other equity instruments
C19	(Dividends Paid)	Amount of dividends distributed to shareholders or members <i>in cash</i> . These distributions should be made from (BS) Retained Earnings
C20	Donated Equity	The value of donations <i>received in cash</i> from the current period
C21	Net Cash from Financing Activities	Sum of all cash flows from activities that result in changes in the size and composition of the funding liabilities and equity of the institution
C22	Net Cash Received/(Paid) for Nonoperating Activities	Sum of all cash received and paid for nonoperating activities
C23	Net Change in Cash and Due from Banks	Sum of cash flows from operating, investing, financing, and nonoperating activities

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Direct Cash Flow Statement Detail *(continued)*

FA4-O12g

REF.	ACCOUNT NAME	DEFINITION
C24	Cash and Due from Banks at the Beginning of the Period	Cash on hand, near cash, and other highly liquid instruments paying little or no interest at the beginning of the period. This number is the same as (BS) Cash and Due from Banks for the end of the previous period.
C25	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	Unrealized gains and losses arising from the changes in Cash and Cash Equivalents in foreign currency exchange rates
C26	Cash and Due from Banks at the End of the Period	Cash on hand, near cash, and other highly liquid instruments paying little or no interest at the end of the period. This number is the same as (BS) Cash and Due from Banks for the end of the current period.

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FA4-O12h

Indirect Cash Flow Statement Detail

REF.	ACCOUNT NAME	DEFINITION
C27	Net Operating Income	Same as (IS) Net Operating Income
C28	Depreciation and Amortization	Same as (IS) Depreciation and Amortization Expense for the period. This noncash expense represents the theoretical decrease in value of a fixed asset.
C29	Impairment Losses on Loans	Same as (IS) Impairment Losses on Loans
C30	(Cash Paid for Taxes)	Same as (CS) Cash Paid for Taxes
C31	Value of Loans Repaid	Same as (C4) Value of Loans Repaid
C32	(Value of Loans Disbursed)	Same as (C9) Value of Loans Disbursed
C33	(Increase)/Decrease in Trade Investments	Same as (C10) Net (Purchase)/Sale of Trade Investments
C34	Increase/(Decrease) in Deposits	Same as (C11) Deposits/ (Withdrawals) from clients
C35	(Increase)/Decrease in Receivables and Other Assets	Change in the sum of (BS) Interest Receivable and (BS) Accounts Receivable and Other Assets from the previous period

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FA4-O12i

Indirect Cash Flow Statement Detail *(continued)*

REF.	ACCOUNT NAME	DEFINITION
C36	Increase/(Decrease) in Payables and Other Liabilities	Change in the sum of (BS) Interest Payable on Funding Liabilities, (BS) Accounts Payable and Other Short-term Liabilities and (BS) Other Long-term Liabilities from the previous period
C37	Net Cash from Operating Activities	Same as (C13) Net Cash from Operating Activities
C38	(Increase)/Decrease in Other Investments	Same as (C14) Net (Purchase)/Sale of Other Investments
C39	(Increase)/Decrease in Book Value of Gross Fixed Assets	Same as (C15) Net (Purchase)/Sale of Net Fixed Assets
C40	Net Cash from Investing Activities	Same as (C16), Net Cash from Investing Activities
C41	Increase/(Decrease) in Short- and Long-term Borrowings	Same as (C17) Net Cash Received/(Repaid) for Short- and Long-term Borrowings
C42	Increase/(Decrease) in Paid-in Capital	Same as (C18) Issuance/(Repurchase) of Paid-in Capital
C43	(Dividends Paid)	Same as (C19) Dividends Paid
C44	Donated Equity	Same as (C20) Donated Equity

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FA4-O12j

Indirect Cash Flow Statement Detail *(continued)*

REF.	ACCOUNT NAME	DEFINITION
C45	Net Cash from Financing Activities	Same as (C21) Net Cash from Financing Activities
C46	Net Cash Received/(Paid) for Nonoperating Activities	Same as (C22) Net Cash Received/(Paid) for Nonoperating Activities
C47	Net Change in Cash and Due from Banks	Sum of cash flows from operating, investing, financing, and nonoperating activities
C48	Cash and Due from Banks at the Beginning of the Period	Cash on hand, near cash, and other highly liquid instruments paying little or no interest at the beginning of the period. This account is the same as (BS) Cash and Due from Banks for the end of the previous period.
C49	Effect of Exchange Rate Changes on Cash and Cash Equivalents	Unrealized gains and losses arising from the changes in Cash and Cash Equivalents in foreign currency exchange rates
C50	Cash and Due from Banks at the End of the Period	Cash on hand, near cash, and other highly liquid instruments paying little or no interest at the end of the period. This account is the same as (BS) Cash and Due from Banks for the end of the current period.

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FA4-O13a

Direct Cash Flow Statement

Ref.	Account Name	2002 (000)	2003 (000)	2004 (000)
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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FA4-O13b

SEEP Direct Cash Flow Statement *(continued)*

Ref.	Account Name	2002 (000)	2003 (000)	2004 (000)
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			

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FA4-O13c

Indirect Cash Flow Statement

Ref.	Account Name	2002 (000)	2003 (000)	2004 (000)
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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FA4-O13d

Indirect Cash Flow Statement *(continued)*

Ref.	Account Name	2002 (000)	2003 (000)	2004 (000)
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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FA4-O14a

GROW Direct Cash Flow Statement

Ref.	Account Name	2002 (000)	2003 (000)	2004 (000)
CASH FLOWS FROM OPERATING ACTIVITIES				
C1	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	4,719	6,342	10,082
C2	Cash Received from Interest on Investments			
C3	Cash Received as Other Operating Revenue			
C4	Value of Loans Repaid	29,384	37,450	59,886
C5	(Cash Paid for Financial Expenses on Funding Liabilities)	(371)	(292)	(823)
C6	(Cash Paid for Other Financial Expenses)			
C7	(Cash Paid for Operating Expenses)	(2,590)	(3,030)	(4,175)
C8	(Cash Paid for Taxes)		(20)	(31)
C9	(Value of Loans Disbursed)	37,481	(45,830)	(79,517)
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	(6,339)	(5,380)	(14,578)

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FA4-O14b

GROW Direct Cash Flow Statement *(continued)*

Ref.	Account Name	2002 (000)	2003 (000)	2004 (000)
CASH FLOWS FROM INVESTING ACTIVITIES				
C14	Net (Purchase)/Sale of Other Investments			
C15	Net (Purchase)/Sale of Fixed Assets	1,416	1,091	814
C16	Net Cash from Investing Activities	1,416	1,091	814
CASH FLOWS FROM FINANCING ACTIVITIES				
C17	Net Cash Received /(Repaid) for Short- and Long-term Borrowings	3,519	4,291	14,082
C18	Issuance/(Repurchase) of Paid-in Capital			
C19	(Dividends Paid)			
C20	Donated Equity	1,030	320	350
C21	Net Cash from Financing Activities	4,549	4,611	14,432
C22	Net Cash Received/(Paid) for Nonoperating Activities	18	117	312
C23	Net Change in Cash and Due from Banks	(356)	438	980
C24	Cash and Due from Banks at the Beginning of the Period	719	363	801
C25	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents			
C26	Cash and Due from Banks at the End of the Period	363	801	1,781

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FA4-O14c

GROW Indirect Cash Flow Statement

Ref.	Account Name	2002 (000)	2003 (000)	2004 (000)
CASH FLOWS FROM OPERATING ACTIVITIES				
C27	Net Operating Income	1,626	2,622	4,437
C28	Depreciation and Amortization	170	234	387
C29	Impairment Losses on Loans	145	262	430
C30	(Cash Paid for Taxes)		(20)	(31)
C31	Value of Loans Repaid	29,384	37,450	59,886
C32	(Value of Loans Disbursed)	(37,481)	(45,830)	(79,517)
C33	(Increase)/Decrease in Trade Investments			
C34	Increase/(Decrease) in Deposits			
C35	(Increase)/Decrease in Receivables and Other Assets	(9)	(113)	(121)
C36	Increase/(Decrease) in Payables and Other Liabilities	(174)	14	(49)
C37	Net Cash from Operating Activities	(6,339)	(5,381)	(14,578)

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FA4-O14d

GROW Indirect Cash Flow Statement *(continued)*

Ref.	Account Name	2002 (000)	2003 (000)	2004 (000)
CASH FLOWS FROM INVESTING ACTIVITIES				
C38	(Increase)/Decrease in Other Investments			
C39	(Increase)/Decrease in Book Value of Gross Fixed Assets	1,416	1,091	814
C40	Net Cash from Investing Activities	1,416	1,091	814
CASH FLOWS FROM FINANCING ACTIVITIES				
C41	Increase/(Decrease) in Short- and Long-term Borrowings	3,519	4,291	14,082
C42	Increase/(Decrease) in Paid-in Capital			
C43	(Dividends Paid)			
C44	Donated Equity	1,030	320	350
C45	Net Cash from Financing Activities	4,549	4,611	14,432
C46	Net Cash Received/(Paid) for Nonoperating Activities	18	117	312
C47	Net Change in Cash and Due from Banks	(356)	438	980
C48	Cash and Due from Banks at the Beginning of the Period	719	363	801
C49	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents			
C50	Cash and Due from Banks at the End of the Period	363	801	1,781

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Handouts

SEEP Income Statement – Definitions

I1	Financial Revenue	The total value of all revenue earned from the provision of financial services.
I2	Financial Revenue from Loan Portfolio	Revenue from interest, fees, commissions, and other fees earned on the loan portfolio. This includes not only interest paid in cash but also interest accrued but not yet paid.
I3	Interest on Loan Portfolio	Interest earned on the loan portfolio.
I4	Fees and Commissions on Loan Portfolio	Penalties, commissions, and other fees earned on the loan portfolio.
I5	Financial Revenue from Investments	Revenue from interest, dividends, and other payments generated by financial assets other than the loan portfolio, such as interest-bearing deposits, certificates of deposit, and treasury obligations.
I6	Other Operating Revenue	All other revenue from the provision of financial services, including transaction fees, premiums, membership fees, passbooks, and smartcards.
I7	Financial Expense	The total value of all financial expenses incurred from operations.
I8	Financial Expense on Funding Liabilities	Total interest and fee expense on deposits and borrowings.
I9	Interest and Fee Expense on Deposits	Interest and fees incurred on all deposits taken by the MFI.
I10	Interest and Fee Expense on Borrowings	Interest and fees incurred on all borrowings that fund the loan portfolio.
I11	Other Financial Expense	Other financial expense related to financial services, including interest on nonfunding liabilities, such as mortgages, and on loans linked to fixed assets, such as vehicles.
I12	Net Financial Income	The net value of financial earnings from financial services.
I13	Impairment Losses on Loans	Previously known as Net Loan Loss Provision Expense, is now provision for loan impairment net of the value of loans recovered.
I14	Provision for Loan Impairment	Previously known as the Loan Loss Provision Expense, the noncash expense calculated as a percentage of the value of the loan portfolio that is at risk of default.
I15	Value of Loans Recovered	Total value of principal recovered on all loans previously written off. This includes principal on partially recovered loans and those recovered in full.
I16	Operating Expense	The total value of all operating expenses, including personnel and administrative expenses incurred in providing financial services.
I17	Personnel Expense	Includes staff salaries, bonuses, and benefits, as well as employment taxes. It also includes the cost of employee recruitment and initial orientation, but not the cost of ongoing or specialized training for existing employees, which is an administrative expense.
I18	Administrative Expense	Nonfinancial expenses, excluding personnel directly related to the provision of financial services or other services that form an integral part of an MFI's financial services' relationships with its clients.

I19	Depreciation and Amortization Expense	The noncash expense that allocates the purchase cost of an MFI's fixed assets over their useful economic life. The depreciation expense is used to create or increase accumulated depreciation and amortization on the Balance Sheet. Amortization is used for other tangible assets, such as software.
I20	Other Administrative Expense	All administrative expenses other than depreciation expense. Examples include rent, utilities, supplies, advertising, transportation, communications, and consulting fees.
I21	Net Operating Income	The net earnings from the provision of financial services.
I22	Net Nonoperating Income/(Expense)	The net earnings from products and services not directly related to core microfinance operations.
I23	Nonoperating Revenue	All revenue not directly related to core microfinance operations, such as revenue from business development services, training, consulting services, management information system sales, or sale of merchandise.
I24	Nonoperating Expense	All expenses not directly related to the core microfinance operation, such as the cost of providing business development services or training. This account also includes any exceptional losses and expenses.
I25	Net Income (Before Taxes and Donations)	All net earnings from the institution's operations before the inclusion of taxes and donations.
I26	Taxes	Includes all taxes paid on net income or other measure of profit as defined by local tax authorities.
I27	Net Income (after Taxes and Before Donations)	All net earnings from the institution's operations, net of taxes, and before the inclusion of donations.
I28	Donations	Value of all donations recognized as revenue during the period, whether restricted or not.
I29	Donations for Loan Capital	Value of all donations used to fund the loan portfolio. Many MFIs are accustomed to applying donations for loan capital directly to the balance sheet. This Framework requires that they are first booked as nonoperating revenue to increase transparency.
I30	Donations for Operating Expense	Value of all donations used to pay for operations other than funding the loan portfolio. These operations include paying personnel and administrative expenses and purchasing fixed assets.
I31	Net Income (after Taxes and Donations)	All net earnings from the institution's operations, net of taxes, and after the inclusion of donations.

Source: The SEEP Network (2005), pp. 14-16.

SEEP Balance Sheet – Definitions

ASSETS		
B1	Cash and Due from Banks	Cash on hand, near cash, and other highly liquid instruments paying little or no interest. This may include non-interest-bearing bank balances and deposits.
B2	Trade Investments	Any financial assets acquired or incurred primarily for the purpose of selling or repurchasing in the near term.
B3	Net Loan Portfolio	The Gross Loan Portfolio less the Impairment Loss Allowance.
B4	Gross Loan Portfolio	All outstanding balances of principals due within or at 12 months for all outstanding client loans. This includes current, delinquent, and renegotiated loans, but not loans that have been not written off.
B5	Impairment Loss Allowance	Previously known as the Loan Loss Allowance, the portion of the gross loan portfolio that has been expensed (provisioned for) in anticipation of losses due to default.
B6	Interest Receivable on Loan Portfolio	Interest receivable on the Gross Loan Portfolio net of any expense to reduce accrued interest if the collection of the accrued interest is considered uncertain.
B7	Accounts Receivable and Other Assets	Accounts receivable, notes receivables, and other receivables, net of any allowances for doubtful or uncollectible accounts.
B8	Other (Long-term) Investments	Includes investments that have a fixed maturity or payments that the MFI intends to hold to maturity.
B9	Net Fixed Assets	The cost or value of all physical property and other tangible assets that the MFI currently uses less accumulated depreciation expense.
B10	Fixed Assets	The cost or value of all physical property and property improvements, furniture, and equipment that the MFI currently uses (including all donated equipment that the MFI owns). Fixed Assets may also include other tangible assets, such as software.
B11	Accumulated Depreciation and Amortization	The sum of all depreciation expenses for Fixed Assets and the amortization of other tangible assets that have not yet been retired and removed from the Balance Sheet.
B12	Total Assets	The value of all asset accounts net of all contra asset accounts.
LIABILITIES		
B13	Demand Deposits	Deposits mobilized from the general public and MFI members that the MFI is liable to repay on demand.
B14	Short-term Time Deposits	Deposits mobilized from the general public and MFI members that the MFI is liable to repay on a fixed date within 12 months of the statement date.
B15	Short-term Borrowings	The principal balance due within or at 12 months from the statement date for all funds received through a loan or other contractual debt agreement.
B16	Interest Payable on Funding Liabilities	Interest accrued on liability accounts that fund financial operations. It does not include borrowing for purchasing or improving real estate or other fixed assets such as vehicles.

B17	Accounts Payable and Other Short-term Liabilities	Other short-term liabilities due within 12 months, including tax and salary liabilities, payroll withholdings, and other accounts payable. It should also include any short-term portion of deferred revenue.
B18	Long-term Time Deposits	Deposits mobilized from the general public and members that the MFI is liable to repay with a fixed maturity date greater than 12 months from the statement date.
B19	Long-term Borrowings	The principal balance due in more than 12 months for all funds received through a loan or other contractual agreement and all subordinated debt.
B20	Other Long-term liabilities	Other long-term liabilities due in more than 12 months, including long-term deferred revenue, pension liabilities, and liabilities that do not directly fund the financial operations of the MFI portfolio, such as mortgages on real estate and other loans for fixed asset purchases.
B21	Total Liabilities	The total value of all liability accounts.
EQUITY		
B22	Paid-in Capital	The value of capital paid by shareholders or members net of any shares repurchased or capital repaid.
B23	Donated Equity	The total value of all donations received and recognized as revenue.
B24	Donated Equity—Prior Years	The cumulative value of donations from prior fiscal years.
B25	Donated Equity—Current Year	The value of donations from the current fiscal year.
B26	Retained Earnings	The total value of net income (after taxes and before donations) from current and prior periods, net of any dividends paid to shareholders or members.
B27	Retained Earnings—Prior Years	The cumulative value of Net Income (After Taxes and Before Donations) from prior periods, net of dividends paid to shareholders or members.
B28	Retained Earnings—Current Year	The value of net income (after taxes and before donations) from the current fiscal year.
B29	Reserves	Reserves such as those imposed by law, statute, or board decision.
B30	Other Equity Accounts	Other equity accounts, including all revaluations and adjustment. For MFIs required to use inflation-based accounting, this account should be used to offset the net inflation expense. The MFI should disclose any substantial item in this account.
B31	Adjustment to Equity	Adjustment to the Balance Sheet to account for subsidized funds, in-kind subsidies, and inflation.
B32	Total Equity	Total value of all equity accounts.
B33	Total Liabilities + Equity	Total value of all liabilities and equity accounts

Source: The SEEP Network (2005), pp. 20-33.

Conventional Balance Sheet Sample

FIXED ASSETS	
CURRENT ASSETS	
Loans to Members	
Debtors and Prepayments	
Cash and Bank Balance	
TOTAL CURRENT ASSETS	
TOTAL ASSETS	
CURRENT LIABILITIES	
Member Savings	
Creditors and Accruals	
TOTAL CURRENT LIABILITIES	
NET CURRENT ASSETS	

FINANCED BY	
Deferred Grant Income	
Capital Grant	
Income and Expenditure	
Revolving Loan Fund	
TOTAL	

Conventional Income Statement Sample

INCOME	
Grant Income	
Other Income	
TOTAL INCOME	
EXPENDITURE	
Interest and Fee Expense	
Personnel	
Other Expense	
TOTAL EXPENDITURE	
DEFICIT OF INCOME OVER EXPENDITURES	

GROW Case Study

GROW was started by a donor in 1998, and in 2001 became a locally registered microfinance organization as a credit-only, nonprofit institution. On June 1, 2004, GROW was merged through accession with another MFI. The net results of the other MFI were transferred to the reserves of GROW. Since GROW is a nonprofit organization, the reserves of the organization cannot be distributed but are appropriated to other reserves. The legislation often changes and GROW must now pay taxes on part of its profits

GROW's mission as an MFI is to provide financial services to economically active people who do not otherwise have access to commercial sources of funding, most notably to women, rural, internally displaced persons (IDPs), and returnee clients.

LOANS

Currently the basic loan is offered in four levels with varying repayment periods (from 5 to 24 months), loan sizes (from 300 up to 20,000) and interest rates (26 percent to 34 percent nominal flat interest rate). Repayments are all monthly. There is a possibility of a three-month grace period (repayment of interest only) for repeat loans.

GROW provides individual and solidarity group loans to 11,580 clients, of which 55 percent are female and 65 percent rural. The current structure includes headquarters, 6 regional offices, and 20 branch offices, to achieve proximity to clients.

PERFORMANCE

		Dec 2001	Dec 2002	Dec 2003	Dec 2004
1.	Number of currently active loan clients	6,777	7,139	11,966	19,891
2.	Number of new clients during period	6,513	8,475	13,413	20,643
3.	Total gross loan portfolio	\$13,327,000	\$18,606,000	\$24,690,000	\$44,132,000
4.	Average loan balance per client	\$1,967	\$2,606	\$2,063	\$2,219
5.	Total staff, end of period	68	76	93	125
6.	Number of loan officers, end of period	44	47	62	85
7.	Branch offices	12	15	17	20
8.	Regional offices	4	5	5	6

GROW has an international technical advisor provided free to GROW by its donor. She has been on contract since January 1, 2002, and is paid directly by the donor at the rate of 48,000 per year.

MIS

The management information system enables GROW to produce reliable, useful, and up-to-date information on its loan portfolio and financial position. Accounting information is processed at headquarters and tracked using Access-based local accounting software.

GROW keeps accurate records on its clients and their payments also through an Access-based loan tracking system. The systems are integrated and reports include microfinance best-practices ratios, comparisons of planned versus actual results, budgets, and projections.

GROW has a long-term funding base of retained earnings, donated equity, and long-term liabilities. The majority of the donated equity is technically a 0 percent liability loan from the donor founder and is classified as such in the audited financial statements. However, it is expected by all parties that these funds will become equity and classifying this as a liability gives a very different image of the capital structure. Long-term loans on the balance sheet at the end of 2003 were all at concessional interest rates (MIP/microfinance incentive project/funds at 5 percent, USAID funds at 12-month LIBOR, donor-founder funds at 0 percent).

		Dec 2001	Dec 2002	Dec 2003	Dec 2004
1.	Inflation (annualized %)	16	18	18	19
2.	Commercial cost of funds (%)	32	34	34	33.5
3.	LIBOR ¹ -12-month rate as of Jan. 31 (%)	5.17	2.49	1.45	1.47

GROW does not have a formal asset liability management (ALM) policy, but an ALM team may be put in place later this year. GROW monitors the portfolio for possible mismatches in maturity; of the current 48 percent of loans initially issued for terms beyond 12 months, the percent of principal falling due beyond 12 months is a very small percentage of the outstanding portfolio. In comparison, virtually all of GROW's resources are long term in either equity or loans, thereby eliminating most risk at present.

GROW experienced one serious shortage in early 2003 when two funders were unexpectedly delayed at the same time. GROW must carefully oversee liquidity to ensure ample funds in each of the regions for disbursements during the month, given the 15 different bank accounts used for loan transactions.

Notes to Cash Flow: All amounts in thousands (000)

Term	2002	2003	2004
Value of Loans Repaid	29,384	37,450	59,886
(Cash Paid for Financial Expenses on Funding Liabilities)	(371)	(292)	(823)
(Value of Loans Disbursed)	(37,481)	(45,830)	(79,517)

GROW acquired its fixed assets with external resources, not its own.
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¹ London Interbank Offered Rate (LIBOR) is a daily reference rate based on the interest rates at which banks offer to lend unsecured funds to other banks in the London wholesale (or "interbank") money market.

GROW Original Income Statement

GROW Income Statement For the Year Ended December 31

DESCRIPTION	2001 (000)	2002 (000)	2003 (000)	2004 (000)
Interest and Fees on Loans	3,922	4,719	6,342	10,082
Interest and Fee Expense	434	371	292	823
Net Interest Income	3,488	4,348	6,050	9,259
Other Income	27	18	117	312
Operating Income	3,515	4,366	6,167	9,571
Operating Expenses	2,194	2,760	3,284	4,593
Impairment Losses on Loans	-	145	262	430
Operating Expenses	2,194	2,905	3,546	5,023
Net Result	1,321	1,461	2,621	4,548
Grant Income	408	1,030	320	350
Net Result after Grant Income	1,729	2,491	2,941	4,898

NOTES TO INCOME STATEMENT (in thousands)	2001 (000)	2002 (000)	2003 (000)	2004 (000)
Other Income				
Exchange Rate Gain		0	86	279
Others	27	18	31	33
Other Income Total	27	18	117	312
Operating Expenses				
Staff Costs	1,440	1,851	2,116	3,009
Depreciation	112	170	234	387
Utilities, Rent, Maintenance	280	315	325	416
Professional Fees and Services	181	202	312	372
Other Administrative Expenses	167	219	270	371
Taxes			20	31
Write-off of Fixed Assets	14	3	7	7
Operating Expenses Total	2,194	2,760	3,284	4,593
Impairment losses on Loans				
Provisions for Loan Impairment	186	157	292	472
Collection of Previously Impaired Loans	(186)	(12)	(30)	(42)
Impairment losses on Loans Total	-	145	262	430
Grant Income				
Donations for Loan Capital	372	915	249	316
Donations for Operating Expenses	36	115	71	34
Grant Income Total	408	1,030	320	350

GROW Original Balance Sheet

GROW BALANCE SHEET As of December 31

DESCRIPTION	2001 (000)	2002 (000)	2003 (000)	2004 (000)
ASSETS				
Current Assets				
Cash and Cash Equivalent	719	363	801	1,781
Loans and Advances to Customers	13,025	18,172	24,012	43,024
Other Current Assets	192	201	314	435
Non-Current Assets				
Property and Equipment	429	1,464	2,321	2,748
TOTAL ASSETS	14,365	20,200	27,448	47,988
EQUITY AND LIABILITIES				
Current Liabilities				
Other Liabilities	613	438	453	404
Short-term Loans	-	6,962	10,454	17,156
Non-Current Liabilities				
Long-term Loans	8,061	4,618	5,417	12,797
TOTAL LIABILITIES	8,674	12,018	16,324	30,357
EQUITY				
Other Resources	4,370	6,721	8,503	13,083
Result for the Year	1,321	1,461	2,621	4,548
TOTAL EQUITY	5,691	8,182	11,124	17,631
TOTAL EQUITY AND LIABILITIES	14,365	20,200	27,448	47,988

NOTES TO BALANCE SHEET	2001 (000)	2002 (000)	2003 (000)	2004 (000)
Loans and Advances to Customers	13,327	18,606	24,690	44,132
Other Provisions for Loan Losses	(302)	(434)	(678)	(1,108)
Total	13,025	18,172	24,012	43,024
Other Current Assets				
Accrued Interest	187	196	288	425
Accounts Receivable	5	5	26	10
Total	192	201	314	435
Property and Equipment				
Total Fixed Assets	640	1,845	2,936	3,750
Total Accumulated Depreciation	(211)	(381)	(615)	(1,002)
Total Net Book Value	429	1,464	2,321	2,748
Other Liabilities				
Accrued Expenses for Short-Term Loans	6	15	25	62
Other Liabilities	607	423	428	342
Total	613	438	453	404
Equity				
Donated Equity	1,584	2,614	2,934	3,284
Retained Earnings	2,786	4,107	5,568	8,189
Reserves	-	-	1	1,610
Net Result for the Year	1,321	1,461	2,621	4,548
Total	5,691	8,182	11,124	17,631

GROW Income Statement (SEEP Format)

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
I1	Financial Revenue				
I2	Financial Revenue from Loan Portfolio				
I3	Interest on Loan Portfolio				
I4	Fees and Commissions on Loan Portfolio				
I5	Financial Revenue from Investment				
I6	Other Operating Revenue				
I7	Financial Expense				
I8	Financial Expense on Funding Liabilities				
I9	Interest and Fee Expense on Deposits				
I10	Interest and Fee Expense on Borrowings				
I11	Other Financial Expense				
I12	Net Financial Income				
I13	Impairment Losses on Loans				
I14	Provisions for Loan Impairment				
I15	Value of Loans Recovered				
I16	Operating Expense				
I17	Personnel Expense				
I18	Administrative Expense				
I19	Depreciation and Amortization Expense				
I20	Other Administrative Expense				
I21	Net Operating Income				
I22	Net Nonoperating Income/(Expense)				
I23	Nonoperating Revenue				
I24	Nonoperating Expense				
I25	Net Income (Before Taxes and Donations)				
I26	Taxes				
I27	Net Income (After Taxes and Before Donations)				
I28	Donations				
I29	Donations for Loan Capital				
I30	Donations for Operating Expense				
I31	Net Income (After Taxes and Donations)				

GROW Income Statement

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
I1	Financial Revenue	3,922	4,719	6,342	10,082
I2	Financial Revenue from Loan Portfolio	3,922	4,719	6,342	10,082
I3	Interest on Loan Portfolio	3,922	4,719	6,342	10,082
I4	Fees and Commissions on Loan Portfolio				
I5	Financial Revenue from Investment				
I6	Other Operating Revenue				
I7	Financial Expense	434	371	292	823
I8	Financial Expense on Funding Liabilities	434	371	292	823
I9	Interest and Fee Expense on Deposits				
I10	Interest and Fee Expense on Borrowings	434	371	292	823
I11	Other Financial Expense				
I12	Net Financial Income	3,488	4,348	6,050	9,259
I13	Impairment Losses on Loans	-	145	262	430
I14	Provisions for Loan Impairment	186	157	292	472
I15	Value of Loans Recovered	(186)	(12)	(30)	(42)
I16	Operating Expense	2,194	2,760	3,264	4,562
I17	Personnel Expense	1,440	1,851	2,116	3,009
I18	Administrative Expense	754	909	1,148	1,553
I19	Depreciation and Amortization Expense	112	170	234	387
I20	Other Administrative Expense	642	739	914	1,166
I21	Net Operating Income	1,294	1,443	2,524	4,267
I22	Net Nonoperating Income/(Expense)	27	18	117	312
I23	Nonoperating Revenue	27	18	117	312
I24	Nonoperating Expense				
I25	Net Income (Before Taxes and Donations)	1,321	1,461	2,641	4,579
I26	Taxes	-	-	20	31
I27	Net Income (After Taxes and Before Donations)	1,321	1,461	2,621	4,548
I28	Donations	408	1,030	320	350
I29	Donations for Loan Capital	372	915	249	316
I30	Donations for Operating Expense	36	115	71	34
I31	Net Income (After Taxes and Donations)	1,729	2,491	2,941	4,898

GROW Balance Sheet (SEEP Format)

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
ASSETS					
B1	Cash and Due from Banks				
B2	Trade Investments				
B3	Net Loan Portfolio				
B4	Gross Loan Portfolio				
B5	Impairment Loss Allowance				
B6	Interest Receivable on Loan Portfolio				
B7	Accounts Receivable and Other Assets				
B8	Other Investments				
B9	Net Fixed Assets				
B10	Fixed Assets				
B11	Accumulated Depreciation and Amortization				
B12	TOTAL ASSETS				
LIABILITIES					
B13	Demand Deposits				
B14	Short-term Time Deposits				
B15	Short-term Borrowings				
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				
EQUITY					
B22	Paid-in Capital				
B23	Donated Equity				
B24	Prior Years				
B25	Current Year				
B26	Retained Earnings				
B27	Prior Years				
B28	Current Year				
B29	Reserves				
B30	Other Equity Accounts				
B31	Adjustments to Equity				
B32	TOTAL EQUITY				
	TOTAL LIABILITIES + EQUITY				

GROW Balance Sheet

Ref.	Account Name	2001 (000)	2002 (000)	2003 (000)	2004 (000)
ASSETS					
B1	Cash and Due from Banks	719	363	801	1,781
B2	Trade Investments				
B3	Net Loan Portfolio	13,025	18,172	24,012	43,024
B4	Gross Loan Portfolio	13,327	18,606	24,690	44,132
B5	Impairment Loss Allowance	(302)	(434)	(678)	(1,108)
B6	Interest Receivable on Loan Portfolio	187	196	288	425
B7	Accounts Receivable and Other Assets	5	5	26	10
B8	Other Investments				
B9	Net Fixed Assets	429	1,464	2,321	2,748
B10	Fixed Assets	640	1,845	2,936	3,750
B11	Accumulated Depreciation and Amortization	(211)	(381)	(615)	(1,002)
B12	TOTAL ASSETS	14,365	20,200	27,448	47,988
LIABILITIES					
B13	Demand Deposits	-	-	-	-
B14	Short-term Time Deposits				
B15	Short-term Borrowings		6,962	10,454	17,156
B16	Interest Payable on Funding Liabilities	6	15	25	62
B17	Accounts Payable & Other Short-term Liabilities	607	423	428	342
B18	Long-term Time Deposits				
B19	Long-term Borrowings	8,061	4,618	5,417	12,797
B20	Other Long-term Liabilities				
B21	TOTAL LIABILITIES	8,674	12,018	16,324	30,357
EQUITY					
B22	Paid-in Capital				
B23	Donated Equity	1,584	2,614	2,934	3,284
B24	Prior Years	1,176	1,584	2,614	2,934
B25	Current Year	408	1,030	320	350
B26	Retained Earnings	4,107	5,568	8,189	12,737
B27	Prior Years	2,786	4,107	5,568	8,189
B28	Current Year	1,321	1,461	2,621	4,548
B29	Reserves			1	1,610
B30	Other Equity Accounts				
B31	Adjustments to Equity				
B32	TOTAL EQUITY	5,691	8,182	11,124	17,631
	TOTAL LIABILITIES + EQUITY	14,365	20,200	27,448	47,988

Technical Notes

SUMMARY OF NEW FEATURES/DIFFERENCES

Income Statement

- Donor funds are treated “below the line.”
- Donor money is recorded after the Net Income (After Taxes and Before Donations).

Balance Sheet

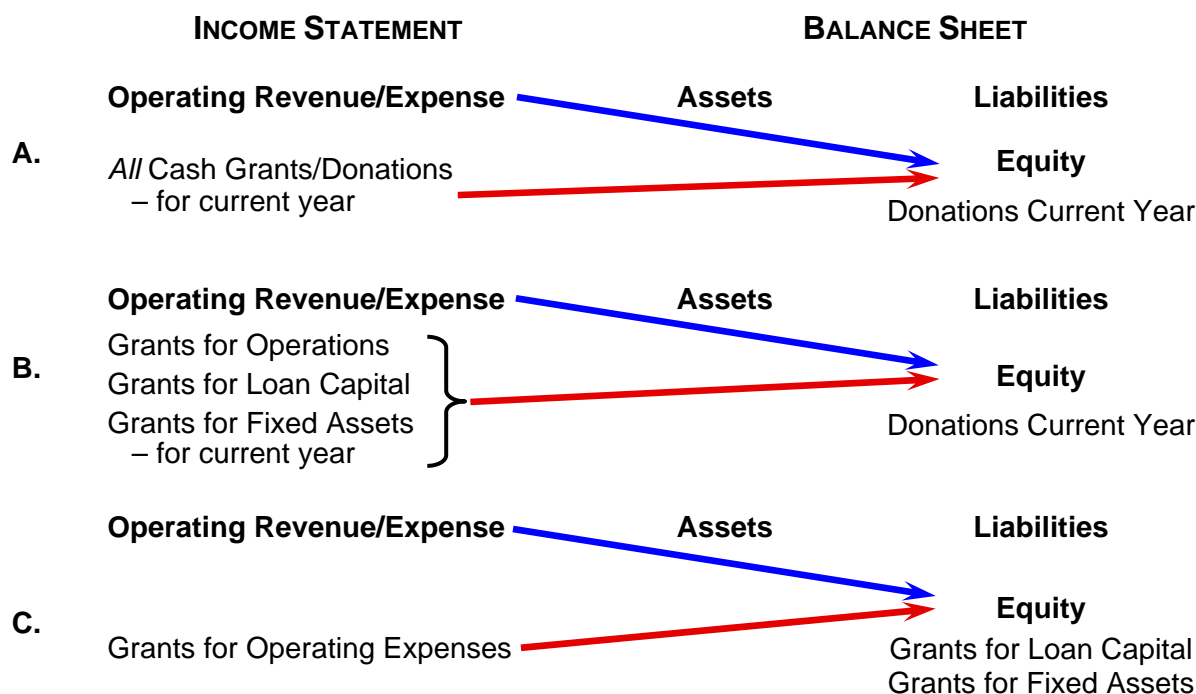
There are three separate sources of equity from the income statement:

- Retained earnings/losses—current year (minus cash donations)
- Donations—current year
- Other equity accounts—including net nonoperating 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.

THREE ALTERNATIVES FOR TREATING CASH DONATIONS

- Goals: 1. Grants are separated from operating income.
2. Grants are fully disclosed in equity.



Notes: Total equity is the same in every example.
Each alternative is correct in accounting terms.
All illustrate transparency of donor funds.

Detailed Explanation of How the Three 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.² 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.

- 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 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:

² 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.

- 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
- 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
- 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
- Adjust their prior year financial statements in accordance with IAS 20 and IAS 8

If the MFI decides on option (2) 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 question, 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 ever thought you might need, but we want you to feel that you know where to get the information when you do need it!

Direct Cash Flow Statement Details

Ref.	Account Name	Definition	Calculation
Cash Flows from Operating Activities			
C1	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	The total value of all financial revenue <i>received in cash</i> from the (B4) Gross Loan Portfolio. If an MFI uses cash accounting, this account is the same as (I2) Financial Revenue from Loan Portfolio. It does not include fees described in (I6) Other Operating Revenue.	
C2	Cash Received from Interest on Investments	Total value of all financial revenue <i>received in cash</i> from (B2) Trade Investments and (B8) Other Investments. If an MFI uses cash accounting, this account is the same as (I5) Financial Revenue from Investments.	
C3	Cash Received as Other Operating Revenue	Total value of all other operating revenue <i>received in cash</i> for the provision of financial services. If an MFI uses cash accounting, this account is the same as (I6) Other Operating Revenue.	
C4	Value of Loans Repaid	The value of all loan principals repaid <i>in cash</i> by the MFI's clients during the period. This includes payments related to current and past-due loans as well as recoveries of written-off loans.	
C5	(Cash Paid for Financial Expenses on Funding Liabilities)	The total value of all interest and fee expense <i>paid in cash</i> on deposits and borrowings. If the MFI uses cash accounting, this account is the same as (I8) Financial Expense on Funding Liabilities.	
C6	(Cash Paid for Other Financial Expenses)	The total value of any other financial expense <i>paid in cash</i> . Most MFIs' other financial expenses are noncash (such as inflation expense), and are therefore not included in this account.	
C7	(Cash Paid for Operating Expenses)	The total value of personnel and administrative expense <i>paid in cash</i> to support the provision of financial services. This account does not include noncash expenses, such as depreciation. If the MFI uses cash accounting, this account is the same as (I17) Personnel Expenses plus (I20) Other Administrative Expenses.	
C8	(Cash Paid for Taxes)	The total value of taxes <i>paid in cash</i> . This includes taxes paid on net income or other measures of revenue or profit. Taxes related to employment or purchases, such as a value-added tax, are included in (I16) Operating Expenses. If the MFI uses cash accounting, this account is the same as (I26) Taxes.	
C9	(Value of Loans Disbursed)	The value of all loans disbursed <i>in cash</i> during the period. This account is the same as (P2).	
C10	Net (Purchase)/Sale of Trade Investments	Cash paid for the purchase (net of cash received for the sale) of (B2) Trade Investments. If purchases exceed sales, this number will be negative. These purchases may include certificates of deposit, including interest-bearing deposits, and treasury bills, and because they are typically used in liquidity management, they are therefore considered an operating activity. This account should be the same as the change in (B2) Trade Investments ($B2^0 - B2^1$).	

Ref.	Account Name	Definition	Calculation
C11	Deposits/(Withdrawals) from Clients	Cash deposits/(withdrawals) made by the institution's clients as (B13) Demand Deposits or (B14) Short-term Time Deposits or (B18) Long-term Time Deposits held at the institution, calculated as $(B13^1 - B13^0) + (B14^1 + B14^0) + (B18^1 - B18^0)$.	
C12	Cash Received/(Paid) for Other Operating Assets and Liabilities	Any cash receipt of payment that increases (B7) Accounts Receivable and Other Assets, or (B17) Accounts Payable and Other Short-term Liabilities, and (B20) Other Long-Term Liabilities. Examples include disbursements of repayment of advances or loans to employees and cash payouts of pensions. This account does not include payments for services that increase assets—such as prepaid rent or insurance—that are included in (C7) Cash Paid for Operating Expenses.	
C13	Net Cash from Operating Activities	Sum of all cash flows arising from the principal revenue-producing activities of the institution and other activities that are neither investing nor financing activities.	C1 + C2 + C3 + C4 + C5 + C6 + C7 + C8 + C9 + C10 + C11 + C12
Cash Flows from Investing Activities			
C14	Net (Purchase)/Sale of Other Investments	Cash paid for the purchase (net of cash received from the sale) of (B8) Other Investments. If purchases exceed sales, this will be a negative number. This account may include bonds or shares that an institution plans to hold for longer than one year. This number should be the same as the change in (B8) Other Investments $(B8^0 - B8^1)$.	
C15	Net (Purchase)/Sale of Fixed Assets	Cash payments to acquire property, buildings, and equipment less any cash proceeds from the sale of property, buildings, and equipment. This number should be the same as the change in (B10) Fixed Assets $(B10^0 - B10^1)$.	
C16	Net Cash from Investing Activities	Sum of all cash flows arising from the acquisition and disposal of long-term assets and other investments not included in cash equivalents.	C14 + C15
Cash Flows from Financing Activities			
C17	Net Cash Received/ (Repaid) for Short- and Long-term Borrowings	Cash proceeds/payments from borrowing or issuing notes. This number should be the same as the change in (B15) Short-term Borrowings and (B19) Long-term Borrowings, $[(B15^1 - B15^0) + (B19^1 - B19^0)]$.	
C18	Issuance/(Repurchase) of Paid-in Capital	Cash proceeds (payments) from issuing (repurchasing) shares or other equity instruments.	
C19	(Dividends Paid)	Amount of dividends distributed to shareholders or members <i>in cash</i> . These distributions should be made from (B26) Retained Earnings.	
C20	Donated Equity	The value of donations <i>received in cash</i> from the current period.	
C21	Net Cash from Financing Activities	Sum of all cash flows from activities that result in changes in the size and composition of the funding liabilities and equity of the institution.	C17 + C18 + C19 + C20

Ref.	Account Name	Definition	Calculation
C22	Net Cash Received/(Paid) for Nonoperating Activities	Sum of all cash received and paid for nonoperating activities.	
C23	Net Change in Cash and Due from Banks	Sum of cash flows from operating, investing, financing, and nonoperating activities.	C13 + C16 + C21 + C22
C24	Cash and Due from Banks at the Beginning of the Period	Cash on hand, near cash, and other highly liquid instruments paying little or no interest at the beginning of the period. This number is the same as (B1) Cash and Due from Banks for the end of the previous period.	
C25	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents	Unrealized gains and losses arising from the changes on Cash and Cash Equivalents in foreign currency exchange rates.	
C26	Cash and Due from Banks at the End of the Period	Cash on hand, near cash, and other highly liquid instruments paying little or no interest at the end of the period. This number is the same as (B1) Cash and Due from Banks for the end of the current period.	C23 + C24 + C25

Indirect Cash Flow Statement Details

Ref.	Account Name	Definition	Calculation
Cash Flows from Operating Activities			
C27	Net Income (Before Taxes and Donations)	Same as (I25) Net Income (Before Taxes and Donations).	
C28	Depreciation and Amortization	Same as (I19) Depreciation and Amortization Expense for the period. This noncash expense represents the theoretical decrease in value of a Fixed Asset.	
C29	Impairment Losses on Loans	Same as (I13) Impairment Losses on Loans.	
C30	Cash Paid for Taxes	Same as (C8) Cash Paid for Taxes	
C31	Value of Loans Repaid	Same as (C4) Value of Loans Repaid.	
C32	(Value of Loans Disbursed)	Same as (C9) Value of Loans Disbursed.	
C33	(Increase)/Decrease in Trade Investments	Same as (C10) Net (Purchase)/Sale of Trade Investments.	
C34	Increase/(Decrease) in Deposits	Same as (C11) Deposits/ (Withdrawals) from clients.	
C35	(Increase)/Decrease in Receivables and Other Assets	Change in the sum of (B6) Interest Receivable and (B7) Accounts Receivable and Other Assets from the previous period, calculated as $(B6^0 - B6^1) + (B7^0 - B7^1)$.	
C36	Increase/(Decrease) in Payables and Other Liabilities	Change in the sum of (B16) Interest Payable on Funding Liabilities, (B17) Accounts Payable and Other Short-term Liabilities and (B20) Other Long-term Liabilities from the previous period, calculated as $(B16^1 - B16^0) + (B17^1 - B17^0) + (B20^1 - B20^0)$.	
C37	Net Cash from Operating Activities	Same as (C13) Net Cash from Operating Activities.	C27 + C28 + C29 + C30 + C31 + C32 + C33 + C34 + C35 + C36
Cash Flows from Investing Activities			
C38	(Increase)/Decrease in Other Investments	Same as (C14) Net (Purchase)/Sale of Other Investments.	
C39	(Increase)/Decrease in the Book Value of Gross Fixed Assets	Same as (C15) Net (Purchase)/Sale of Net Fixed Assets.	
C40	Net Cash from Investing Activities	Same as (C16), Net Cash from Investing Activities.	C38 + C39

Ref.	Account Name	Definition	Calculation
Cash Flows from Financing Activities			
C41	Increase/(Decrease) in Short- and Long-term Borrowings	Same as (C17) Net Cash Received/(Repaid) for Short- and Long-term Borrowings.	
C42	Increase/(Decrease) in Paid-in Capital	Same as (C18) Issuance/(Repurchase) of Paid-in Capital.	
C43	(Dividends Paid)	Same as (C19) Dividends Paid.	
C44	Donated Equity	Same as (C20) Donated Equity.	
C45	Net Cash from Financing Activities	Same as (C21) Net Cash from Financing Activities.	C41 + C42 + C43 + C44
C46	Net Cash Received/(Paid) for Nonoperating Activities	Same as (C22) Net Cash Received/(Paid) for Nonoperating Activities.	
C47	Net Change in Cash and Due from Banks	Sum of cash flows from operating, investing, financing, and nonoperating activities.	C37 + C40 + C44 + C46
C48	Cash and Due from Banks at the Beginning of the Period	Cash on hand, near cash, and other highly liquid instruments paying little or no interest at the beginning of the period. This account is the same as (B1) Cash and Due from Banks for the end of the previous period.	
C49	Effect of Exchange Rate Changes on Cash and Cash Equivalents	Unrealized gains and losses arising from the changes on Cash and Cash Equivalents in foreign currency exchange rates.	
C50	Cash and Due from Banks at the End of the Period	Cash on hand, near cash, and other highly liquid instruments paying little or no interest at the end of the period. This account is the same as (B1) Cash and Due from Banks for the end of the current period.	C47 + C48 + C49

SEEP Direct Cash Flow Statement

Ref.	Term	2002	2003	2004
CASH FLOWS FROM OPERATING ACTIVITIES				
C1	Cash Received from Interest, Fees, and Commissions on Loan Portfolio			
C2	Cash Received from Interest on Investment			
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 & 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 FLOW 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			

SEEP Indirect Cash Flow Statement

Ref.	Term	2002	2003	2004
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 FLOW 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			

GROW Direct Cash Flow Statement

Ref.	Term	2002	2003	2004
CASH FLOWS FROM OPERATING ACTIVITIES				
C1	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	4,719	6,342	10,082
C2	Cash Received from Interest on Investment			
C3	Cash Received as Other Operating Revenue			
C4	Value of Loans Repaid	29,384	37,450	59,886
C5	(Cash Paid for Financial Expenses on Funding Liabilities)	(371)	(292)	(823)
C6	(Cash Paid for Other Financial Expenses)			
C7	(Cash Paid for Operating Expenses)	(2,590)	(3,030)	(4,175)
C8	(Cash Paid for Taxes)		(20)	(31)
C9	(Value of Loans Disbursed)	(37,481)	(45,830)	(79,517)
C10	Net (Purchase)/Sale of Trade Investments			
C11	Deposits/(Withdrawals) from Clients			
C12	Cash Received/(Paid) for Other Operating Assets & Liabilities			
C13	NET CASH FROM OPERATING ACTIVITIES	(6,339)	(5,380)	(14,578)
CASH FLOWS FROM INVESTING ACTIVITIES				
C14	Net (Purchase)/Sale of Other Investments			
C15	Net (Purchase)/Sale of Fixed Assets	1,416	1,091	814
C16	NET CASH FROM INVESTING ACTIVITIES	1,416	1,091	814
CASH FLOW FROM FINANCING ACTIVITIES				
C17	Cash Received/(Repaid) for Short- and Long-term Borrowings	3,519	4,291	14,082
C18	Issuance/(Repurchase) of Paid-in Capital			
C19	(Dividends Paid)			
C20	Donated Equity	1,030	320	350
C21	NET CASH FROM FINANCING ACTIVITIES	4,549	4,611	14,432
C22	Net Cash Received/(Paid) for Nonoperating Activities	18	117	312
C23	Net Change in Cash and Due from Banks	(356)	438	980
C24	Cash and Due from Banks at the Beginning of the Period	719	363	801
C25	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents			
C26	Cash and Due from Banks at the End of the Period	363	801	1,781

GROW Indirect Cash Flow Statement

Ref.	Term	2002	2003	2004
CASH FLOWS FROM OPERATING ACTIVITIES				
C27	Net Operating Income	1,626	2,622	4,437
C28	Depreciation and Amortization	170	234	387
C29	Impairment Losses on Loans	145	262	430
C30	(Cash Paid for Taxes)		(20)	(31)
C31	Value of Loans Repaid	29,384	37,450	59,886
C32	(Value of Loans Disbursed)	(37,481)	(45,830)	(79,517)
C33	(Increase)/Decrease in Trade Investments			
C34	Increase/(Decrease) in Deposits			
C35	(Increase)/Decrease in Receivables and Other Assets	(9)	(113)	(121)
C36	Increase/(Decrease) in Payables and Other Liabilities	(174)	14	(49)
C37	NET CASH FROM OPERATING ACTIVITIES	(6,339)	(5,381)	(14,578)
CASH FLOWS FROM INVESTING ACTIVITIES				
C38	(Increase)/Decrease in Other Investments			
C39	(Increase)/Decrease in Book Value of Gross Fixed Assets	1,416	1,091	814
C40	NET CASH FROM INVESTING ACTIVITIES	1,416	1,091	814
CASH FLOW FROM FINANCING ACTIVITIES				
C41	Increase/(Decrease) in Short- and Long-term Borrowings	3,519	4,291	14,082
C42	Increase/(Decrease) in Paid-in Capital			
C43	(Dividends Paid)			
C44	Donated Equity	1,030	320	350
C45	NET CASH FROM FINANCING ACTIVITIES	4,549	4,611	14,432
C46	Net Cash Received/(Paid) for Nonoperating Activities	18	117	312
C47	Net Change in Cash and Due from Banks	(356)	438	980
C48	Cash and Due from Banks at the Beginning of the Period	719	363	801
C49	Exchange Rate Gains/(Losses) on Cash and Cash Equivalents			
C50	Cash and Due from Banks at the End of the Period	363	801	1,781

SESSION 5: OVERVIEW OF FINANCIAL ANALYSIS

Session Summary

- OBJECTIVES:** By the end of the session participants will be able to:
- State reasons why one needs to analyze financial information
 - Discuss the importance of ratios to decision makers
 - State reasons that prevent organizations from getting good information and discuss strategies to overcome blocks

TIME: 49–51 minutes

SUPPLIES: Flipchart and markers
LED projector or overhead projector and overhead markers

PARTICIPANT MATERIALS

OVERHEADS: FA1-O2 Financial Analysis (*definition*)
FA5-O1 Information Quote
FA5-O2a–b The SEEP 18 – Financial Analysis Ratios

HANDOUTS:	FA5-H1	Some of the Financial Management Decisions that Need to be Made by an MFI Manager for Which Financial Analysis is Required	Optional
	FA5-H2	The SEEP 18 – Financial Analysis Ratios	
	FA5-H3	Critical Incidents	
	FA5-H4	Answers to Critical Incidents	
	FA5-H5	Use of Ratios	

Session 5: Overview of Financial Analysis

INTRODUCTION

1. (3 minutes) Introduce the session by showing FA5-O1, Information Quote (optional: with a smile!). Ask: Now that we have all the information we need neatly organized...what do we do with it? Answer: Analyze it! Link to the "mantra." Follow with a review of the session's objectives.

Briefly ask for examples from a few participants of what they presently analyze and how they do this.

2. (7 minutes) Ask the following two questions, one after the other, choosing whichever question participants are more likely to be comfortable with first. For many, that might be "Why don't we analyze?" Record key points on flipchart.
 - Why don't we analyze?
Answers may include: hide inefficiency, lack of skills to do so, don't care how the MFI is performing, no competition, lack of information, lack of time, lack of money.
 - Why do we or should we analyze?
Answers may include: to see trends in performance over time, to make good managerial decisions, to check that we are achieving organizational objectives, to see how we improve our efficiency and effectiveness, for comparison with other MFIs, to see if we are profitable, to plan better.

Lead a group discussion on the pros of analysis, but also take time to acknowledge reasons why they don't analyze, bringing in local examples.

(Note: Optional FA5-H1 supports the pro-analysis argument as an example of what some MFI finance managers thought were key decisions for which they needed financial analyses.) Summarize the discussion.

3. (5 minutes) Acknowledge that good analysis is an investment and go on to highlight the future positive returns of this investment. Say: Before you start serious financial analysis, let's take a few minutes to think conceptually about its importance and to make the case for why it is essential to decision making.

Summarize by stating that there are innumerable ratios and indicators that are used by MFIs to examine their positions. In this course, they will learn about 18 SEEP ratios that should sufficiently present a clear picture of an MFI. If desired, distribute FA5-H2 as a preview and briefly introduce the four categories. Explain that the rest of the course will cover the ratios in detail.

ANALYSIS IS ESSENTIAL – EXERCISE

4. (10 minutes) Distribute FA5-H3, Critical Incidents. Work through one question as an example of the type of answers required, so that the participants do not go into a great deal of detail.

Divide the large group into four or five subgroups and give each group one scenario on which to concentrate. If time allows, participants also may work on the other scenarios. But they should be prepared to present their cases and a brief summary of the discussion for the scenario assigned to them.

Questions to answer for each of the seven scenarios:

- What will be the effect on the MFI's financial performance of the critical situation and/or the MFI's action plan to address the situation?
- What information could have prevented this crisis and/or will help the manager assess the effectiveness of his/her activities?

Walk around the groups to help them categorize the type of information that they need.

5. (10–12 minutes) Reconvene the large group; ask subgroup reporters to read the scenario they worked on, and to briefly tell the group the answers to the questions. Refer to FA5-H4 to ensure the basic issues are addressed, asking follow-up questions if needed. Keep the discussion moving and focused on the key points.

Consider noting that the frequency of measuring ratios depends on the MFI's lending methodology. For example, if the program has weekly repayments, measuring portfolio quality annually would be absurd, since it would need weekly portfolio reports. If possible, use a local example to illustrate key points. Hand out FA5-H4.

6. (5 minutes) Give a brief overview of financial analysis. Explain that analysis is a financial management tool that enables managers of microfinance institutions to achieve greater efficiency and move toward sustainability.

Point out that financial analysis is the art of interpreting financial statements and indicators. It requires managers to look at past performance, analyze it, and use the lessons learned to make today's decisions

Without analysis, creating financial statements is an accounting exercise. In addition to ratio analysis, there are several ways to use financial statements and ratios to learn more about an MFI's performance.

Explain that financial ratio analysis is a tool that helps managers address the primary issues that apply to every MFI, regardless of context and design:

- Profitability and sustainability
- Asset/liability management
- Portfolio quality

- Efficiency and productivity

Also point out that while this course focuses on financial analysis, the MFI may also have other objectives that require analysis to monitor progress.

These organizational objectives may include measuring impact—outreach, poverty alleviation, employment creation, and so forth.

Some of the information needed to monitor these objectives can often be extracted indirectly from study of the financial indicators. For example, MFIs may want to know if they are meeting their clients' needs. If their clients continue with larger loans and if the MFIs continue to attract more clients, then it can be deduced that they are indeed meeting their clients' needs because clients keep demanding and paying for more of the MFIs' services.

INTRODUCTION OF FINANCIAL ANALYSIS TOOLS

7. (4 minutes) Refer to (or distribute) FA5-H2, The SEEP 18 – Financial Analysis Ratios—with the list of ratios to be introduced in the remainder of the course. Use FA5-O2a–b (same list) to give an overview of each. Once again, relate the ratios back to Critical Incidents (FA5-H3) and the answers (FA5-H4) used at the beginning of the session illustrating how they can be used to analyze certain situations. Also note that benchmarking with industry peers is now very easy, thanks to the MicroBanking Bulletin.

Summarize by saying: No one ratio tells it all. There are no values for any specific ratio that are necessarily correct. Ratios must be analyzed together, and ratios tell more when consistently tracked over a period of time. It is the trend in these ratios that is critically important. Taken together, the ratios in the framework provide a perspective on the financial health of the loan portfolio and of the institution as a whole.

8. (5 minutes) Ask participants to summarize main points—why they should analyze, what they should analyze, how, and when (how often).

Emphasize where they have been and where they are going, and link to subsequent sessions. Hand out FA5-H5 as a summary of the session.

Overheads

THE COMPLETE SET OF OVERHEADS IS IN A SEPARATE POWERPOINT FILE ENTITLED "CGAP FINANCIAL ANALYSIS OVERHEADS."

(Don't forget session 1 overhead—FA1-O2)

FA5-O1

The information you have is not the information you want.
 The information you want is not the information you need.
 The information you need is not the information you can obtain.
 The information you can obtain costs more than you want to pay.



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FA5-O2a

The SEEP 18

Financial Sustainability Indicators

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 Ratio
- R10 Write-off Ratio
Adjusted Write-off Ratio
- R11 Risk Coverage Ratio
Adjusted Risk Coverage Ratio

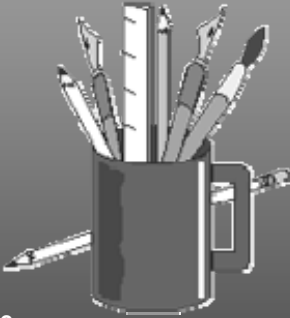
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The SEEP 18 *(continued)*

Efficiency and Productivity

- 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



Handouts

Some of the Financial Management Decisions that Need to be Made by an MFI Manager for Which Financial Analysis is Required

(NOT IN ANY ORDER)

- How to manage the finances to achieve the **strategic goals** of the institution
- How to increase **profitability**
- How to reach **self-sufficiency/break-even point**
- How to increase **efficiency**, especially reducing the cost per unit of money loaned
- What is the optimum level of each different **operational expense**, including the **cost of funds**?
- How to manage the costs of **human resources** as part of overall human resource management
- How to deal with the effect of **inflation**
- What is the **impairment loss allowance** policy?
- What is the **write-off and rescheduling** policy?
- What should the **interest rate** be for the MFI?
- How to manage **liquidity**—that is, how to keep solvent at the same time as disbursing the maximum number of loans, setting a target level of liquidity
- What is the best **financing structure**—that is, how much **debt**, including from commercial sources, and how much **capital** do you need?
- What should the **asset** structure be?
- How to manage **fixed assets**—that is, the depreciation policy, how to finance them, are they insured, are they safe?
- What are the **currency risks** and can they be minimized?
- How to undertake **trend analysis** and to compare actual performance against planned performance

(These decisions were the result of brainstorming by finance managers of MFIs in Bosnia and Herzegovina.)

The SEEP 18

Sustainability Ratios

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

Critical Incidents

Please read and discuss the event below that is assigned to your group. For the presentation, please be able to answer the following two questions for the large group:

- What will be some of the main effects on the MFI's performance?
- What information could have prevented this crisis and/or will help the manager assess the situation to plan action?

SCENARIOS

1. In the pursuit of financial efficiency, an MFI decides to increase loan officer productivity, so it sets up an incentive scheme linking loan officer pay to the number of clients. The branch managers are also promoted according to their branch client population.
2. Due to worsening cases of delinquency and default, an MFI decides to reward its loan officers according to the level of their portfolio-at-risk and to suspend loans in all branches until the trend changes.
3. In order to meet the donor targets for outreach of eight branches by the end of the year (and as of September it has only three branches) the MFI decides to quickly recruit and train officers, who are then deployed to open new branches and meet client targets. Before embarking on this plan, the MFI did not consider its internal target for increasing sustainability.
4. An MFI has five different loan products under its group lending scheme, as well as working capital and fixed asset loans for individuals with security. The total portfolio outstanding is growing fast, but the income from the portfolio is growing at a much slower rate.
5. The Operations Manager is angry about escalating branch costs. He has therefore instituted the following changes: fired all office messengers, programmed all the phones at the branches to receive calls only, and declared overtime null in all branches. All purchases for branch requirements are to be made at the head office.
6. The board of directors is revising the annual results of the MFI (monoproduct credit institution). It is obvious that there is a huge gap between the projected interest income and the interest income received by the MFI, although the portfolio quality remained high throughout the year. The goal of the MFI was to achieve financial sustainability, so the board recommended cutting down costs by merging some branches and letting go some of the loan (account) officers. It was also recommended to increase productivity of all loan officers by setting higher targets (both in number of loans and portfolio outstanding).
7. The MFI was growing very rapidly. To provide access to its products, the institution was opening new branches and hiring loan officers. The number of loans disbursed doubled during the past six months. At the end of this month, the CFO discovered that he was short of cash and could not pay rent and salaries on time. He decided to use the overdraft line at the local commercial bank. The crisis was overcome, but the overdraft cost 20 percent instead of the regular 9 percent.

Answers to Critical Incidents

SCENARIO	SOME OF THE MAIN EFFECTS ON FINANCIAL PERFORMANCE
1	<ul style="list-style-type: none"> • There will be a tradeoff between growth and delinquency. • Clients that are recruited in a hurry by the loan officers may not be quality clients. This can lead to delinquency and default. • Delinquency can also lead to liquidity and income-generation problems, as principal and interest payments are less than expected. Hence the MFI will be unable to meet its cash commitments for repeat loans, and its profitability will be reduced. • This action could also lead to structural problems if managers encourage their subordinates to expand their outreach at the expense of all else. <p><i>Information needed:</i> portfolio quality, efficiency and productivity, sustainability and profitability indicators (for example, portfolio-at-risk, number of clients/loan officer, cash flow analysis, administrative efficiency, and ROA).</p>
2	<ul style="list-style-type: none"> • There will be no tradeoff here; it is all bad news. The clients will see there are no more loan disbursements and slow down paying back their existing loans. This will increase delinquency, so the loan officers will not be able to get their incentive pay. They will then lose interest in their jobs and not try to get the loans back anyway! • The most evident way loan officers can decrease their PAR when there is delinquency is by increasing the volume of lending significantly. This is not an option here. PAR could possibly be kept steady though long-term relationship building and intensifying client monitoring and visits. This will be a time-consuming effort. • Delinquency can also lead to liquidity and income-generation problems, as principal and interest payments are less than expected. Hence the MFI will be unable to meet its cash commitments for repeat loans, and its profitability will be reduced. <p><i>Information needed:</i> portfolio quality, efficiency and productivity, sustainability and profitability indicators.</p>
3	<ul style="list-style-type: none"> • There is a tradeoff between growth and profitability as well as a debate about who determines the strategy of the MFI. • Instead of growing on the basis of sustainable branches, branches may be opened in places where the MFI has no experience and thus present the MFI with heavy carrying costs. It is very costly to maintain new branches until they reach profitability and will be even more devastating if the branch can never be sustainable. New officers sent to open branches may not have experience getting quality clients, resulting in delinquency and default. • The MFI needs to talk to the donor about the need to maintain high quality and an efficient MFI. <p><i>Information needed:</i> portfolio quality, efficiency and productivity, sustainability and profitability indicators.</p>
4	<ul style="list-style-type: none"> • The MFI needs to understand the profitability of its different loan products. • Not all the loans have the same cost structure, interest rate, or portfolio quality. The growth in the portfolio may be due to larger loans to individuals that have a higher delinquency or it may be due to the establishment of many new groups who have high up-front establishment costs. • Until the MFI analyses the profitability of each loan product it will not be able to understand why this is occurring. <p><i>Information needed:</i> portfolio quality, efficiency and productivity, asset/liability management (for example, yield on gross portfolio), sustainability and profitability.</p>

5	<ul style="list-style-type: none"> • There is a tradeoff between productivity and costs. • By firing the office messengers, the operations manager increases the workload for loan officers who would have to carry out the office messengers' work, thus decreasing their productivity. • This could demoralize the field staff and lead to even worse performance in terms of credit delivery and recovery. • By centralizing all purchases, the operations officer may or may not improve efficiency; he doesn't appear to know. • The no-overtime policy could increase delinquency; an incentive scheme for loan officers would be better. <p><i>Information needed:</i> efficiency and productivity, sustainability and profitability, portfolio quality.</p>
6	<ul style="list-style-type: none"> • There is always a difference between what the MFI expects to earn on its major asset and what it actually earns—yield gap (a small gap is acceptable, but a gap >10 percent may indicate serious problems) • The MFI needs to calculate the yield gap. • Closing down branches in order to reduce costs may in fact be counterproductive. The investment of opening the branch will be lost and future outreach may be limited. • Firing the less productive loan officers might demoralize those remaining, as they will have to work much harder to obtain the higher targets. • Geographical limitation (closing branches) may not allow the increase in the number of borrowers. <p><i>Information needed:</i> portfolio quality, efficiency, productivity, yield on gross loan portfolio, information on lending procedures and methodology.</p>
7	<ul style="list-style-type: none"> • Financial institutions are particularly vulnerable to cash shortages because their entire business is based on the proper management of cash inflows and outflows. • While overdraft lines of credit are a good way to ensure adequate liquidity during a crisis or cover temporary cash shortages, they tend to be an expensive source of funds, with high interest rates and access fees. • In addition to securing backup sources of liquidity, it is important for MFIs to address liquidity more systematically by quantifying, measuring, and limiting their liquidity needs on a regular basis by performing maturity-gap analyses and stress-testing their liquidity. • Insufficient liquidity can force an MFI to access its expensive backup liquidity sources, temporarily cease making loans, or in extreme cases, default on its loan payments and close down. • Excess liquidity can indicate that an institution is too fiscally conservative, which can impede its growth, slow or lower income, or that demand for credit is not sufficient to utilize the available funds. <p><i>Information needs:</i> short-term deposits and borrowings and other short-term payables and liabilities, cash flow projections.</p>

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.

SESSION 6: PORTFOLIO QUALITY

Session Summary

- OBJECTIVE:** By the end of the session participants will be able to:
- Examine portfolio quality from several different perspectives
 - Define and calculate portfolio-at-risk, write-off ratio and risk coverage ratio
 - Discuss the importance of three portfolio quality ratios to an MFI
 - Define and calculate provision for loan impairment and impairment loss allowance

TIME: 207–229 minutes

SUPPLIES: Flipcharts
LED projector or overhead projector
Overhead markers
FA4-H7, GROW Income Statement
FA4-H9, GROW Balance Sheet

PARTICIPANT MATERIALS

OVERHEADS: FA6-O1 What Is A Portfolio?
FA6-O2 Portfolio Quality Ratio Formulas
FA6-O3 Portfolio-at-Risk Formula
FA6-O4 Sample Portfolio of Four Loans
FA6-O5 Portfolio-at-Risk by Age
FA6-O6 GROW Portfolio—Sample Individual Loans
FA6-O7a Portfolio Quality Ratios form
FA6-O7b Portfolio Quality Ratios (example)
FA6-O8 Loan Loss Impairment Definitions
FA6-O9 Effect of Impairment Loss Allowance and Write-off on Balance Sheet Value of the Gross Loan Portfolio
FA6-O10 Rationale for Provision for Loan Impairment and Impairment Loss Allowance
FA6-O11 GROW Impairment Loss Allowance Calculation
FA6-O12 Ratios After Write-off
FA6-O13 Adjusted Portfolio Ratios Worksheet
FA6-O14 All Portfolio Ratios—Answers

HANDOUTS: FA6-H1 Portfolio Quality Ratios
FA6-H2 GROW Portfolio – Sample Individual Loans
FA6-H3a GROW Sample Portfolio-at-Risk Calculations
FA6-H3b GROW Sample Portfolio-at-Risk – Answers
FA6-H4 Portfolio Quality Ratios – GROW 2002–2004
FA6-H5 Portfolio Quality Ratios form

Trainer Instructions

- FA6-H6 PAR and Portfolio Quality Ratios—Answers
- FA6-H7 Accounting for Provisions for Loan Impairment and Write-offs
- FA6-H8a GROW Impairment Loss Allowance Calculations
- FA6-H8b GROW Impairment Loss Allowance – Answers
- FA6-H9a GROW Write-off and PAR after Write-off form
- FA6-H9b GROW Impairment Adjustments and PAR after Write-off – Answers
- FA6-H10a GROW Adjusted Portfolio Quality Ratios Calculations
- FA6-H10b GROW Adjusted Portfolio Quality Ratios – Answers

PREPARED FLIPCHART

Arrears Rate and PAR Calculations and Allowance Rate Table

Session 6: Portfolio Quality

MEASURING PORTFOLIO-AT-RISK

1. (5 minutes) Tell participants that they will start the analysis by first looking at the portfolio. Ask: What comes into your mind when I say “Gross Loan Portfolio”? Take a few responses and then show FA6-O1, What Is A Portfolio? Ask: What do you understand by portfolio quality? Then ask: Why is portfolio quality important to an MFI? Briefly review several responses. Make sure everyone has a firm grasp of why portfolio quality is important.

Show FA6-O2, introducing the portfolio quality ratios that will be discussed in the session. Hand out FA6-H1. Say: Now, let us look at an example to begin this discussion.

2. (5 minutes) Begin by posing the following problem. If necessary, write the key points on a flipchart—but emphasize that this is just a simple introduction.

Say: You have given two friends the same size loan of 1,000 that has to be repaid in 10 monthly installments. Friend A has made seven 100 payments but missed the eighth. Friend B has made two of the monthly payments but missed the third month’s payment of 100.

Ask: Which of the two friends is riskier? (Answer: B)

Ask why and explain that:

- Both friends have missed one payment of 100 each. The value of the amount past due, arrears, or late payments is the same for both—100.
- Friend A has paid 700 and has an outstanding balance of 300. Therefore you stand to lose the outstanding balance of 300 from Friend A.
- Friend B has more of her loan outstanding, so you stand to lose more if she defaults on repaying the remaining balance of 800.

This demonstrates that the major risk factor in the portfolio is not the payments that are past due, but the outstanding balance of loans with payments past due.

3. (5 minutes) Use the above example to introduce the portfolio-at-risk (PAR) formula. Put up FA6-O3 showing both formulas, emphasize the PAR formula, and lead a discussion on what PAR means.
4. (5 minutes) Tell participants that they will continue to discuss the differences in the two ratios. Show FA6-O4, Sample Portfolio of Four Loans. Explain the portfolio and calculate the amount past due and PAR, using the previously prepared flipchart, Arrears Rate and PAR calculations and Allowance Rate Table (see Trainer Notes).

Compare the portfolio-at-risk with the arrears rate, using the example to show why it is a better measure of portfolio quality.

- $PAR = 80/150 = 53$ percent

- $\text{Arrears Rate} = 30/150 = 20$ percent

Briefly ask participants why the arrears rate tells them little about the real risk in the portfolio, and what the difference is between it and the PAR.

As part of this discussion, mention “repayment rate” and ensure that participants understand that the measurement itself does not tell them about the quality of the gross loan portfolio. The repayment rate ratio describes the relationship between what the MFI received and what it should have received—the Gross Loan Portfolio is not in the numerator or denominator. As the repayment rate ratio is a commonly used and much cherished ratio, be sure to acknowledge that it is most useful to plan cash flow and to track trends in repayments, but not helpful in measuring portfolio quality.

There may be some debate over the PAR, because participants might think that if they keep their clients’ forced savings, then the portfolio is not “at risk.” Point out that:

- Savings is a financial service to the client; it is not just a security mechanism.
- Even formal financial institutions that have 100 percent security use PAR.
- Like any financial institution, if MFIs have to rely primarily on the security to get the loan back, they are not making good loans.

Summarize the discussion’s key points.

5. (5–7 minutes) Present the concept of aging delinquency, using FA6-O5, Portfolio-at-Risk by Age. At first, show only the percent for the entire portfolio. Ask: Which organization is healthier? Why? (Answer: Both are the same.)

Then reveal the aging portions and ask the same question: Which organization is healthier and why? Elicit the answer: Organization A, because it has a better chance of getting the 6 percent that is only 30 days past due back, and so on. In addition, ask what could be happening in the organization with respect to its portfolios and its collection efforts.

6. (5 minutes) Tell the group that they now will have some time to practice. Pass out FA6-H2, GROW Portfolio—Sample Individual Loans. Put up and review FA6-O6, making sure the participants understand the report.

PAR ASSIGNMENT

7. (30 minutes) Have participants break up into small preassigned groups (based on the precourse skills audit results). Ask them to do as many problems as they can in FA6-H3a, GROW Sample Portfolio-at-Risk—Calculations. Remind them that they have 30 minutes for the exercise.
8. (10 minutes), Ask participants for the answers and how they calculated them, recording the responses either on a flipchart or blank overhead, Go over all the answers. Pass out FA6-H3b.

9. (10 minutes) Ask: What do these results tell us about portfolio quality? Elicit the major points of the exercise from the participants, and record them on a flipchart.

Highlight and discuss the following:

- Strengths of the “portfolio-at-risk” calculation
 - Definition of past due at 1, 31, 61, or 91 days (Explain that aging categories will vary according to repayment schedules. For instance, for programs with daily or weekly repayments, 30-day increments may be too long for measuring risk.)
 - Effects of a fast-growing portfolio on delinquency
 - Effects of rescheduling on delinquency
 - PAR permits the comparison of performance for two different products (such as a short-term loan and a long-term loan, or a group-based loan and an individual loan)
10. (5 minutes) Ask participants to summarize the main points, based on what they have learned from the exercises. For emphasis, ask one more time: Which ratio is the best measurement of portfolio quality and why? What is the relationship between PAR and the institution’s sustainability?

Summarize and link to the following session on loan loss.

11. (15 minutes) Distribute FA6-H4, Portfolio Quality Ratios – GROW 2002–2004, and ask participants to complete the exercise at the bottom of it.
- Briefly review their answers and ask for any questions.
12. (15 minutes) Show FA6-O7a, Portfolio Quality Ratios (only unadjusted), and briefly review the three ratios again. Distribute FA6-H5, Portfolio Quality Ratios form, and again ask participants to complete the worksheet.
13. (5–10 minutes) Show FA6-O7b and review the answers. Hand out FA6-H6, PAR and Portfolio Quality Ratios – Answers.

LOAN LOSS IMPAIRMENT

14. (13 minutes) Introduce the topic of loan loss impairment by asking: What happens when payments start coming in too late? (Answer: potential loan loss.) Follow up by asking what an MFI should do to prepare for, or account for, loan loss in its financial statements for management purposes? Take a few responses, then explain the three concepts of provisions for loan impairment, impairment loss allowances, and write-offs, using FA6-O8, FA6-O9 and FA6-O10, and distribute handout FA6-H7. If participants get confused by the concepts of debit and credit, de-emphasize this and remind them that more about this topic is covered in the Accounting course.

15. (7 minutes) Tell the group that they will be developing an impairment loss allowance for GROW. Explain that, unfortunately, they do not have the delinquency history of GROW's whole portfolio over the last two years and it is this historical performance of the portfolio that is the only reliable guide for setting the Impairment Loss Allowance, Provision and Write-off. Tell participants that they should therefore draw upon a combination of the performance of the portfolio of GROW Individual Loans and the level of delinquency and write-off in the MFIs they represent. Any new MFI might use a similar process.

Put the following chart—**headings only**—on a flipchart. (During the discussion, fill in each column with answers from the group, such as those shown under the Portfolio Aging column.)

	Portfolio Aging	Likely Recovery	Allowance Rate
(add) }	On time		
	1 payment late		
	2 payments late		
	etc.		

Then ask: What aging period should we use? Explain that MFIs can have monthly, weekly, or daily aging periods, so participants need to standardize by using the number of payments late. Then ask group members for their experiences in likely recovery rates for each of the number of payments late; fill in the column on the flipchart. Keep the discussion moving and bring in local examples. Remind them that the Impairment Loss Allowance is the inverse of the likely recovery.

16. (5 minutes) Summarize the discussion and call attention to GROW's aging practices by putting up FA6-O11, GROW Impairment Loss Allowance Calculation, to compare the group responses with the actual GROW provisioning schedule. State that since GROW does not have the historical information, it has decided to use the rates used in the MicroBanking Bulletin for benchmarking

Emphasize to the group that provisions, allowances, and write-offs should be based on the MFI's historical experience (as soon as there is one). GROW will do this once it collects the data and will adjust its allowances accordingly. The rates will be different for each program, based on the past performance in the MFI's portfolio history.

17. (10 minutes) Have participants complete FA6-H8a, GROW Impairment Loss Allowance Calculations, individually or in pairs, if need be.

18. (5 minutes) Review the answers as a group. Ask participants to comment on the impairment loss allowance and the PAR. Hand out FA6-H8b.

Ask if the current allowances are sufficient to cover the risk for potential loss (the answer should be "no" for 2002 and 2004). Then ask how they know if it is adequate. Finally, ask participants what they think should be done to ensure the

allowance is sufficient to cover the risk. (Answer: They will adjust the financial statements to reflect these changes.) Explain that they will have the opportunity to do this in the next session. Take any questions on loan impairment allowances and adjustments.

EFFECT OF WRITE-OFFS ON RATIOS

19. (5–10 minutes) Ask the group what is meant by “write-off” and what is its purpose? Consider using FA6-O9 again to explain the concept and the effects of a write-off on the impairments allowance and Gross Outstanding Portfolio.
20. (5 minutes) Say: You will now calculate a write-off for GROW. Since the loans with more than six late payments have been written off, how will this affect the PAR? Distribute FA6-H9a, GROW Write-off and PAR after Write-off form.
21. (10 minutes) Show FA6-O12, Ratios After Write-off, and hand out FA6-H9b. Ask participants to comment on the answers and quality of the portfolio after the write-off; be sure to ask follow-up questions. Emphasize again in the discussions how write-offs may disguise a delinquency problem.
22. (15 minutes) Lead the group in calculating adjusted portfolio quality ratios for GROW, using FA6-O13; distribute FA6-H10a, GROW Adjusted Portfolio Quality Ratios Calculations.

After participants have completed the worksheet, show FA6-O14 and distribute FA6-H10b.
23. (5–15 minutes) Lead a discussion on the ratios, the differences between adjusted and nonadjusted ratios, and the quality and trends of GROW’s portfolio.
24. (5 minutes) Ask: How does portfolio quality affect the sustainability of an institution?

In the discussion, emphasize the fact that portfolio quality is important to an MFI because the portfolio generates the MFI’s operating income. If the quality of the portfolio is not high, then the interest and fees will not be a reliable source of income for the MFI, and it will continue to be dependent on subsidies to finance its operations.

Be sure to make linkages between the provision for loan impairment and setting sustainable interest. Emphasize that loan losses decapitalize an important productive asset of an MFI. The lesson is that MFIs need to keep delinquency and loan losses very low so they can be sustainable, not just that they should have an adequate provision!
25. (2 minutes) Close the session, briefly review past sessions, and bridge to the next.

Trainer Notes

- The formulas in the software and in the SEEP Framework vary. This session uses the formulas based on the software, as noted throughout this session.
- Prior to the session, the trainer should prepare a flipchart, Arrears Rate and PAR Calculations and Allowance Rate Table, to be used in step 4, showing the following formula (flipchart format):

Gross Loan Portfolio =

Amount Past Due =

Unpaid Principal Balance of all Loans with payments past due =

Arrears Rate FORMULA =

PAR =

Overheads

THE COMPLETE SET OF OVERHEADS IS IN A SEPARATE POWERPOINT FILE ENTITLED "CGAP FINANCIAL ANALYSIS OVERHEADS."

FA6-O1

What Is A Portfolio?

**Gross Loan Portfolio of
a microfinance institution is**

**The principal balance
of all loans
outstanding**

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Portfolio Quality Ratio Formulas ^{FA6-O2}

RATIO	FORMULA
Portfolio-at-Risk (PAR) by Age	$\frac{\text{Unpaid Principal Balance of all loans with payments >XX Days past due} + \text{Value of Renegotiated Loans}}{\text{Gross Loan Portfolio}}$
Adjusted PAR Ratio	$\frac{\text{Adj. Unpaid Principal Balance of all loans with payments >XX Days past due} + \text{Value of Renegotiated Loans}}{\text{Adjusted Gross Loan Portfolio}}$
Write-off Ratio	$\frac{\text{Value of Loans Written Off}}{\text{Average Gross Loan Portfolio}}$
Adjusted Write-off Ratio	$\frac{\text{Value of Loans Written Off} + \text{Write-off Adjustment}}{\text{Average Adjusted Gross Loan Portfolio}}$
Risk Coverage Ratio	$\frac{\text{Impairment Loss Allowance}}{\text{Portfolio-at-Risk >30 Days}}$
Adjusted Risk Coverage Ratio	$\frac{\text{Adjusted Impairment Loss Allowance}}{\text{Adjusted PAR >30 Days} - \text{Write-off Adjustment}}$

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FA6-03

Portfolio-at-Risk Formula


Common: Arrears Rate

$$\frac{\text{Amount Past Due}}{\text{Gross Loan Portfolio}}$$

BETTER:

PORTFOLIO-AT-RISK (PAR)

$$\frac{\text{Unpaid Principal Balance of all Loans >30 days + Renegotiated Loans}}{\text{Gross Loan Portfolio}}$$

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FA6-04

Sample Portfolio of Four Loans

	Today					
	Past Payments			Future Payments		
Client 1	X	X	X			
Client 2		X	O			
Client 3	X	O	O			
Client 4		X	X			

KEY:

- X = payment
- O = delinquent installment
- Four clients in portfolio
- Each box represents \$10

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FA6-O5

Portfolio-at-Risk by Age

Organization A

Total Portfolio-at-Risk	1–30 Days	31–60 Days	61–90 Days	Over 90 Days
14%	6%	4%	2%	2%

Organization B

Total Portfolio-at-Risk	1–30 Days	31–60 Days	61–90 Days	Over 90 Days
14%	4%	2%	1%	7%

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FA6-O6

GROW Portfolio – Sample Individual Loans As of December 31, 2004

1	2	3	4	5	6	7	8	9	10	11	12
Client	Disbursement Date	Term (months)	Loan Amount	Monthly Payment	Total Amount Paid	Amount Outstanding	Total Amount Past Due	1 pmt 1 to 30 Days	2 pmts 31 to 60 Days	3 pmts 61 to 90 Days	>4 pmts >90 Days
A	15-Dec-03	5	1,200	240	1,200	0					
B	19-Dec-03	4	1,000	250	1,000	0					
C	23-Dec-03	3	600	200	0	written off nonrecoverable in August 2004					
D	15-Jan-04	6	1,200	200	1,200	0					
E	23-Mar-04	3	900	300	900	0					
F	11-Jun-04	5	1,000	200	1,000	0					
G	21-Jul-04	6	720	120	600	120					
H	23-Jul-04	10	850	85	425	425					
I	24-Aug-04	6	720	120	480	240					
J	21-Sep-04	6	1,500	250	750	750					
K	13-Nov-04	7	2,100	300	300	1,800					
L	14-Jul-04	8	2,000	250	750	1,250	500	250	250		
M	24-Aug-04	6	900	150	0	900	600	150	150	150	150
N	25-Aug-04	5	1,500	300	600	900	600	300	300		
O	14-Oct-04	4	600	150	150	450	150	150			
P	12-Aug-04	4	800	200	400	400	400	200	200		
Q	15-Dec-04	4	1,100	275	0	1,100	0				
R	28-Dec-04	5	2,200	440	0	2,200	0				

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FA6-O7a

Portfolio Quality Ratios

Ref.	DESCRIPTION	2002	2003	2004
R9	Portfolio-at-Risk			
a	PAR >30 Days			
b	Value of Renegotiated Loans			
c	a + b			
d	Gross Loan Portfolio			
R9	PAR Ratio = c/d			
R10	Write-off Ratio			
a	Value of Loans Written-off			
b	Average Gross Loan Portfolio			
R10	Write-off Ratio = a/b			
R11	Risk Coverage Ratio			
a	Impairment Loss Allowance			
b	Portfolio-at-Risk >30 days			
R11	Risk Coverage Ratio = a/b			

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FA6-O7b

Portfolio Quality Ratios

Ref.	DESCRIPTION	2002	2003	2004
R9	Portfolio-at-Risk			
a	PAR >30 Days	1,090	1,343	477
b	Value of Renegotiated Loans	0	0	0
c	a + b	1,090	1,343	477
d	Gross Loan Portfolio	18,606	24,690	44,132
R9	PAR Ratio = c/d	5.86%	5.44%	1.08%
R10	Write-off Ratio			
a	Value of Loans Written-off	0	0	0
b	Average Gross Loan Portfolio	15,955	21,648	34,411
R10	Write-off Ratio = a/b	0.00%	0.00%	0.00%
R11	Risk Coverage Ratio			
a	Impairment Loss Allowance	434	678	1,108
b	Portfolio-at-Risk >30 days	1,090	1,343	477
R11	Risk Coverage Ratio = a/b	39.82%	50.48%	232.29%

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FA6-08

Loan Loss Impairment Definitions

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 gross loan portfolio.

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 allowance *and* the gross loan portfolio.

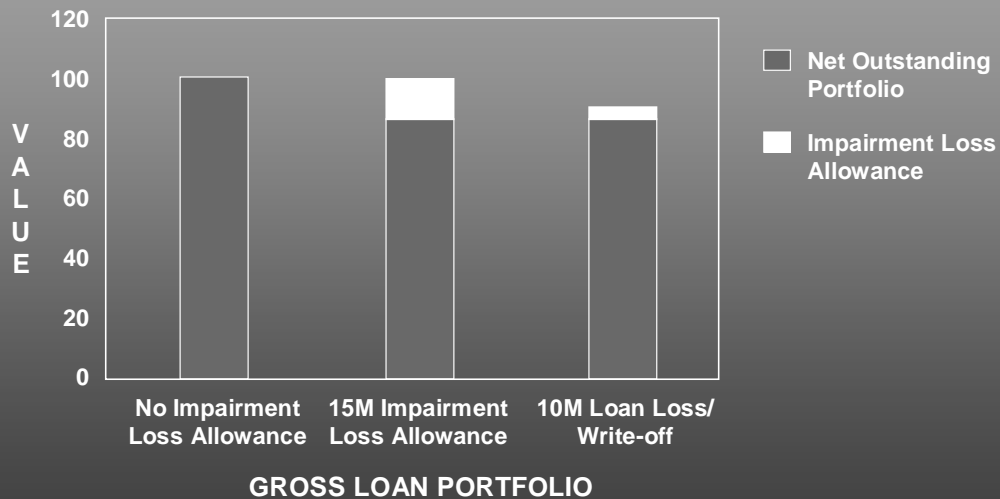
Sources: Ledgerwood 1996; SEEP 2005.

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FA6-09

Effect of Impairment Loss Allowance and Write-offs on Balance Sheet Value of the Gross Loan Portfolio



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Rationale for Provision for Loan Impairment and Impairment Loss Allowance

Maintaining loans on the books that are unlikely to be repaid overstates the value of the portfolio.



“A well-defined policy that establishes an allowance for loan impairment and periodically declares loans non-recoverable saves a program from declaring a large amount unrecoverable all at once thereby drastically reducing assets.”

Sources: Stearns 1991; SEEP 2005.
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GROW Impairment Loss Allowance Calculation

CATEGORY OF AGED LOANS	LIKELY RECOVERY	IMPAIRMENT LOSS ALLOWANCE
1 payment past due	90%	10%
2 payments past due	70%	30%
3 payments past due	70%	30%
4–6 payments past due	40%	60%
>6 payments past due	0%	100%

Refer to the Loan table below and make an allowance for each category of aged loans.

Formula Impairment Loss Allowance Ratio: $\frac{\text{Total Impairment Loss Allowance}}{\text{Gross Loan Portfolio}}$

Record Adjustments for Loan Impairment

	2002	2003	2004
Impairment Loss allowance calculated			
B/S Impairment Loan Allowance =			
Adjustment =			

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FA6-O12

Ratios After Write-off

LOAN LOSSES or WRITE-OFFs decrease the allowance and the gross loan portfolio

AFTER WRITE-OFF – Over 180 days/6 payments	2002	2003	2004
Amount Written Off	24	48	85
Total Outstanding Portfolio after Write-off	18,582	24,642	44,047
PAR over 1 day/payment late	12%	14%	21.5%
PAR over 30 days/2 payments late	5.74%	5%	0.89%
PAR over 90 days/4 payments late	0.24%	0.3%	0.27%

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FA6-O13

Adjusted Portfolio Ratios Worksheet

Ref.	DESCRIPTION
Adj. R9	Adjusted Portfolio-at-Risk Ratio
a	Adjusted PAR >30 Days
b	Value of Renegotiated Loans
c	a + b
d	Adjusted Gross Loan Portfolio
Adj. R9	Adjusted PAR Ratio = c/d
Adj. R10	Adjusted Write-off Ratio
a	Value of Loans Written Off + Write-off Adjustment
b	Average Adjusted Gross Loan Portfolio
Adj. R10	Adjusted Write-off Ratio = a/b
Adj. R11	Adjusted Risk Coverage Ratio
a	Adjusted Impairment Loss Allowance
b	Adjusted PAR >30 days – Write-off Adjustment
Adj. R11	Adjusted Risk Coverage Ratio = a/b

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All Portfolio Ratios – Answers

Ref.	DESCRIPTION	2002	2003	2004
R9	PAR over 30 days Ratio	5.86%	5.44%	1.08%
Adj. R9	Adjusted PAR Ratio	5.87%	5.45%	1.08%
R10	Write-off Ratio	0.00%	0.00%	0.00%
Adj. R10	Adjusted Write-off Ratio	0.15%	0.22%	0.25%
R10	Risk Coverage Ratio	39.82%	50.48%	232.29%
Adj. R11	Adjusted Risk Coverage Ratio	42.31%	48.65%	280.61%

Handouts

Portfolio Quality Ratios

Accounting provides you with an ongoing history of financial activity. Ratios will allow you to examine financial relationships to diagnose the well-being of your project. Key ratios should be monitored regularly to measure performance. The chart that follows describes the purpose of each indicator and gives a range of acceptable ratios.

INDICATOR	RATIO	MEASUREMENT
Portfolio-at-Risk (PAR) By Age	$\frac{\text{Unpaid Principal Balance of all loans with payments >30 Days past due} + \text{Value of Renegotiated Loans}}{\text{Gross Loan Portfolio}}$	The most accepted measure of portfolio quality. The most common international measurements of PAR are >30 days and >90 days, but can vary with terms of loan.
Adjusted PAR Ratio	$\frac{\text{Adjusted Unpaid Principal Balance of all loans with payments >30 Days past due} + \text{Value of Renegotiated Loans}}{\text{Adjusted Gross Loan Portfolio}}$	The adjusted PAR reduces the Gross Loan Portfolio by the Write-off Adjustment.
Write-off Ratio	$\frac{\text{Value of Loans Written Off}}{\text{Average Gross Loan Portfolio}}$	Represents the percentage of the MFI's loans that has been removed from the balance of the gross loan portfolio because they are unlikely to be repaid. MFIs' write-off policies vary; managers are recommended to calculate this ratio on an adjusted basis.
Adjusted Write-off Ratio	$\frac{\text{Value of Loans Written Off} + \text{Write-off Adjustment}}{\text{Average Adjusted Gross Loan Portfolio}}$	
Risk Coverage Ratio	$\frac{\text{Impairment Loss Allowance}}{\text{Unpaid Principal Balance of all loans with payments >30 Days past due}}$	Shows how much of the portfolio-at-risk is covered by the MFI's Impairment Loss Allowance.
Adjusted Risk Coverage Ratio	$\frac{\text{Adjusted Impairment Loss Allowance}}{\text{Adjusted Unpaid Principal Balance of all loans with payments >30 Days past due} - \text{Write-off Adjustment}}$	The adjusted ratio incorporates the Impairment Loss Allowance Adjustment and the Write-off Adjustment

See CGAP Occasional Paper No.3, "Measuring Microcredit Delinquency: Ratios Can Be Harmful to Your Health." See SEEP Framework, 2005.

Note: Portfolio-at-Risk (PAR) and the Write-off Ratio are the most preferred ratios for analyzing portfolio quality. The other ratios are more limited, as noted in the measurement column above.

GROW Portfolio – Sample Individual Loans

As per 31 December 2004

Client	Disbursement Date	Term (Months)	Loan Amount	Monthly Payment	Total Amount Paid	Amount Outstanding	Total Amount Past Due	1 pmt 1 to 30 Days	2 pmt 31 to 60 Days	3 pmt 61 to 90 Days	>4 pmt >90 Days
A	15-Dec-03	5	1,200	240	1,200	0					
B	19-Dec-03	4	1,000	250	1,000	0					
C	23-Dec-03	3	600	200	0	0	written off nonrecoverable in August 2004				
D	15-Jan-04	6	1,200	200	1,200	0					
E	23-Mar-04	3	900	300	900	0					
F	11-Jun-04	5	1,000	200	1,000	0					
G	21-Jul-04	6	720	120	720	120					
H	23-Jul-04	10	850	85	850	425					
I	24-Aug-04	6	800	133	800	240					
J	21-Sep-04	6	1,500	250	1,500	750					
K	13-Nov-04	7	2,100	300	300	1,800					
L	14-Jul-04	8	2,000	250	750	1,250	500	250	250		
M	24-Aug-04	6	900	150	0	900	600	150	150	150	150
N	25-Aug-04	5	1,500	300	600	900	600	300	300		
O	14-Oct-04	4	600	150	150	450	150	150			
P	12-Aug-04	4	800	200	400	400	400	200	200		
Q	15-Dec-04	4	1,100	275	0	1,100	0				
R	28-Dec-04	5	2,200	440	0	2,200	0				

Note: For amounts past due:

1–30 days past due → 1 missed payment

31–60 days past due → 2 missed payments

61–90 days past due → 3 missed payments

Over 90 days past due → over 4 missed payments

GROW Sample Portfolio-at-Risk Calculations

Use the GROW Portfolio – Sample Individual Loans (FA6-H2) to answer these questions.

1. Calculate Portfolio-at-Risk (PAR) for each situation where past due is defined as:
 - a) More than 1 day/1payment past due
 - b) More than 30 days/2 payments past due
 - c) More than 90 days/4 payments past due
2. If the program made 10 new loans of \$900 each, worth a total of \$9,000, in December 2004, what would Portfolio-at-Risk be?
 - a) Portfolio-at-Risk formula—assume more than 30 days past due as delinquent.
 - b) Why is the rate so much lower than it was without these new loans?
3. Consider these same new loans had been made October 1, 2004, and the monthly payment for each loan was \$150. Five of the clients with new loans had missed their November 1 and December 1 payments (that is, their first and second payments). What would the delinquency rate be using the PAR formula?
(Assume more than 30 days past due as delinquent.)

GROW Sample Portfolio-at-Risk – Answers

1. Calculate the Portfolio-at-Risk (PAR) formula for each situation where past due is defined as:

a) More than 1 day past due

$$\frac{1,250 + 900 + 900 + 450 + 400}{10,535} = \frac{3,900}{10,535} = \mathbf{37\%}$$

The 10,535 is calculated by adding each “Amount Outstanding” for clients A through R.

b) More than 30 days past due

$$\frac{1,250 + 900 + 900 + 400}{10,535} = \frac{3,450}{10,535} = \mathbf{33\%}$$

c) More than 90 days past due

$$\frac{900}{10,535} = \mathbf{8.5\%}$$

2. If the program made 10 new loans of 900 each, worth a total of 9,000, in December 2004, what would be the delinquency rate?

a) Portfolio-at Risk-formula—assume more than 30 days past due as delinquent.

$$\frac{3,450}{10,535 + 9,000} = \mathbf{17.6\%}$$

b) Why is the rate so much lower than it was without these new loans?

Rapidly growing portfolios can hide delinquency; in these cases, one should look at actual amounts past due to see how the portfolio is changing.

3. Consider these same new loans had been made October 1, 2004, and the monthly payment for each loan was 150. Five of the new loans had missed their November 1 and December 1 payments. The new gross loan portfolio is 18,035. Use portfolio-at-risk formula, assume more than 30 days past due as delinquent. What would the PAR be?

$$\frac{3,450 + 4,500}{10,535 + 7,500} = \mathbf{44\%}$$

Portfolio Quality Ratios – GROW 2002–2004

Portfolio Aging Schedule 2004		Number of Loans	Portfolio Value
P11, P12	Current Portfolio	16,549	34,192
P13, P14	1 payment (1–30 days) past due	3,154	9,463
	2 payments (31–60 days) past due	34	103
	3 payments (61–90 days) past due	57	170
	4–6 payments past due	40	119
	>6 payments past due	57	85
	Total	19,891	44,132

Portfolio Aging Schedule 2003		Number of Loans	Portfolio Value
P11, P12	Current Portfolio	10,307	21,284
P13, P14	1 payment past due	994	2,063
	2 payments past due	434	900
	3 payments past due	155	321
	4–6 payments past due	36	74
	>6 payments past due	40	48
	Total	11,966	24,690

Portfolio Aging Schedule 2002		Number of Loans	Portfolio Value
P11, P12	Current Portfolio	6,286	16,343
P13, P14	1 payment past due	443	1,173
	2 payments past due	341	905
	3 payments past due	44	116
	4–6 payments past due	17	45
	>6 payments past due	9	24
	Total	7,139	18,606

Calculate Portfolio-at-Risk for GROW

	2002	2003	2004
PAR over 1 day/payment late			
PAR over 30 days/2 payments late			
PAR over 90 days/4 payments late			

Comments on the trends:

Portfolio Quality Ratios

Ref.	Description	2002	2003	2004
R9	Portfolio-at-Risk			
a	PAR >30 Days			
b	Value of Renegotiated Loans			
c	a + b			
d	Gross Loan Portfolio			
R9	PAR Ratio = c/d			
R10	Write-off Ratio			
a	Value of Loans Written Off	0	0	0
b	Average Gross Loan Portfolio			
R10	Write-off Ratio = a/b			
R11	Risk Coverage Ratio			
a	Impairment Loss Allowance			
b	Portfolio-at-Risk >30 days			
R11	Risk Coverage Ratio = a/b			

PAR and Portfolio Quality Ratios – Answers

Portfolio-at-Risk for GROW

	2002	2003	2004
PAR over 1 day/payment late	12.16%	13.80%	22.52%
PAR over 30 days/2 payments late	5.86%	5.44%	1.08%
PAR over 90 days/4 payments late	0.37%	0.49%	0.46%

Ref.	Description	2002	2003	2004
R9	Portfolio-at-Risk			
a	PAR >30 Days	1,090	1,343	477
b	Value of Renegotiated Loans	0	0	0
c	a + b	1,090	1,343	477
d	Gross Loan Portfolio	18,606	24,690	44,132
R9	PAR Ratio = c/d	5.86%	5.44%	1.08%
R10	Write-off Ratio			
a	Value of Loans Written Off	0	0	0
b	Average Gross Loan Portfolio	15,955	21,648	34,411
R10	Write-off Ratio = a/b	0.00%	0.00%	0.00%
R11	Risk Coverage Ratio			
a	Impairment Loss Allowance	434	678	1,108
b	Portfolio-at-Risk >30 days	1,090	1,343	477
R11	Risk Coverage Ratio = a/b	39.82%	50.48%	232.29%

Accounting for Provisions for Loan Impairment and Write-offs

A **provision** 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.

Provisions expense this 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.

Provisions for Loan Impairment charged to a period are expensed in the Income and Expense Statement. The corresponding credit accumulates over time in the Balance Sheet as **Impairment Loss 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 Loss Allowance, loan losses are written off against impairment loss allowances and are also removed from the Gross Loan Portfolio.

The accounting transaction is:

Dr Impairment Loss Allowance
Cr Gross Loan Portfolio

Write-offs do not affect the net portfolio 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.

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

GROW Impairment Loss Allowance Calculations

While GROW has aged its portfolio, it has not methodically used the aging for the purpose of establishing the Impairment Loss Allowance. It has decided to adapt the Benchmarking Allowance rates so that it may easily compare it to benchmarks in the future. When GROW has an established history, it will review the rates to ensure that it has sufficient allowance for impaired loans.

Category of Aged Loans	MicroBanking Bulletin Benchmarking Allowance Rates
1 payment past due (1–30 days)	10%
2 payments past due (31–60 days)	30%
3 payments past due (61–90 days)	30%
4–6 payments past due (91–180 days)	60%
>6 payments past due (over 180 days)	100%

Portfolio Aging Schedule 2004		Number of Loans	Portfolio	Loss Allowance Rate (%)	Impairment Loss Allowance
P11, P12	Current Portfolio	16,549	34,192		
P13, P14	1 payment past due	3,154	9,463	10.0	
	2 payments past due	34	103	30.0	
	3 payments past due	57	170	30.0	
	4–6 payments past due	40	119	60.0	
	>6 payments past due	57	85	100.0	
	Total	19,891	44,132		

Total Impairment Loss Allowance
Gross Loan Portfolio

=

Portfolio Aging Schedule 2003		Number of Loans	Value of Portfolio	Loss Allowance Rate (%)	Impairment Loss Allowance
P11, P12	Current Portfolio	10,307	21,284		
P13, P14	1 payment past due	994	2,063	10.0	
	2 payments past due	434	900	30.0	
	3 payments past due	155	321	30.0	
	4–6 payments past due	36	74	60.0	
	>6 payments past due	40	48	100.0	
	Total	11,966	24,690		

Total Impairment Loss Allowance
Gross Loan Portfolio

=

Portfolio Aging Schedule 2002		Number of Loans	Value of Portfolio	Loss Allowance Rate (%)	Impairment Loss Allowance
P11, P12	Current Portfolio	6,286	16,343		
P13, P14	1 payment past due	443	1,173	10.0	
	2 payments past due	341	905	30.0	
	3 payments past due	44	116	30.0	
	4–6 payments past due	17	45	60.0	
	>6 payments past due	9	24	100.0	
	Total	7,139	18,606		

<u>Total Impairment Loss Allowance</u> Gross Loan Portfolio	=
--	---

GROW Impairment Loss Allowance – Answers

Portfolio Aging Schedule 2004		Number of Loans	Portfolio	Loss Allowance Rate (%)	Impairment Loss Allowance
P11, P12	Current Portfolio	16,549	34,192	-	-
P13, P14	1 payment past due	3,154	9,463	10.0	946
	2 payments past due	34	103	30.0	31
	3 payments past due	57	170	30.0	51
	4–6 payments past due	40	119	60.0	71
	>6 payments past due	57	85	100.0	85
	Total	19,891	44,132		1,185

Portfolio Aging Schedule 2003		Number of Loans	Value of Portfolio	Loss Allowance Rate (%)	Impairment Loss Allowance
P11, P12	Current Portfolio	10,307	21,284	-	-
P13, P14	1 payment past due	994	2,063	10.0	206
	2 payments past due	434	900	30.0	270
	3 payments past due	155	321	30.0	96
	4–6 payments past due	36	74	60.0	44
	>6 payments past due	40	48	100.0	48
	Total	11,966	24,690		665

Portfolio Aging Schedule 2002		Number of Loans	Value of Portfolio	Loss Allowance Rate (%)	Impairment Loss Allowance
P11, P12	Current Portfolio	6,286	16,343	-	-
P13, P14	1 payment past due	443	1,173	10.0	117
	2 payments past due	341	905	30.0	272
	3 payments past due	44	116	30.0	35
	4–6 payments past due	17	45	60.0	27
	>6 payments past due	9	24	100.0	24
	Total	7,139	18,606		475

Record Adjustments for Loan Impairment

	2002	2003	2004
Current Impairment Loan Allowance =			
Impairment Allowance as per Aging Report =			
Adjustment =			

GROW Write-off and PAR after Write-off

GROW has read that it is good to have a write-off policy and to write off loans according to the policy. GROW has decided to write off all loans that are over 180 days late. What are the effects of the write-offs on the ratios?

Use the same Portfolio Report, FA6-H8b, to begin.

After Write-off—over 180 days/6 payments	2002	2003	2004
Amount written off			
Total outstanding portfolio after write-off			
PAR over 1 day/payment late			
PAR over 30 days/2 payments late			
PAR over 90 days/4 payments late			

Compare them to ratios before the write-off. Comments:

GROW Impairment Adjustments and PAR after Write-off – Answers

Adjustments for Loan Impairment

	2002	2003	2004
Current Impairment Loan Allowance =	434	678	1,108
Impairment Allowance as per Aging Report =	475	665	1,185
Adjustment =	41	0	77

After Write-off—over 180 days/6 payments	2002	2003	2004
Amount written off	24	48	85
Total outstanding portfolio after write-off	18,582	24,642	44,047
PAR over 1 day/payment late	12%	14%	21.5%
PAR over 30 days/2 payments late	5.74%	5%	0.89%
PAR over 90 days/4 payments late	0.24%	0.3%	0.27%

GROW Adjusted Portfolio Quality Ratios Calculations

Ref.	Description	2002	2003	2004
R9	Portfolio-at-Risk			
a	PAR >30 Days	1,090	1,343	477
b	Value of Renegotiated Loans	0	0	0
c	a + b	1,090	1,343	477
d	Gross Loan Portfolio	18,606	24,690	44,132
R9	PAR Ratio = c/d	5.86%	5.44%	1.08%
Adj. R9	Adjusted Portfolio-at-Risk			
a	Adjusted PAR >30 Days	1,066		
b	Value of Renegotiated Loans	0		
c	a + b	1,066		
d	Adjusted Gross Loan Portfolio	18,582		
Adj. R9	Adjusted PAR Ratio = c/d	5.74%		
R10	Write-off Ratio			
a	Value of Loans Written Off	0	0	0
b	Average Gross Loan Portfolio	15,955	21,648	34,411
R10	Write-off Ratio = a/b	0.00%	0.00%	0.00%
Adj. R10	Adjusted Write-off Ratio			
a	Value of Loans Written Off + Write-off Adjustment	24		
b	Average Gross Loan Portfolio	15,955		
Adj. R10	Adjusted Write-off Ratio = a/b	0.15%		

Ref.	Description	2002	2003	2004
R11	Risk Coverage Ratio			
a	Impairment Loss Allowance	434	678	1,108
b	Portfolio-at-Risk >30 days	1,090	1,343	477
R11	Risk Coverage Ratio = a/b	39.82%	50.48%	232.29%
Adj. R11	Adjusted Risk Coverage Ratio			
a	Adjusted Impairment Loss Allowance	451		
b	Adj. PAR >30 days – Write-off Adjustment	1,066		
Adj. R11	Adjusted Risk Coverage Ratio = a/b	42.31%		

GROW Adjusted Portfolio Quality Ratios – Answers

Ref.	Description	2002	2003	2004
R9	Portfolio-at-Risk			
a	PAR >30 Days	1,090	1,343	477
b	Value of Renegotiated Loans	0	0	0
c	a + b	1,090	1,343	477
d	Gross Loan Portfolio	18,606	24,690	44,132
R9	PAR Ratio = c/d	5.86%	5.44%	1.08%
Adj. R9	Adjusted Portfolio-at-Risk			
a	Adjusted PAR >30 Days	1,066	1,295	392
b	Value of Renegotiated Loans	0	0	0
c	a + b	1,066	1,295	392
d	Adjusted Gross Loan Portfolio	18,582	24,642	44,047
Adj. R9	Adjusted PAR Ratio = c/d	5.74%	5.26%	0.89%
R10	Write-off Ratio			
a	Value of Loans Written Off	0	0	0
b	Average Gross Loan Portfolio	15,955	21,648	34,411
R10	Write-off Ratio = a/b	0.00%	0.00%	0.00%
Adj. R10	Adjusted Write-off Ratio			
a	Value of Loans Written Off + Write-off Adjustment	24	48	85
b	Average Gross Loan Portfolio	15,955	21,612	34,345
Adj. R10	Adjusted Write-off Ratio = a/b	0.15%	0.22%	0.25%
R11	Risk Coverage Ratio			
a	Impairment Loss Allowance	434	678	1,108
b	Portfolio-at-Risk >30 days	1,090	1,343	477
R11	Risk Coverage Ratio = a/b	39.82%	50.48%	232.29%
Adj. R11	Adjusted Risk Coverage Ratio			
a	Adjusted Impairment Loss Allowance	451	630	1,100
b	Adj. PAR >30 days – Write-off Adjustment	1,066	1,295	392
Adj. R11	Adjusted Risk Coverage Ratio = a/b	42.31%	48.65%	280.61%

SESSION 7: ANALYTICAL ADJUSTMENTS

Session Summary

- OBJECTIVE:** By the end of the session the participant will be able to:
- Explain the rationale for making adjustments to total financial operations expenses
 - Calculate adjustments for subsidized cost of funds
 - Calculate adjustments to reflect in-kind subsidies
 - Calculate adjustments for inflation
 - Calculate adjustments for impairment loss allowance
 - Calculate adjustments for write-offs
 - Create adjusted financial statements for GROW 2002–2004

TIME: 205–244 minutes

SUPPLIES: Flipchart and markers
LED projector or overhead projector and overhead markers
FA4-H7, GROW Income Statement
FA4-H9, GROW Balance Sheet
FA6-H10b, GROW Adjusted Portfolio Quality Ratios

TRAINER MATERIALS

FA7-M1 Effects of Inflation on Equity – Annual
FA7-M2 A Breadtime Story
FA7-M3 Technical Notes
FA4-H7 GROW Income Statement
FA4-H9 GROW Balance Sheet
FA6-H10b GROW Adjusted Portfolio Quality Ratios – Answers

PARTICIPANT MATERIALS

OVERHEADS: FA7-O1 Analytical Adjustments
FA7-O2 Types of Analytical Adjustments (SEEP)
FA7-O3 Subsidies Adjustments GROW 2002 form
FA7-O4 GROW 2002 Adjustments
FA7-O5a GROW Inflation Adjustments – 2002 form
FA7-O5b GROW Inflation Adjustments – 2002 (Answers)
FA7-O6 GROW Adjustment for Impairment Loss Allowance and Write-off
FA7-O7a–b GROW Analytical Adjustments
FA7-O8a–b GROW Adjusted Income Statement
FA7-O9a–c GROW Adjusted Balance Sheet

FA7-O10	Typical Elements of a Balance Sheet
FA7-O11	Inflation Effects Formula

Optional

Trainer Instructions

HANDOUTS:	FA7-H1	Three Types of Analytical Adjustments (SEEP)
	FA7-H2	GROW Analytical Adjustments Worksheet
	FA7-H3	GROW Analytical Adjustments
	FA7-H4	GROW Adjusted Income Statement Worksheet
	FA7-H5	GROW Adjusted Income Statement
	FA7-H6	GROW Adjusted Balance Sheet Worksheet
	FA7-H7	GROW Adjusted Balance Sheet
	FA7-H8	Technical Notes

Session 7: Analytical Adjustments

INTRODUCTION

1. (3 minutes) Ask participants to take out the financial statements for GROW, FA4-H7 and FA4-H9, and FA6-H10b (GROW Adjusted Portfolio Quality Ratios – Answers), and keep them at hand.

Lead the group in a review of formatting financial statements. Ask: Why did we format GROW financial statements this way?

Answer: The original financial statements are an accurate representation of GROW's financial position from an accounting perspective. But they are not useful as management tools to see the extent to which GROW is dependent on subsidies, which is why they use the SEEP financial statement format.

However, even with the SEEP format, there are elements that do not reflect the full costs the institution is incurring. To undertake accurate financial analysis, they need to make some analytical adjustments.

2. (7 minutes) Ask: If the executive director of GROW wanted to see if his or her institution could operate sustainably—that is, completely independent of subsidies—what additional information would he or she need?

Have the group identify any costs that GROW incurs that are not reflected in the expenses. Write their answers on a flipchart and probe until they respond with the following:

- Subsidized cost of funds
- In-kind subsidies
- Inflation
- Impairment loss allowance
- Write-off

Explain to participants that these are additional, or hidden, costs incurred by the MFI that they need to recognize for internal management purposes. They are not to be included in the audited financial statements but are internal adjustments to the expenses for management purposes. Show FA7-O1 and FA7-O2 and distribute FA7-H1.

Point out that in some countries with a history of high inflation, an inflation adjustment is required in the audited financial statements. But in this case they are treating inflation as an internal management issue.

SUBSIDIZED COST OF FUNDS

3. (5 minutes) Ask: What is the rationale for adjusting expenses to account for the subsidized cost of funds?

(Answer: The rationale is that it helps managers understand what the MFI's expenses would be if the MFI had to rely on commercial sources of funds such as bank loans or savings instead of concessional loans.)

Remind the group that in this course, they are looking at how an MFI can be independent of subsidies in the long term, so they need to identify where there are subsidies and to see how big those subsidies are.

COMMERCIAL RATE OF FUNDS

4. (10 minutes). Tell the group that the term used to indicate the price that the MFI would have to pay for commercial money is the commercial rate of funds. They could also use the term "market rate"—the terminology is not the issue. The key question is, what would they be paying for their funds if the MFI was not subsidized, but funded by commercial-rate savings or bank loans? Refer participants to CGAP Occasional Paper 1, page 3.

Emphasize that the answer depends on the sources of commercial funds. If the MFI is borrowing from any source, then the commercial rate for funds would be the rate the MFI would pay on bank loans. These rates are the last actual rates from the bank, comparable rates or—if no alternative—the 90-day T-bill rate.

Explain that if the MFI intends to get a license to mobilize savings legally, then the commercial rate for its savings would be the rate paid on voluntary savings from the general public, plus an allowance for the additional administrative cost of capturing deposits.

Introduce FA7-O3 and say: The way to calculate the amount of subsidy is to price your savings or loans at their respective commercial rate and then subtract what you have already paid for those loans.

Walk the group through the simple formula for cost of funds for GROW:

$$\begin{aligned} & (\text{average funding liabilities} \times \text{market/commercial rate for funds}) \\ & \quad \text{minus} \\ & \quad \text{interest and fee expense on funding liabilities} \end{aligned}$$

Ask for questions, then ask participants to calculate the 2002 cost of funds subsidy for GROW. Participants will need to refer to the GROW case study from session 4 for the market/commercial rate of funds and financial statements 2002–2004 (FA4-H7 and FA4-H9). Solicit answers from the group. Then show FA7-O4, explain, and take questions.

5. (5 minutes) Follow up by asking: What would the effect of forced savings or soft loans be on this subsidy adjustment?

(Answer: Additional forced savings or soft loans would increase this adjustment.)

6. (10 minutes) Have the group work in neighboring triads again, discussing possible answers to the following question: What are the options for addressing this subsidy to prepare the MFI for future commercial sources of funds?

Call for the group's attention after five minutes and ask for responses. Be sure that the points in FA7-M3 on subsidized cost of funds are included:

IN-KIND SUBSIDIES AND DONATIONS

7. (7 minutes) Introduce the second adjustment: in-kind subsidies. The nonoperating income in the Income Statement reflects all cash grants or donations. But it does not account for the in-kind donations that may be received by an MFI.

Ask participants: What in-kind subsidies and donations do you receive or might an MFI receive?

(Answers can include technical advice, training, rent, use of transport, other foreign consultants, and so forth.)

IN-KIND SUBSIDY ADJUSTMENT

8. (5 minutes) Tell the group that the in-kind subsidy adjustment adds in the cost, or fair market value, of goods and services that the MFI does not pay for but that are important to the conduct of its business.

Ask: Looking at the GROW example, what in-kind subsidies can you identify?

(Answer: GROW is provided, through its original donor, with a technical advisor for three years. The donor is covering all costs associated with having the expatriate work for GROW.)

9. (5 minutes) Ask: If GROW had to pay for this expertise, how would it affect its total financial operations expenses?

(Answer: GROW's total financial operations expenses would increase by 48,000 in 2002.)

As a follow-up, ask participants about the difference that the MFI's having substantial in-kind subsidies would make to its sustainability. Show the bottom portion of FA7-O3.

Briefly add that substantial in-kind subsidies and donations increase an MFI's adjusted costs and increase the time it takes to reach sustainability. The solution is to ask if they really need these donations or not. Prompt them: If not, say no!

10. (2 minutes) Using the adjustments made above, lead participants in making adjustments on the total financial operations expenses for 2002 (FA7-O4). Work quickly through each line, one at a time, pausing for questions.
11. (5 minutes) Summarize the main points and ask for questions. In addition, ask participants to think about the effects of the two adjustments just reviewed.

Point out that these adjustments increase the expenses that will need to be paid for from operational income if the institution is to be sustainable.

INFLATION

12. (5 minutes) Pose the question below to get the group thinking about inflation devaluing their capital. (They will understand later why inflation particularly affects equity; for now they just need to realize its importance.)

Ask participants: Why is inflation an additional cost to an MFI?

Answers include:

- Inflation negatively affects the value of equity (capital or net worth).
- Reduction in the real value of the equity has a cost.
- Even a low inflation rate, when compounded, is significant.
- Inflation strikes at the heart of a business.

13. (4 minutes) Begin the overview by asking: What, then, is the cost of Inflation? Solicit answers from the participants.

14. (7 minutes) **Optional:** In cases where the participants are very interested in the mechanics of calculating the effect of inflation, show optional overheads FA7-O10 and FA7-O11.

Explain to participants that this is just an introduction to the topic, and they should not dedicate time for calculations, for this is not the main message—the impact of inflation on equity is.

Quickly divide the large group into six subgroups of people sitting next to one another. Give each small group one of the four annual inflation rates and the local inflation rate, averaged over the last three years. (You will need to have researched the average local inflation rate for the last three years.) Ask each small group to calculate the percent devaluation from inflation over three years, using the rate you assigned to each while they were being formed: 5 percent, 15 percent, and so on.

Check each of the small groups to be sure they have the right answer before calling the large group together again. If participants are slow at calculations, skip this group exercise and go straight to the answers and discuss them.

Also consider using the meal illustration in FA7-M1, or the “Breadtime Story” in FA7-M2.

15. (2 minutes) **Optional:** Ask the participants for their results, ensure they are correct, and complete the overhead. The point is not to focus on the calculation but to show how much value the equity has lost in three years. Show FA7-O11, Inflation Effects Formula.

Annual Inflation	% Loss in 3 Years
5%	14%
15%	34%
20%	42%
40%	64%
Current inflation rate of country	

16. (5 minutes) Conclude by asking the group to discuss what this means for their MFIs.

Summarize by emphasizing that inflation does have a significant negative effect on equity, especially when it is compounded over the years. Tell the group that, because of its significance, they will examine the effects of inflation in more depth.

Please note that this next section is NOT the most technically rigorous explanation of inflation effects—but it reflects the level of participants in the pilot course. If your participants are at a higher level, adjust this section and lecture to suit the audience.

If participants are at a lower level and need a more concrete example of the effects of inflation, refer to optional explanation/exercises.

17. (25 minutes) **Optional:** Put up the typical elements of a B/S shown in overhead FA7-O10, Typical Elements of a Balance Sheet. Tell the group that the easiest place to start when answering the question of how inflation affects the Balance Sheet is to identify how inflation affects the components of the Balance Sheet, and why. Use the Balance Sheet overhead to guide the discussion. See Technical Notes, FA7-M3, and SEEP Framework.

Ask: How does inflation affect financial assets such as the Gross Loan Portfolio? Financial liabilities such as loans from commercial banks? Net fixed assets?

Remind them that equity is not contractually based and is affected by inflation, as discussed already.

Explain that, as the discussion has revealed, there are two ways to think about the net effect of inflation on the Balance Sheet. Using FA7-O10 as a visual, go over the points covered under FA-M3, Technical Notes, on inflation and equity.

Describe the first way by saying: Although equity is eroded by inflation, some of the equity is invested in fixed assets, which appreciate with inflation, thus counterbalancing the impact on equity. In other words, it is only that part of equity that remains after subtracting the value of the net fixed assets that is affected by inflation.

Then tell the group about the second method. Say: Alternatively, inflation affects the difference between financial assets and liabilities. That is, inflation will affect equity.

Summarize by telling participants that these two approaches will give exactly the same amount of equity affected by inflation.

18. (10 minutes) Give the group the actual formula for the inflation adjustment, which is shown on FA7-H1:

$$\begin{aligned} & (\text{equity, beginning of period X annual inflation rate}) \\ & \quad \text{minus} \\ & (\text{net fixed assets, beginning of period X annual inflation rate}) \end{aligned}$$

Put up FA7-O5a, and work through the example for 2002. Then ask participants to complete the calculations. Prompt the group by asking why equity and net fixed assets are at the beginning of the period used in this calculation.

When the group has finished the calculations, reveal the answers in FA7-O5b. Explain the answers and take questions.

PORTFOLIO-AT-RISK (IMPAIRMENT LOSS ALLOWANCE AND WRITE-OFF)

19. (5 minutes) Review the adjustments and work of session 6. Ask the group: What do you recall about portfolio-at-risk adjustments? Why should an MFI consider these important adjustments? Then lead a discussion on the two questions and write the answers on a flipchart.

(Answers: There are two common or recommended adjustments—impairment loss allowance adjustment and write-off adjustment. An MFI's treatment of its portfolio-at-risk can have a major impact on its financial results. For performance monitoring, the answer is that the adjustments ensure that some minimum standards for the portfolio-at-risk are applied.)

20. (15 minutes) Explain once again how to calculate adjustment for Impairment Loss Allowance and write-off and show FA7-O6. Remind participants to use FA6-H10b, GROW Adjusted Portfolio Quality Ratios – Answers.
21. (20 minutes) Have participants form four or five groups and have them compute the GROW analytical adjustments for 2003 and 2004 by completing the adjustment table worksheet on FA7-H2.

Be sure to walk around and check that participants understand the adjustments. When the calculations are completed, hand out FA7-H3 so participants can check their answers.

Briefly show FA6-O7a–b as a review and take any questions on the adjustments.

Summarize by asking participants to recap the main points of the analytical adjustments

Lead a discussion by asking: Why do we need to do adjustments? How are they calculated?

And (most important): How can this be used by management in an MFI? What can an MFI do to minimize the need for adjustments? Remind the group that

these adjustments are for management's analytical purposes; they are not adjusting financial statements.

22. (15–20 minutes) Ask participants: How would the adjustments affect the GROW Income Statement and Balance Sheet? Discuss the effects in detail.
Focus on the I/S first. Show FA7-O8a–b and reveal the answers one by one as a response to participants' input.
23. (15 minutes) Distribute FA7-H4 and ask participants to complete the adjusted Income Statement for the 2003 and 2004 worksheet.
24. (5 minutes) Distribute FA7-H5, answers to the worksheet. Take questions.
25. (5 minutes) Have the group focus on the Balance Sheet. Show F7-O9a–c and reveal and explain the answers one by one.
26. (15 minutes) Distribute FA7-H6 and ask participants to complete the adjusted GROW Balance Sheet for 2003 and 2004.
27. (5 minutes) Distribute FA7-H7 and review the answers. Take any remaining questions about the exercise.

CONCLUSION

28. (15 minutes) Ask the group: What do these numbers mean to GROW? How would these adjustments affect GROW's sustainability? List responses on a flipchart and ask follow-up questions.

Tell the group that each adjustment means an additional expense to be added to the internal management reports. They will reduce the adjusted operating profit. However, there are actions GROW can take to reduce the effect of these adjustments.

Explain that the ratio analysis, which looks at the institution's sustainability, will need to include the adjusted expenses to ensure an accurate picture of GROW's expenses. Adjusted expenses mean the MFI will take longer to reach sustainability because its costs are higher.

Ask: What have participants learned about the impact of adjustments on their costs? In particular, what action will participants take as a result of understanding this subsidy? List participants' responses on a flipchart.

Responses should include recognition that the MFI is responsible for all its costs. Even though they cannot affect the rate of inflation, MFIs can take action to reduce its effects, just as they can take action to prepare for commercial sources of funds and be prepared to pay for all in-kind donations they receive. Participants should refer back to the actions discussed above, which can reduce the impact of the adjustments.

Remind participants to make these adjustments on their own financials, as homework. Hand out FA7-H8, Technical Notes.

29. (2 minutes) Ask participants for any other comments and questions, then bridge to the next session on asset/liability management ratios.

Trainer Notes

- This session does not have many group activities. You will need to ask a lot of follow-up questions and engage participants, rather than fall back into lecturing.
 - For optional steps: There are four options that the trainer can use to illustrate the effects of inflation on equity over time within the time allocated:
 1. Quickly divide the large group into six subgroups of people who are sitting next to one another. Give each small group one of the four annual inflation rates and the local inflation rate averaged over the last three years, and ask group members to calculate the percent devaluation from inflation over three years, using the formula. (You can achieve this by walking around the room, assigning the formulas, saying, This group will work on the formula using 5 percent, this group will take 15 percent, and so on.)

In preparation, you will need to have researched the average local inflation rate for the last three years. You also will need to check each of the groups to be sure they have the right answer before bringing the large group together again.
 2. If participants are slow at calculations, you may skip this group exercise and go straight to the answers and discuss them.
 3. Use the meal illustration in FA7-M1.
 4. Use the Breadtime Story in FA7-M2.
-

Effect of Inflation on Equity – Annual

Inflation is 20 percent every year.

On December 31, 2002, a meal costs \$1.

On December 31, 2003, the same meal costs _____.

On December 31, 2004, the same meal costs _____.

On December 31, 2002, the MFI's equity is \$100,000. If all this equity were invested in loans to clients, they could use the proceeds to buy _____ meals.

During 2003, the MFI breaks even on accounting basis, so its equity on December 31, 2003, is still \$100,000. If this equity were invested in loans to clients, they could use the proceeds to buy _____ meals.

During 2004, the MFI breaks even on accounting basis, so its equity on December 31, 2004, is still \$100,000. If this equity were invested in loans to clients, they could use the proceeds to buy _____ meals.

By breaking even over the two-year period, the MFI has in fact suffered a loss in the real value (purchasing power) of its equity equal to _____ meals or _____ at December 31, 2004, prices.

The Breadtime Story

Year	Money on Hand	Annual Inflation Rate	Price per Loaf	No. of Loaves Bought	Percent Lost Due to Inflation	Additional Amount Needed to Buy 10 Loaves
1	100		10.0	10		
2	100	20%	12.0	8.3	16.7	20
3	100	20%	14.4	6.9	30.6	44
4	100	20%	17.3	5.8	42.1	73
5	100	20%	20.7	4.8	51.8	107

Technical Notes

FORCED SAVINGS – ADJUSTMENT OF FORCED SAVINGS

If questioned about adjustment of forced savings, say: For the purpose of this training we will carry out a simple adjustment, that includes everything for the sake of exposition and prudence. This more subtle explanation below should be used when the participants' level of understanding is relatively high and/or if the question is raised.

In general, all funding liabilities should be adjusted for commercial cost of funds. However, in the case of forced savings, a number of factors must be taken into account. First, it must be understood that forced savings is part of the lending methodology and cannot be thought of as separate from the loan product. If the MFI plans to continue offering the loan product with forced savings included, then technically the forced savings should not be adjusted. Why? Because the MFI would not have to look for commercial funds for that portion of the loan portfolio held in forced savings. For example: if an MFI requires 20 percent in forced savings or compensating balances, then for every 100 loan, the MFI only needs to raise 80, since it will raise the other 20 from the client.

If the MFI plans to eliminate the forced savings product and plans to continue offering the same gross loan size (that is, 100 instead of 80), then the forced savings should be adjusted. This is because in the future the MFI will have to replace the forced savings with commercial sources (either voluntary savings or commercial loans), and therefore will have to raise the entire 100.

SUBSIDIZED COST OF FUNDS

Ensure the following points are included:

- The purpose is to see that loans at low interest rates subsidize the MFI. If the MFI had to get concessional bank loans from fully commercial sources, they would be more expensive.
- The first option is to set interest rates to cover the commercial rate(s) for funds, so that when the MFI accesses the funds commercially, it will be able to afford them. Remember, the cost of funds subsidy is a noncash expense, so the MFI is not making up for an actual cash outflow but for the additional expenses that would be incurred if it were operating like a business.
- Recognizing that the MFI needs to be independent of donor funds, the second option is to look for the cheapest sources of commercial funds. That would mean considering taking voluntary savings from the general public. This may require a license from the central bank, but in the long term is cheaper than commercial bank loans.
- However, savings may not always be less expensive than commercial loans, particularly for MFIs going into voluntary savings for the first time. Other costs to take into consideration include infrastructure costs (such as safe, MIS, systems, and procedures), specialized human resources (both operational and back-office), a liquidity policy that requires an increased proportion of assets to be held as cash, which is nonproductive, and numerous costs related to obtaining a license and being supervised by the authorities.

INFLATION ADJUSTMENTS

Be careful that participants do not confuse inflation effects with hard-currency indexing or exchange-rate fluctuation. Gains and losses on these are already reflected in the financial statements.

First, introduce the concept of what is affected by inflation—namely, that overall, those assets and liabilities that are contractual in nature carry prices that presumably include the cost of inflation or could have the cost of inflation included by people setting the prices. Inflation eats into the income earned (or expense incurred), but in general the asset or liability itself is not affected.

Then go into the specifics by referring to the B/S. Ask: How does inflation affect the Balance Sheet?

- **Financial Assets** such as the Gross Loan Portfolio are contractually based, and inflation may be included in the price. If the MFI sets the interest rate on its loans to keep up with inflation, then its income is protected. If interest rates do not adequately cover inflation, its income deteriorates, but the assets themselves are not affected. The equity is affected because the income flows through to the B/S.

Consider noting that in the CGAP Occasional Paper 1 on Setting Interest Rates, inflation is discussed.

- **Financial Liabilities** such as loans from commercial banks are also contractually based. Financial liabilities that are not linked to inflation benefit the MFI, because the interest rate does not include the cost of inflation; it is the bank that loses. Again, the equity is affected if the loans are priced to cover inflation, because it is an additional expense that flows to the B/S.
- **Net Fixed Assets** do not lose value as a result of inflation—they are inflation-proof. For example, microentrepreneurs often invest in fixed assets such as jewelry or goats because they will maintain their value in the face of inflation. In fact, fixed assets actually appreciate in value along with inflation. (Consider pointing out that as fixed assets lose value over time due to wear and tear, which is reflected in the accumulated depreciation due to depreciation, net fixed assets are used to calculate the inflation adjustment).
- **Equity** is not contractually based and its value is eroded by inflation, as discussed already.

Show the following on FA7–O10 as the group follows step by step. Conclude by saying: Therefore, there are two ways to think about the net effect of inflation on the balance sheet:

1. Although equity is eroded by inflation, some of the equity is invested in fixed assets, which appreciate with inflation, thus counterbalancing the impact on equity. In other words, it is only that part of equity remaining after subtracting the value of the net fixed assets that is affected by inflation. (See shading A.)
2. Alternatively, inflation affects the difference between financial assets and liabilities (from CGAP Occasional Paper 1, page 3).

Financial Assets	Financial Liabilities
B	A
Net Fixed Assets	Equity

These two approaches give exactly the same amount of equity affected by inflation.

Ask: Why are equity and net fixed assets at the beginning of the period used in this calculation?

Answer: Because the adjustment considers the effects of inflation during the period, the formula uses the value for net fixed assets and equity at the beginning of the period (or the end of the previous period). This shows the effects of inflation on the beginning value of fixed assets and equity during the period. This assumes that any effects of inflation on fixed assets sold or acquired during the period are already incorporated in the sale or purchase price. Although this calculation is not a perfect measurement, using the beginning of the period provides a fair approximation of the effects of inflation.

From the SEEP Framework, Section 3.5, "Inflation Adjustments," pg. 50:

DIFFERENCES

Table 3.6 highlights several examples of differences in the methodologies that are commonly used to adjust for inflation. All methodologies analyzed in this chapter use the same formula for adjusting for inflation, which consists of calculating the erosion of equity and revaluation of fixed assets due to the effect of inflation.

Table 3.6. Differences in Inflation Adjustment Methodologies

Adjustment Criteria	Examples
Accounts	Net fixed assets and total equity Net fixed assets, total equity, and net income
Period	Period average Beginning of period (end of previous period) End of current period
Rate	Calculated from the Consumer Price Index (CPI) Obtained from the Central Bank (or another reliable source) Self-reported Inflation rate from the IMF Statistics (line 64X)

Formula:

$$A3 = A3.1 - A3.2$$

where:

$$A3.1 = (\text{Equity Accounts} \times \langle \text{Rate} \rangle)$$

$$A3.2 = (\text{Net Fixed Assets} \times \langle \text{Rate} \rangle)$$

If an MFI already calculates an inflation expense as part of (I11) Other Financial Expenses, the Inflation Adjustment is applied only if the adjustment is greater than the recorded Inflation Expense. The entry in the adjusted financial statements is A.3 less (I11-1) Inflation Expense.

The formula for the Inflation Adjustment is as follows:

$$A3 = (A3.1 - A3.2) - (I11-1) \text{ Inflation Expense}$$

HOW TO COVER INFLATION ADJUSTMENTS

The first option is to set interest rates to cover the cost of inflation. The additional income flows through to the B/S, thus increasing the MFI's equity. Since the effect of inflation is an

adjustment, not a cash expense, we are making up for the loss in purchasing power of the equity, not a cash outflow.

The second option is to increase the amount of fixed rate liabilities. Since we know fixed rate liabilities are not affected by inflation, but equity is affected, in an inflationary environment it would therefore make sense to increase the liabilities of the MFI.

The third option, theoretically, is to invest any surplus cash in fixed assets, thus reducing financial assets and increasing fixed assets. BUT fixed assets are not productive for an MFI and reducing cash could affect liquidity, so it is not a recommended option.

PORTFOLIO QUALITY ADJUSTMENTS

Two adjustments are common and recommended for the portfolio-at-risk: the Impairment Loss Allowance Adjustment and the Write-off Adjustment. An MFI should consider these adjustments regardless of regulatory requirements.

The ***Impairment Loss Allowance*** is a type of adjustment for the value of the gross loss portfolio to reflect the credit quality of the portfolio. MFIs should have an impairment loss allowance policy that reflects their historical loss rates, perceived credit risk, and local standards. This adjustment has great benchmarking value because its primary purpose is to impose a minimum standard. MFIs perform this adjustment for analytical purposes only, determining for themselves which provisioning levels may be the most appropriate.

Writing off a loan is an accounting treatment to acknowledge that assuming a past due loan will be collected is no longer reasonable, even if collection efforts continue. The Write-off Adjustment is an analytical exercise, not an operational decision.

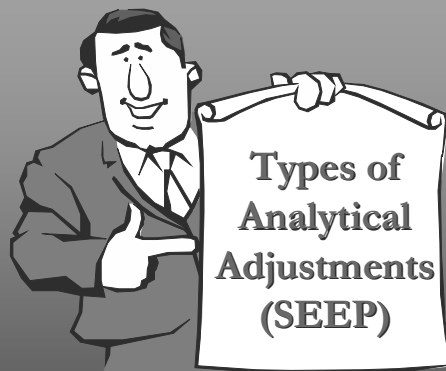
Overheads

THE COMPLETE SET OF OVERHEADS IS IN A SEPARATE POWERPOINT FILE ENTITLED "CGAP FINANCIAL ANALYSIS OVERHEADS."

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 GROW 2002

FA7-O3

Cost of Funds		CALCULATION
a	Average Short-term Borrowings + Average Long-term Borrowings	
b	Market Rate, End of Period	34%
c	Market Cost of Funds = a x b	
d	Interest and Fee Expense on Borrowings	371
e	Adjustment for Subsidized Cost of Funds (A1) = c - d	

In-kind Subsidies	Paid By Other (Donor)	ADJUSTMENT
Personnel Expense		
Administrative Expenses		
Adjustment for In-kind Subsidies (A2)		

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GROW 2002 Adjustments

FA7-O4

All amounts are in thousands (000)

Cost of Funds		CALCULATION
a	Average Short-term Borrowings + Average Long-term Borrowings	$(0 + 6962)/2 + (8061+4618)/2 = 3482+6339 = 9821$
b	Market Rate, End of Period	34%
c	Market Cost of Funds = a x b	3,339
d	Interest and Fee Expense on Borrowings	371
e	Adjustment for Subsidized Cost of Funds (A1) = c - d	2,968

In-kind Subsidies	Paid By Other (Donor)	ADJUSTMENT
Personnel Expense	48	48
Administrative Expense	0	0
Adjustment for In-kind Subsidies (A2)	48	48

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FA7-O5a

GROW Inflation Adjustments – 2002

	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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FA7-O5b

GROW Inflation Adjustment – 2002

	FORMULA	ADJUSTMENT
a	Equity, Beginning of Period	5,691
b	Inflation Rate	18%
c	Adjustment to Equity (A3.1) = a x b	1,024
d	Net Fixed Assets, Beginning of Period	429
e	Inflation Rate	18%
f	Adjustment to Fixed Assets (A3.2) = d x e	77
g	Net Adjustment for Inflation (A3) = c – f	947

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GROW Adjustment for Impairment Loss Allowance and Write-off

FA7-O6

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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GROW Analytical Adjustments

FA7-O7a

DESCRIPTION	2002 (000)	2003 (000)	2004 (000)
A1 Adjustment for Subsidized Cost of Funds			
a Average Short-term Borrowings	3,482	8,708	13,805
b Average Long-term Borrowings	6,339	5,017	9,107
c Average Long- and Short-term Borrowings	9,820	13,725	22,912
d Market Rate, End of Period	34.00%	34.00%	33.50%
e Market Cost of Funds = c x d	3,339	4,667	7,676
f Interest and Fee Expense on Borrowings	371	292	823
g Adjustment for Subsidized Cost of Funds	2,968	4,375	6,853
A2 Adjustment for In-kind Subsidies			
a Personnel Expense	48	48	48
b Administrative Expense			
c Adjustment for In-kind Subsidies = a + b	48	48	48

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GROW Analytical Adjustments *(continued)*

FA7-07b

DESCRIPTION		2002 (000)	2003 (000)	2004 (000)
A3 Inflation Adjustment				
a	Equity, Beginning of Period	5,691	8,182	11,124
b	Inflation Rate	18%	18%	19%
c	Inflation Adjustment to Equity = a x b	1,024	1,473	2,114
d	Net Fixed Assets, Beginning of Period	429	1,464	2,321
e	Inflation Adjustment to Fixed Assets = d x b	77	264	441
f	Net Adjustment for Inflation = c - e	947	1,209	1,673
A4 Adjustment for Impairment Loss Allowance				
a	Adjusted Impairment Loss Allowance	475	665	1,185
b	Actual Impairment Loss Allowance	434	678	1,108
c	Adjustment for Impairment Loss Allowance = a - b	41		77
A5 Adjustment for Write-off				
	PAR >180 days Past Due	24	48	85
	TOTAL ADJUSTMENTS	4,004	5,632	8,650

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GROW Adjusted Income Statement

FA7-08a

Ref.	X-Ref.	Account Name	2002 Adj. (000)
I1		Financial Revenue	4,719
I2		Financial Revenue from Loan Portfolio	4,719
I3		Interest on Loan Portfolio	4,719
I4		Fees and Commissions on Loan Portfolio	-
I5		Financial Revenue from Investments	-
I6		Other Operating Revenue	-
I7		Financial Expense	4,286
I8		Financial Expense on Funding Liabilities	3,339
I9		Interest and Fee Expense on Deposits	-
I10		Interest and Fee Expense on Borrowings	371
	A1	Adjustment for Subsidized Cost of Funds	2,968
I11		Other Financial Expense	
	A3	Adjustment for Financial Expenses	947
I12		Net Financial Income	433
I13		Impairment Losses on Loans	186
I14		Provision for Loan Impairment	157
	A4	Adjustment for Provision for Loan Impairment	41
I15		Value of Loans Recovered	(12)

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GROW Adjusted Income Statement *(continued)*

Ref.	X-Ref.	Account Name	2002 Adj. (000)
I16		Operating Expense	2,808
I17		Personnel Expense	1,851
	A2.1	Adjustment for In-kind Personnel Expenses	48
I18		Administrative Expense	909
I19		Depreciation and Amortization Expense	170
I20		Other Administrative Expense	739
	A2.2	Adjustment for Other Administrative Expenses	
I21		Net Operating Income	(2,561)
I22		Net Nonoperating Income/(Expense)	18
I23		Nonoperating Revenue	18
I24		Nonoperating Expense	–
I25		Net Income (Before Taxes and Donations)	(2,543)
I26		Taxes	–
I27		Net Income (After Taxes and Before Donations)	(2,543)
I28		Donations	1,030
I29		Donations for Loan Capital	915
I30		Donations for Operating Expense	115
I31		Net Income (After Taxes and Donations)	(1,513)

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GROW Adjusted Balance Sheet

Ref.	X-Ref.	Account Name	2002 Adj. (000)
ASSETS			
B1		Cash and Due from Banks	363
B2		Trade Investments	–
B3		Net Loan Portfolio	18,131
B4	A5	Gross Loan Portfolio	18,606
B5		Impairment Loss Allowance	(434)
	A4, A5	Adjustment for Impairment Loss Allowance	(41)
B6		Interest Receivable on Loan Portfolio	196
B7		Accounts Receivable and Other Assets	5
B8		Other Investments	–
B9		Net Fixed Assets	1,541
B10		Fixed Assets	1,845
	A3.2	Adjustment to Fixed Assets	77
B11		Accumulated Depreciation and Amortization	(381)
B12		TOTAL ASSETS	20,236

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GROW Adjusted Balance Sheet *(continued)*

FA7-O9b

Ref.	X-Ref.	Account Name	2002 Adj. (000)
LIABILITIES			
B13		Demand Deposits	–
B14		Short-term Time Deposits	–
B15		Short-term Borrowings	6,963
B16		Interest Payable on Funding Liabilities	15
B17		Accounts Payable and Other Short-term Liabilities	424
B18		Long-term Time Deposits	–
B19		Long-term Borrowings	4,616
B20		Other Long-term Liabilities	–
B21		TOTAL LIABILITIES	12,018

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GROW Adjusted Balance Sheet *(continued)*

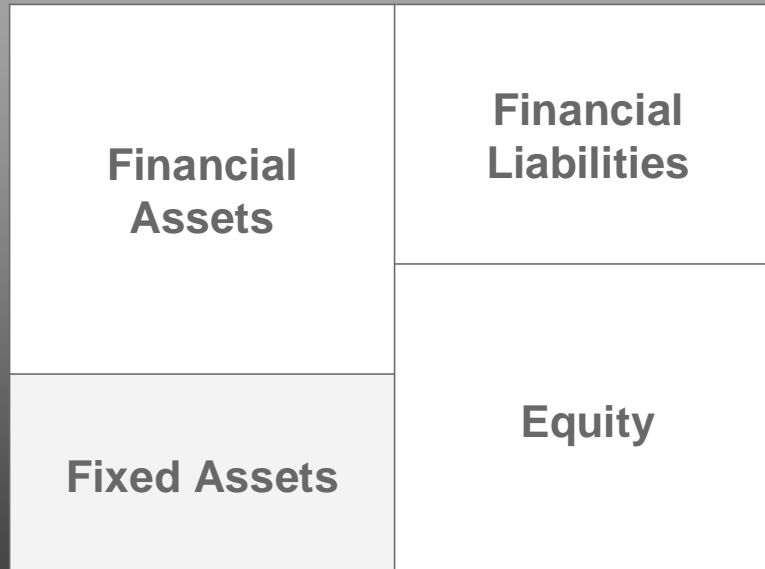
FA7-O9c

Ref.	X-Ref.	Account Name	2002 Adj. (000)
EQUITY			
B22		Paid-in Capital	–
B23		Donated Equity	2,614
B24		Prior Years	1,584
B25		Current Year	1,030
B26		Retained Earnings	5,564
B27		Prior Years	4,107
B28		Current Year	1,461
	A1 –A4	Adjustments to Income	(4,004)
B29		Reserves	–
B30		Other Equity Accounts	
B31		Adjustments to Equity	4,040
B31-1	A1	Subsidized Cost of Funds Adjustment	2,968
B31-2	A2	In-kind Subsidy Adjustment	48
B31-3	A3	Inflation Adjustment	1,024
B32		TOTAL EQUITY	8,218
		TOTAL LIABILITIES + EQUITY	20,236

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Typical Elements of a Balance Sheet



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Inflation Effects Formula

Annual Inflation	% Loss in 3 Years
5%	14%
15%	34%
20%	42%
40%	64%
<i>Current inflation rate of country</i>	

$$\text{Formula} = 1 - \left\{ \frac{1}{1 + \text{inflation rate}} \right\}^n$$

n = The number of years over which you wish to compound the effects of inflation

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Handouts

Three Types of Analytical Adjustments (SEEP)

Ref.	Account Name	Explanation	Formula
1. Subsidies			
A1	Subsidized Cost of Funds	Examines the difference between an MFI's financial expense and the financial expense it would pay if all its funding liabilities were priced at market rate.	$\{(Average\ Short\text{-}term\ Borrowings + Average\ Long\text{-}term\ Borrowings) \times Market\ Rate\ for\ Borrowing\} - Interest\ and\ Fee\ Expense\ on\ Borrowings$
A2	In-kind Subsidy	The difference between what the MFI is actually paying for a donated or subsidized good or service and what it would have to pay for the same good or service on the open market. Common examples of these in-kind subsidies are computers, consulting services, free office space, and free services of a manager.	$Period\ Estimated\ Market\ Cost\ of\ [Accounts] - Period\ Actual\ Cost\ of\ [Accounts]$
2. Inflation			
A3	Inflation	The rationale behind the inflation adjustment is that an MFI should, at a minimum, preserve the value of its equity (and shareholders investments) against erosion due to inflation. In addition, this adjustment is important to consider when benchmarking institutions in different countries and economic environments. Unlike subsidy adjustment, recording an inflation adjustment is common in many parts of the world and is mandated by Section 29 of the International Accounting Standards (IAS) in high inflation economies.	$(Equity,\ Beginning\ of\ Period \times Inflation\ Rate) - (Net\ Fixed\ Assets,\ Beginning\ of\ Period \times Inflation\ Rate)$
3. Portfolio-at-Risk			
A4	Impairment Loss Allowance	Intended to bring an MFI's Impairment Loss Allowance in line with the quality of its Gross Loan Portfolio.	$Gross\ Loan\ Portfolio \times [Allowance\ Rated] - (Impairment\ Loss\ Allowance)$
A5	Write-off	Intended to identify loans on an MFI's books that by any reasonable standard should be written off. This adjustment can significantly reduce the value of an MFI's assets if persistent delinquent loans are not counted as part of the Gross Loan Portfolio.	Portfolio-at-Risk > 180 days

- If an adjustment calculation produces a negative number, the adjustment is not applied.
- Managers should explain the adjustment calculation and which variables they chose.
- Adjustments can be applied for any period of time.
- The method used to calculate averages makes a difference.

GROW Analytical Adjustments Worksheet

Using FA4-H7, FA4-H9, and FA6-H10b, please calculate adjustments for GROW.

	DESCRIPTION	2002	2003	2004
A1	Adjustment for Subsidized Cost of Funds			
	a. Average Short-term Borrowings	3,482		
	b. Average Long-term Borrowings	6,339		
	c. Average Long- and Short-term Borrowings	9,820		
	d. Market Rate, End of Period	34.00%		
	e. Market Cost of Funds = c x d	3,339		
	f. Interest and Fee Expense on Borrowings	371		
	g. Adjustment for Subsidized Cost of Funds = e - f	2,968		
A2	Adjustment for In-kind Subsidies			
	a. Personnel Expense	48		
	b. Administrative Expense			
	c. Adjustment for In-kind Subsidies = a + b	48		
A3	Inflation Adjustment			
	a. Equity, Beginning of Period	5,691		
	b. Inflation Rate	18%		
	c. Inflation Adjustment to Equity = (a x b)	1,024		
	d. Net Fixed Assets, Beginning of Period	429		
	e. Inflation Adjustment to Fixed Assets = (d x b)	77		
	f. Net Adjustment for Inflation = c - e	947		
A4	Adjustment for Impairment Loss Allowance			
	a. Adjusted Impairment Loss Allowance	475		
	b. Actual Impairment Loss Allowance	434		
	c. Adjustment to Impairment Loss Allowance = a - b >0	41		
A5	Adjustment for Write-off			
	PAR > 180 days Past Due	24		
TOTAL ADJUSTMENTS		4,004		

GROW Analytical Adjustments

	DESCRIPTION	2002	2003	2004
A1	Adjustment for Subsidized Cost of Funds			
	a. Average Short-term Borrowings	3,482	8708	13,805
	b. Average Long-term Borrowings	6,339	5,017	9,107
	c. Average Long- and Short-term Borrowings	9,820	13,725	22,912
	d. Market Rate, End of Period	34.00%	34.00%	33.50%
	e. Market Cost of Funds = c x d	3,339	4,667	7,675.5
	f. Interest and Fee Expense on Borrowings	371	292	823
	g. Adjustment for Subsidized Cost of Funds = e - f	2,968	4,375	6,853
A2	Adjustment for In-kind Subsidies			
	a. Personnel Expense	48	48	48
	b. Administrative Expense			
	c. Adjustment for In-kind Subsidies = a + b	48	48	48
A3	Inflation Adjustment			
	a. Equity, Beginning of Period	5,691	8,182	11,124
	b. Inflation Rate	18%	18%	19%
	c. Inflation Adjustment to Equity = (a x b)	1,024	1,473	2,113.6
	d. Net Fixed Assets, Beginning of Period	429	1,464	2,321
	e. Inflation Adjustment to Fixed Assets = (d x b)	77	264	441.0
	f. Net Adjustment for Inflation = c - e	947	1,209	1,673
A4	Adjustment for Impairment Loss Allowance			
	a. Adjusted Impairment Loss Allowance	475	665	1,185
	b. Actual Impairment Loss Allowance	434	678	1,108
	c. Adjustment to Impairment Loss Allowance = a - b >0	41		77
A5	Adjustment for Write-off			
	PAR > 180 days Past Due	24	48	85
TOTAL ADJUSTMENTS		4,004	5,632	8,650

GROW Adjusted Income Statement Worksheet

Ref.	Account Name	2002 (ADJ) (000)	2003 (ADJ) (000)	2004 (ADJ) (000)
I1	Financial Revenue	4,719		
I2	Financial Revenue from Loan Portfolio	4,719		
I3	Interest on Loan Portfolio	4,719		
I4	Fees and Commissions on Loan Portfolio	-		
I5	Financial Revenue from Investment	-		
I6	Other Operating Revenue	-		
I7	Financial Expense	4,286		
I8	Financial Expense on Funding Liabilities	3,339		
I9	Interest and Fee Expense on Deposits	-		
I10	Interest and Fee Expense on Borrowings	371		
A1	Adjustment for Subsidized Cost of Funds	2,968		
I11	Other Financial Expense			
A3	Adjustment for Financial Expenses	947		
I12	Net Financial Income	433		
I13	Impairment Losses on Loans	186		
I14	Provisions for Loan Impairment	157		
A4	Adjustment for Provision for Loan Impairment	41		
I15	Value of Loans Recovered	(12)		
I16	Operating Expense	2,808		
I17	Personnel Expense	1,851		
A2.1	Adjustment for In-kind Personnel Expenses	48		
I18	Administrative Expense	909		
I19	Depreciation and Amortization Expense	170		
I20	Other Administrative Expense	739		
A2.2	Adjustment for Other Administrative Expenses			
I21	Net Operating Income	(2,561)		
I22	Net Nonoperating Income/(Expense)	18		
I23	Nonoperating Revenue	18		
I24	Nonoperating Expense	-		
I25	Net Income (Before Taxes and Donations)	(2,543)		
I26	Taxes	-		
I27	Net Income (After Taxes and Before Donations)	(2,543)		
I28	Donations	1,030		
I29	Donations for Loan Capital	915		
I30	Donations for Operating Expense	115		
I31	Net Income (After Taxes and Donations)	(1,513)		

GROW Adjusted Income Statement

Ref.	Account Name	2002 (ADJ) (000)	2003 (ADJ) (000)	2004 (ADJ) (000)
I1	Financial Revenue	4,719	6,342	10,082
I2	Financial Revenue from Loan Portfolio	4,719	6,342	10,082
I3	Interest on Loan Portfolio	4,719	6,342	10,082
I4	Fees and Commissions on Loan Portfolio	-	-	-
I5	Financial Revenue from Investment	-	-	-
I6	Other Operating Revenue	-	-	-
I7	Financial Expense	4,286	5,876	9,349
I8	Financial Expense on Funding Liabilities	3,339	4,667	7,676
I9	Interest and Fee Expense on Deposits	-	-	-
I10	Interest and Fee Expense on Borrowings	371	292	823
A1	Adjustment for Subsidized Cost of Funds	2,968	4,375	6,853
I11	Other Financial Expense			
A3	Adjustment for Financial Expenses	947	1,209	1,673
I12	Net Financial Income	433	466	733
I13	Impairment Losses on Loans	186	262	507
I14	Provisions for Loan Impairment	157	292	472
A4	Adjustment for Provision for Loan Impairment	41	-	77
I15	Value of Loans Recovered	(12)	(30)	(42)
I16	Operating Expense	2,808	3,312	4,610
I17	Personnel Expense	1,851	2,116	3,009
A2.1	Adjustment for In-kind Personnel Expenses	48	48	48
I18	Administrative Expense	909	1,148	1,553
I19	Depreciation and Amortization Expense	170	234	387
I20	Other Administrative Expense	739	914	1,166
A2.2	Adjustment for Other Administrative Expenses			
I21	Net Operating Income	(2,561)	(3,108)	(4,384)
I22	Net Nonoperating Income/(Expense)	18	117	312
I23	Nonoperating Revenue	18	117	312
I24	Nonoperating Expense	-	-	-
I25	Net Income (Before Taxes and Donations)	(2,543)	(2,991)	(4,072)
I26	Taxes	-	20	31
I27	Net Income (After Taxes and Before Donations)	(2,543)	(3,011)	(4,103)
I28	Donations	1,030	320	350
I29	Donations for Loan Capital	915	249	316
I30	Donations for Operating Expense	115	71	34
I31	Net Income (After Taxes and Donations)	(1,513)	(2,691)	(3,753)

GROW Adjusted Balance Sheet Worksheet

Ref.	Account Name	2002 (ADJ) (000)	2003 (ADJ) (000)	2004 (ADJ) (000)
	ASSETS			
B1	Cash and Due from Banks	363		
B2	Trade Investments	-		
B3	Net Loan Portfolio	18,131		
B4/A5	Gross Loan Portfolio (adjusted)	18,582		
A5	Adjustment for Write-offs	24		
B5	Impairment Loss Allowance (adjusted)	(434)		
A4, A5	Adjustment for Impairment Loss Allowance	(41)		
B6	Interest Receivable on Loan Portfolio	196		
B7	Accounts Receivable and Other Assets	5		
B8	Other Investments	-		
B9	Net Fixed Assets (adjusted)	1,541		
B10	Fixed Assets	1,845		
A3.2	Inflation Adjustment to Net Fixed Assets	77		
B11	Accumulated Depreciation & Amortization	(381)		
B12	TOTAL ASSETS	20,236		
	LIABILITIES			
B13	Demand Deposits	-		
B14	Short-term Time Deposits	-		
B15	Short-term Borrowings	6,963		
B16	Interest Payable on Funding Liabilities	15		
B17	Accounts Payable and Other Short-term Liabilities	424		
B18	Long-term Time Deposits	-		
B19	Long-term Borrowings	4,616		
B20	Other Long-term Liabilities	-		
B21	TOTAL LIABILITIES	12,018		
	EQUITY			
B22	Paid-in Capital	-		
B23	Donated Equity	2,614		
B24	Prior Years	1,584		
B25	Current Year	1,030		
B26	Retained Earnings	1,564		
B27	Prior Years	4,107		
B28	Current Year	1,461		
A1-A4	Adjustments to Income	(4,004)		
B29	Reserves	-		
B30	Other Equity Accounts			
B31	Adjustments to Equity*	4,040		
A1	Subsidized Cost of Funds Adjustment**	2,968		
A2	In-kind Subsidy Adjustment	48		
A3	Inflation Adjustment**	1,024		
B32	TOTAL EQUITY	8,218		
	TOTAL LIABILITIES + EQUITY	20,236		

* This entry may need to be adjusted by 1 to account for the rounding of other entries.

** These entries are rounded.

GROW Adjusted Balance Sheet

Ref.	Account Name	2002 (ADJ) (000)	2003 (ADJ) (000)	2004 (ADJ) (000)
	ASSETS			
B1	Cash and Due from Banks	363	801	1,718
B2	Trade Investments	-	-	-
B3	Net Loan Portfolio	18,131	24,012	42,947
B4/A5	Gross Loan Portfolio (adjusted)	18,582	24,642	44,047
A5	Adjustment for Write-offs	24	48	85
B5	Impairment Loss Allowance (adjusted)	(434)	(678)	(1,108)
A4, A5	Adjustment for Impairment Loss Allowance	(41)	-	(77)
B6	Interest Receivable on Loan Portfolio	196	288	425
B7	Accounts Receivable and Other Assets	5	26	10
B8	Other Investments	-	-	-
B9	Net Fixed Assets (adjusted)	1,541	2,585	3,189
B10	Fixed Assets	1,845	2,936	3,750
A3.2	Inflation Adjustment to Net Fixed Assets	77	264	441
B11	Accumulated Depreciation & Amortization	(381)	(615)	(1,002)
B12	TOTAL ASSETS	20,236	27,712	48,352
	LIABILITIES			
B13	Demand Deposits	-	-	-
B14	Short-term Time Deposits	-	-	-
B15	Short-term Borrowings	6,963	10,454	17,156
B16	Interest Payable on Funding Liabilities	15	25	62
B17	Accounts Payable and Other Short-term Liabilities	424	428	342
B18	Long-term Time Deposits	-	-	-
B19	Long-term Borrowings	4,616	5,417	12,797
B20	Other Long-term Liabilities	-	-	-
B21	TOTAL LIABILITIES	12,018	16,324	30,357
	EQUITY			
B22	Paid-in Capital	-	-	-
B23	Donated Equity	2,614	2,934	3,284
B24	Prior Years	1,584	2,614	2,934
B25	Current Year	1,030	320	350
B26	Retained Earnings	1,564	2,557	4,087
B27	Prior Years	4,107	5,568	8,189
B28	Current Year	1,461	2,621	4,548
A1-A4	Adjustments to Income	(4,004)	(5,632)	(8,650)
B29	Reserves	-	1	1,610
B30	Other Equity Accounts	-	-	-
B31	Adjustments to Equity*	4,040	5,896	9,014
A1	Subsidized Cost of Funds Adjustment**	2,968	4,375	6,852
A2	In-kind Subsidy Adjustment	48	48	48
A3	Inflation Adjustment**	1,024	1,473	2,114
B32	TOTAL EQUITY	8,218	11,388	17,995
	TOTAL LIABILITIES + EQUITY	20,236	27,712	48,352

* This entry may need to be adjusted by 1 to account for the rounding of other entries.

** These entries are rounded.

Technical Notes

EFFECT OF INFLATION ADJUSTMENT ON FINANCIAL STATEMENTS

The inflation adjustment may have the following affect on accounts:

- increase other financial expense (I/S)
- increase net fixed assets (B/S)

This increase in expenses will reduce retained earnings (B/S), current year; revaluation of net fixed assets will increase total assets (B/S).

To balance these changes, the sum of these two effects is added to adjustments to equity in the adjusted balance sheet.

MORE COMMENTS

How does inflation affect the Balance Sheet?

Overall, those assets and liabilities that are contractual in nature carry prices that presumably include the cost of inflation, or the cost of inflation could be included by people setting the prices. Inflation eats into the income earned (or expense incurred), but in general the asset or liability itself is not affected. Specifically, the effects are:

- **Financial Assets** such as the Gross Loan Portfolio are contractually based, and inflation may be included in the price. If the MFI sets the interest rate on its loans to keep up with inflation, then its income is protected. If interest rates do not adequately cover inflation, its income deteriorates, but the assets themselves are not affected. The equity is affected because the income flows through to the B/S.

Consider noting that in the CGAP Occasional Paper 1 on Setting Interest Rates, inflation is discussed.

- **Financial Liabilities** such as loans from commercial banks are also contractually based. Financial liabilities that are not linked to inflation benefit the MFI, because the interest rate does not include the cost of inflation; it is the bank that loses. Again, the equity is affected if the loans are priced to cover inflation, because it is an additional expense that flows to the B/S.
- **Net Fixed Assets** do not lose value as a result of inflation—they are inflation-proof. For example, microentrepreneurs often invest in fixed assets such as jewelry or goats because they will maintain their value in the face of inflation. In fact, fixed assets actually appreciate in value along with inflation. (Consider pointing out that as fixed assets lose value over time due to wear and tear, which is reflected in the accumulated depreciation due to depreciation, net fixed assets are used to calculate the inflation adjustment.)
- **Equity** is not contractually based and its value is eroded by inflation, as discussed already.

Therefore, there are two ways to think about the net effect of inflation on the Balance Sheet:

1. Although equity is eroded by inflation, some of the equity is invested in fixed assets, which appreciate with inflation, thus counterbalancing the impact on equity. In other words, it is only that part of equity remaining after subtracting out the value of the net fixed assets that is affected by inflation. (See shading A.)

2. Alternatively, inflation affects the difference between financial assets and liabilities (from CGAP Occasional Paper 1, page 3).

Financial Assets	Financial Liabilities
B	A
Net Fixed Assets	Equity

These two approaches give exactly the same amount of equity affected by inflation.

Why are equity and net fixed assets at the beginning of period used in this calculation?

Because the adjustment considers the effects of inflation during the period, the formula uses the value for net fixed assets and equity at the beginning of the period (or the end of the previous period). This shows the effects of inflation on the beginning value of fixed assets and equity during the period. This assumes that any effects of inflation on fixed assets sold or acquired during the period are already incorporated in the sale or purchase price. Although this calculation is not a perfect measurement, using the beginning of the period provides a fair approximation of the effects of inflation.

From the SEEP Framework, Section 3.5 “Inflation Adjustments,” p. 50:

DIFFERENCES

Table 3.6 highlights several examples of differences in the methodologies that are commonly used to adjust for inflation. All methodologies analyzed in this chapter use the same formula for adjusting for inflation, which consists of calculating the erosion of equity and revaluation of fixed assets due to the effect of inflation.

Table 3.6. Differences in Inflation Adjustment Methodologies

Adjustment Criteria	Examples
Accounts	Net fixed assets and total equity Net fixed assets, total equity, and net income
Period	Period average Beginning of period (end of previous period) End of current period
Rate	Calculated from the Consumer Price Index (CPI) Obtained from the Central Bank (or another reliable source) Self-reported Inflation rate from the IMF Statistics (line 64X)

Formula:

$$A3 = A3.1 - A3.2$$

where:

$$A3.1 = (\text{Equity Accounts} \times \langle \text{Rate} \rangle)$$

$$A3.2 = (\text{Net Fixed Assets} \times \langle \text{Rate} \rangle)$$

If an MFI already calculates an inflation expense as part of (I11) Other Financial Expenses, the Inflation Adjustment is applied only if the adjustment is greater than the recorded Inflation Expense. The entry in the adjusted financial statements is A.3 less (I11-1) Inflation Expense.

The formula for the Inflation Adjustment is as follows:

$$A3 = (A3.1 - A3.2) - (I11-1) \text{ Inflation Expense}$$

What are the options for preventing or addressing the loss of value of the MFI's equity?

- The first option is to **set interest rates to cover the cost of inflation**. The additional income flows through to the B/S, thus increasing the MFI's equity. Since the effect of inflation is an adjustment, not a cash expense, we are making up for the loss in purchasing power of the equity, not a cash outflow.
- The second option is to **increase the amount of fixed rate liabilities**. Since we know fixed rate liabilities are not affected by inflation, but equity is affected, in an inflationary environment it would therefore make sense to increase the liabilities of the MFI.
- The third option, theoretically, is to **invest any surplus cash in fixed assets**, thus reducing financial assets and increasing fixed assets. BUT fixed assets are not productive for an MFI and reducing cash could affect liquidity, so it is not a recommended option.

What are the options for addressing this subsidy to prepare the MFI for future commercial sources of funds?

- The purpose is to see that **forced savings, which earn low interest rates and loans at low interest rates, subsidize the MFI**. If you had to get the forced savings or concessional bank loans from fully commercial sources, they would be more expensive.
- The first option is to **set interest rates to cover the shadow price** (or the commercial rate) for the funds, so that when the MFI accesses the funds commercially it will be able to afford them. Remember the cost of funds subsidy is a noncash expense, so we are not making up for an actual cash outflow but for the additional expenses that would be incurred if we were operating like a business.
- Recognizing that the MFI needs to be independent of donor funds, the second option is to **look for the cheapest sources of commercial funds**. That would mean considering taking voluntary savings from the general public. This may require a license from the central bank, but in the long term it is cheaper than commercial bank loans.
- However, savings may not always be less expensive than commercial loans, particularly for MFIs going into voluntary savings for the first time. Other costs to take into consideration include infrastructure costs (safe, MIS, systems, procedures), specialized human resources (both operational and back-office), a liquidity policy that requires an increased proportion of assets to be held as cash, which is nonproductive, and numerous costs related to obtaining a license and being supervised by the authorities.

SESSION 8: ASSET/LIABILITY MANAGEMENT

Session Summary

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

- Define asset/liability management
- Calculate the five recommended SEEP Asset/Liability Management Ratios
- Explain the significance of the ratios for an MFI

TIME: 122–137 minutes

SUPPLIES: Flipchart and markers, LED projector or overhead projector

PARTICIPANT MATERIALS

OVERHEADS: FA8-O1 Asset/Liability Management (ALM) (*definition*)
FA8-O2 Components of ALM
FA8-O3a–b ALM Ratios and Formulas
FA8-O4a–c GROW Asset/Liability Management Ratios

HANDOUTS: FA8-H1 Asset/Liability Management Components
FA8-H2 Definitions Worksheet
FA8-H3 Asset/Liability Management Ratios Formulas
FA8-H4 ALM Ratios Worksheet
FA8-H5 GROW Asset/Liability Management Ratios
FA8-H6 Technical Notes on ALM Ratios

Participants should have these handouts handy for the remainder of the course:

FA4-H7 GROW Income Statement
FA4-H9 GROW Balance Sheet
FA7-H5 GROW Adjusted Income Statement
FA7-H7 GROW Adjusted Balance Sheet

Session 8: Asset/Liability Management

INTRODUCTION

1. (5 minutes) Begin the session by asking the participants what they understand by asset/liability management. Ask participants to write down a few ideas. After several moments, take a few responses. Don't evaluate the definitions here; this is just a quick introductory exercise to get participants thinking.

Tell the group that during this session, they are going to learn about asset/liability management, or ALM, and its importance to MFIs.

2. (5 minutes) Briefly lead a brainstorming session on defining and listing the components of asset/liability management. List the key words and points on a flipchart. After eliciting several ideas, compare them to FA8-O1, Asset/Liability Management (ALM), and FA8-O2, Components of ALM. Hand out FA8-H1.
3. (10–20 minutes) Ask: What accounts are related to asset/liability management analysis? To stimulate further thinking, distribute FA8-H2 and ask participants in neighboring pairs or trios to group themselves together to complete the worksheet, listing what they use or might measure in each category and how they would measure it.
4. (10 minutes) Reconvene group attention and ask participants to share some of their ideas.

After a few minutes show FA8-O3a–b and introduce and explain (through questioning and discussion) the ratios recommended by SEEP that the group will encounter in this course. Hand out FA8-H3.

5. (5 minutes) Ask: What is the relationship between asset/liability management and profitability/sustainability? Good asset/liability management can optimize the productive deployment of assets, reduce the cost of borrowings, and generate healthy surpluses, leading to an MFI's profitability.

Say: Let's see how GROW rates with regard to its asset/liability management.

6. (20–25 minutes) Hand out FA8-H4, ALM Ratios Worksheet. Ask participants to work individually or in pairs to complete ALM ratios for 2003 and 2004. Be sure to walk around, watching to see that participants are on the right track. Allow enough time for the participants to arrive at answers themselves.

Be aware that while participants should not have too much trouble calculating the ratios, a few areas may present problems. If most of the participants are proceeding well, then present some of the problems noted when walking around when reviewing the answers.

7. (10 minutes) Put up FA8-O4a–c, revealing the overhead's answers one by one after first asking the participants for the answers. Hand out FA8-H5.

8. (15 minutes) Tell the group that now that they know the different ratios that are calculated for asset liability management, they will learn about how those ratios can be used.

Divide participants into five groups of two to four people and instruct them to discuss the ratios, based on the following questions (previously written on a flipchart):

- What does the ratio indicate?
- Why this ratio is important?
- What does it tell you about the performance of GROW?
- What factors influence this ratio?
- How can it be improved?
- What are the effects of adjustment (if any) on the ratio?

At the end of the small group discussions, ask each group to prepare a flipchart summarizing their discussion of the questions. Assign each group a different ratio to present publicly (see instructions in the Trainer Notes), so that everyone discusses all the ratios in a small group, but presents only one ratio in front of the large group.

9. (30 minutes) Call on each group to present the analysis for its assigned ratio. Facilitate a short discussion at the end of each presentation, encouraging other participants to comment on the ratio presented—especially as they apply to their MFIs.
10. (10 minutes) Ask the group what they learned during this session, including questions such as:
- How many of their MFIs apply these concepts?
 - Will they be able to calculate these ratios for their MFIs?
 - What are the challenges?

Use participants' answers to summarize the session. Emphasize the key ratios in ALM and their relevance to MFIs. Remind the group that ignoring ALM is a major drawback in most MFIs, affecting not only their liquidity but also their long-term sustainability.

11. (2 minutes) Close this session and bridge to the next.

Trainer Notes

For step 8, divide the class into five groups of two to four members that will each present one set of ratios. You may wish to cut out the following table and give each group one box.

Group 1

$$\text{Yield on Gross Portfolio} = \frac{\text{Cash Received from Interest, Fees, and Commissions on Loan Portfolio}}{\text{Average Gross Loan Portfolio}}$$

$$\text{Yield Gap} = 100\% - \frac{\text{Cash Revenue from Loan Portfolio}}{(\text{Net Loan Portfolio} \times \text{Expected Annual Yield})}$$

Group 2

$$\text{Cost of Funds} = \frac{\text{Financial Expense on Funding Liabilities}}{(\text{Average Deposit} + \text{Average Borrowings})}$$

$$\text{Adjusted Cost of Funds} = \frac{\text{Adjusted Financial Expense on Funding Liabilities}}{(\text{Average Deposit} + \text{Average Borrowings})}$$

Group 3

$$\text{Portfolio to Assets} = \frac{\text{Gross Loan Portfolio}}{\text{Assets}}$$

Group 4

$$\text{Debt/Equity} = \frac{\text{Liabilities}}{\text{Equity}}$$

$$\text{Adjusted Debt/Equity} = \frac{\text{Liabilities}}{\text{Adjusted Equity}}$$

Group 5

$$\text{Current Ratio} = \frac{\text{Cash} + \text{Trade Investments}}{\text{Demand Deposit} + \text{Short-term Time Deposit} + \text{Short-term Borrowings} + \text{Interest Payable on Funding Liabilities} + \text{Accounts Payable and Other Short-term Liabilities}}$$

Overheads

THE COMPLETE SET OF OVERHEADS IS IN A SEPARATE POWERPOINT FILE ENTITLED "CGAP FINANCIAL ANALYSIS OVERHEADS."

FA8-01



Asset/Liability Management (ALM)



is the ongoing process of
planning, monitoring, and controlling
volumes, maturities, rates, and yields
of assets and liabilities.



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FA8-02

Components of ALM

- **Interest Rate Management** – ensure the use of funds generates more revenue than the cost of funds
- **Asset Management** – funds used to create assets that produce the most revenue (are most “productive”)
- **Leverage** – the degree to which an MFI is using borrowed funds
- **Liquidity Management** – ensure sufficient funds (“liquid”) are available to meet any short-term obligations

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ALM Ratios and Formulas

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	$\frac{\text{Financial Expense on Funding Liabilities}}{(\text{Average Deposit} + \text{Average Borrowing})}$
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	$\frac{\text{Adjusted Financial Expense on Funding Liabilities}}{\text{Average Gross Loan Portfolio}}$

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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	$\frac{\text{Cash} + \text{Trade Investments}}{(\text{Demand Deposit} + \text{Short-term Time Deposit} + \text{Short-term Borrowings} + \text{Interest Payable on Funding Liabilities} + \text{Accounts Payable and Other Short-term Liabilities})}$

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FA8-O4a

GROW Asset/Liability Management Ratios

Ref.	DESCRIPTION	2002	2003	2004
R4	Yield on Gross Portfolio Ratio = a/b			
a	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	4,719	6,342	10,082
b	Average Gross Loan Portfolio	15,967	21,633	34,415
R4	Yield on Gross Portfolio Ratio = a/b	29.56%	29.32%	29.30%
R5	Portfolio to Assets Ratio			
a	Gross Loan Portfolio	18,606	24,690	44,132
b	Assets	20,200	27,448	47,988
R5	Portfolio to Assets Ratio = a/b	92.11%	89.95%	91.96%
R6	Cost of Funds Ratio			
a	Financial Expenses on Funding Liabilities	371	292	823
b	Average Deposits	–	–	–
c	Average Borrowings	9,820	13,725	22,912
d	b + c	9,820	13,725	22,912
R6	Cost of Funds Ratio = a/d	3.78%	2.13%	3.59%

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FA8-O4b

GROW Asset/Liability Management Ratios (continued)

Ref.	DESCRIPTION	2002	2003	2004
Adj. R6	Adjusted Cost of Funds Ratio			
a	Adjusted Financial Expenses on Funding Liabilities	3,339	4,667	7,676
b	Adjusted Deposits	–	–	–
c	Adjusted Borrowings	9,820	13,725	22,912
d	b + c	9,820	13,725	22,912
Adj. R6	Adjusted Cost of Funds Ratio = a/d	34.00%	34.00%	33.50%
R7	Debt to Equity Ratio			
a	Liabilities	12,018	16,324	30,357
b	Equity	8,182	11,124	17,631
R7	Debt to Equity Ratio = a/b	146.88%	146.75%	172.18%
Adj. R7	Adjusted Debt to Equity Ratio			
a	Liabilities	12,018	16,324	30,357
b	Adjusted Equity	8,218	11,388	17,995
Adj. R7	Adjusted Debt to Equity Ratio = a/b	146.24%	143.34%	168.70%

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GROW Asset/Liability Management Ratios *(continued)*

Ref.	DESCRIPTION	2002	2003	2004
R6	Liquid Ratio			
a	Cash	363	801	1,781
b	Trade Investments	–	–	–
c	a + b	363	801	1,781
d	Demand Deposits	–	–	–
e	Short-term Deposits	–	–	–
f	Short-term Borrowings	6,962	10,454	17,156
g	Interest Payable on Funding Liabilities	15	25	62
h	Accounts Payable and Other Short-term Liabilities	423	428	342
i	d + e + f + g + h	7,400	10,907	17,560
R8	Liquid Ratio = c/i	4.91%	7.34%	10.14%

Handouts

Asset/Liability Management Components

Asset/liability management is the ongoing process of planning, monitoring, and controlling the volumes, maturities, rates, and yields of assets and liabilities. The basis of financial intermediation is the ability to manage assets (the use of funds) and liabilities (the source of funds). Asset/liability management is required on the following levels:

- **Interest rate management:** The MFI must make sure that the use of funds generates more revenue than the cost of funds.
- **Asset management:** Funds should be used to create assets that produce the most revenue (are most “productive”).
- **Leverage:** The MFI seeks to borrow funds to increase assets and thereby increase revenue and net profit. The term leverage indicates the degree to which an MFI is using borrowed funds. At the same time, the MFI must manage the cost and use of its borrowings so that it generates more revenue than it pays in interest and fee expense on those borrowings. If an MFI is highly leveraged and is unable to deploy the borrowed funds in a manner which generates surplus income, then it can run into repayment problems with its lenders. Highly leveraged MFIs may also be unable to find lenders in the future.
- **Liquidity management:** The MFI must also make sure that it has sufficient funds available (“liquid”) to meet any short-term obligations.

Definitions Worksheet

For each of the ALM components mentioned below, note down the main indicators you will use, along with their formulas.

ALM Components	Indicator	Formula
Interest Rate Management		
Asset Management		
Leverage		
Liquidity Management		

Asset/Liabilities Management Ratios Formulas

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	$\frac{\text{Financial Expense on Funding Liabilities}}{(\text{Average Deposit} + \text{Average Borrowing})}$
Adjusted Cost of Funds	$\frac{\text{Adjusted Financial Expense on Funding Liabilities}}{(\text{Average Deposit} + \text{Average Borrowing})}$
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	$\frac{\text{Cash} + \text{Trade Investments}}{(\text{Demand Deposit} + \text{Short-term Time Deposit} + \text{Short-term Borrowings} + \text{Interest Payable on Funding Liabilities} + \text{Accounts Payable and Other Short-term Liabilities})}$

ALM Ratios Worksheet

Ref.	DESCRIPTION	2002	2003	2004
R4	Yield on Gross Portfolio Ratio			
a	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	4,719		
b	Average Gross Loan Portfolio	15,967		
R4	Yield on Gross Portfolio Ratio = a/b	29.56%		
R5	Portfolio to Assets Ratio			
a	Gross Loan Portfolio	18,606		
b	Assets	20,200		
R5	Portfolio to Assets Ratio = a/b	92.11%		
R6	Cost of Funds Ratio			
a	Financial Expenses on Funding Liabilities	371		
b	Average Deposits			
c	Average Borrowings	9,820		
d	b + c	9,820		
R6	Cost of Funds Ratio = a/d	3.78%		
Adj R6	Adjusted Cost of Funds Ratio			
a	Adjusted Financial Expenses on Funding Liabilities	3,339		
b	Average Deposits			
c	Average Borrowings	9,820		
d	b + c	9,820		
Adj R6	Adjusted Cost of Funds Ratio = a/d	34.00%		
R7	Debt to Equity Ratio			
a	Liabilities	12,018		
b	Equity	8,182		
R7	Debt to Equity Ratio = a/b	146.88%		
Adj R7	Adjusted Debt to Equity Ratio			
a	Liabilities	12,018		
b	Adjusted Equity	8,218		
Adj R7	Adjusted Debt to Equity Ratio = a/b	146.24%		

Ref.	DESCRIPTION	2002	2003	2004
R8	Liquid Ratio			
a	Cash	363		
b	Trade Investments	-		
c	a + b	363		
d	Demand Deposits	-		
e	Short-term Deposits	-		
f	Short-term Borrowings	6,962		
g	Interest Payable on Funding Liabilities	15		
h	Accounts Payable and Other Short-term Liabilities	423		
i	d + e + f + g + h	7,400		
R8	Liquid Ratio = c/i	4.91%		

GROW Asset/Liability Management Ratios

Ref.	DESCRIPTION	2002	2003	2004
R4	Yield on Gross Portfolio Ratio			
a	Cash Received from Interest, Fees, and Commissions on Loan Portfolio	4,719	6,342	10,082
b	Average Gross Loan Portfolio	15,967	21,648	34,411
R4	Yield on Gross Portfolio Ratio = a/b	29.56%	29.30%	29.30%
R5	Portfolio to Assets Ratio			
a	Gross Loan Portfolio	18,606	24,690	44,132
b	Assets	20,200	27,448	47,988
R5	Portfolio to Assets Ratio = a/b	92.11%	89.95%	91.96%
R6	Cost of Funds Ratio			
a	Financial Expenses on Funding Liabilities	371	292	823
b	Average Deposits			
c	Average Borrowings	9,820	13,725	22,912
d	b + c	9,820	13,725	22,912
R6	Cost of Funds Ratio = a/d	3.78%	2.13%	3.59%
Adj R6	Adjusted Cost of Funds Ratio			
a	Adjusted Financial Expenses on Funding Liabilities	3,339	4,667	7,676
b	Average Deposits			
c	Average Borrowings	9,820	13,725	22,912
d	b + c	9,820	13,725	22,912
Adj R6	Adjusted Cost of Funds Ratio = a/d	34.00%	34.00%	33.50%
R7	Debt to Equity Ratio			
a	Liabilities	12,018	16,324	30,357
b	Equity	8,182	11,124	17,631
R7	Debt to Equity Ratio = a/b	146.88%	146.75%	172.18%
Adj R7	Adjusted Debt to Equity Ratio			
a	Liabilities	12,018	16,324	30,357
b	Adjusted Equity	8,218	11,388	17,995
Adj R7	Adjusted Debt to Equity Ratio = a/b	146.24%	143.34%	168.70%
R8	Liquid Ratio			
a	Cash	363	801	1,781
b	Trade Investments	-	-	-
c	a + b	363	801	1,781
d	Demand Deposits	-	-	-
e	Short-term Deposits	-	-	-
f	Short-term Borrowings	6,962	10,454	17,156
g	Interest Payable on Funding Liabilities	15	25	62
h	Accounts Payable and Other Short-term Liabilities	423	428	342
i	d + e + f + g + h	7,400	10,907	17,560
R8	Liquid Ratio = c/i	4.91%	7.34%	10.14%

Technical Notes on ALM Ratios

From the SEEP Framework 2005

1. Yield on gross portfolio

What does this ratio indicate?

Yield on Gross Portfolio, also called *portfolio yield*, measures how much the MFI actually received in cash interest payments and Fees and Commissions from its clients during the period. In other words, it indicates the gross loan portfolio's ability to generate cash financial revenue from interest, fees, and commissions. It does not include any revenues that have been accrued but not paid in cash, or any non-cash revenues in the form of post-dated checks, seized but unsold collateral, etc.

Why this ratio is important?

Cash receipts from the Gross Loan Portfolio are vital for an MFI's survival. As a cash measure, this indicator is distorted by neither unrealistic accrual or deferral policies nor by loan refinancing nor other means of noncash payment that can hide loan delinquency problems.

What factors can influence this ratio?

Portfolio yield must be analyzed in the context of the local market and prevailing interest rates. Yields should not fluctuate significantly unless the MFI frequently changes its loan terms and conditions.

Managers should be careful when averaging or annualizing for the purposes of calculating the yield. If an MFI's Gross Loan Portfolio is growing quickly, a simple average may distort the calculation of the yield. Similarly, looking at the yield for a short period, such as a month, may also distort the yield. Managers can (and should) look at this ratio on a monthly or quarterly basis and recognize any distortions due to averaging or annualizing.

1.1 Yield Gap

What does this ratio indicate?

This ratio compares revenue actually received in cash with revenue expected from loan contracts. It indicates the extent to which the portfolio has not earned the cash revenue which it was expected to earn.

In this formula, "expected annual yield" means the effective interest rate of the loan contracts (the declining-balance equivalent rate) for a single payment period, multiplied by the number of periods in a year.

Why this ratio is important?

MFI managers should frequently compare the portfolio yield with the effective interest rate of their loans or the contractual yield of the portfolio to determine whether a "yield gap" exists. If the yield is significantly and/or consistently lower than the effective interest rate, it may indicate problems with loan collections.

What factors can influence this ratio?

While a small gap is common, a substantial yield gap (> 10%) may indicate significant past-due payments (arrears), fraud, inefficiency, or accounting error.

2. Cost of Funds/Adjusted Cost of Funds

What does this ratio indicate?

This ratio gives a blended interest rate for all of an MFI's funding liabilities, deposits, and borrowings. Funding liabilities do not include interest payable or interest on loans to finance fixed assets.

Why this ratio is important?

When compared to the yield on portfolio, it reveals how the cost of funding the Gross Loan Portfolio with borrowings relates to the Yield on the Gross Loan Portfolio. This relationship is the key element of successful interest rate management. Managers should seek to maintain a sufficient financial spread between the Cost of Funds and yield.

What factors can influence this ratio?

Financial institutions strive to minimize Cost of Funds and maximize yield. Ideally, a low Cost of Funds results from an MFI gaining access to Deposits and/or Borrowings at a reasonable cost because depositors and lenders considered it creditworthy. The more creditworthy the MFI, the lower the cost will be. Several reasons exist as to why an institution may achieve a low Cost of Funds, however, not all of them are healthy for the institution's long-term growth. Cost of Funds could be quite low because the MFI has access to subsidized borrowings.

The Cost of Funds depends on the market and will therefore vary by country and also by institution type and legal status. A manager needs to monitor the MFI's Cost of Funds frequently.

Effects of Adjustments

The Subsidized Cost of Funds Adjustment increases Financial Expenses on Funding Liabilities and increases the Cost of Funds. Managers may want to monitor their dependence on subsidized borrowings by monitoring the difference between the unadjusted and adjusted Cost of Funds.

3. Portfolio to Assets Ratio

What does this ratio indicate?

An MFI's primary business is making loans and providing other financial services to micro entrepreneurs. This ratio shows how well an MFI allocates its assets to its primary business and, in most cases, its most profitable activity—making loans.

Why this ratio is important?

At first glance, a manager can see how well the MFI is deploying its funds into high-yielding micro loans. This ratio is most valuable when observed monthly. The Gross Loan Portfolio can fluctuate dramatically month to month if the MFI experiences seasonal spikes in demand for loans. Managers can also use the ratio to identify fluctuations that may result from structural or operational rigidities that cause a high number of loans to be disbursed or repaid at the same time. Depending on the context, this ratio could indicate the need for additional funding or be a sign of excess liquidity.

What factors can influence this ratio?

Much depends on the MFI's liquidity requirements and its asset/liability management abilities: MFIs that rely heavily on savings to fund their portfolio tend to be more efficient at maintaining a high and steady Portfolio to Assets ratio.

4. Debt/Equity Ratio and Adjusted Debt/Equity Ratio

What does this ratio indicate?

Debt/Equity, a common measurement of an MFI's capital adequacy, indicates the safety cushion the institution has to absorb losses before creditors are at risk. It also shows how well the MFI is able to leverage its equity to increase assets through borrowing and is frequently called the Leverage ratio. This ratio is usually important for investors and lenders.

Why this ratio is important?

The Debt/Equity ratio is a stock ratio, capturing a single moment in time. It can fluctuate daily and should be monitored as frequently as possible by MFIs that are highly leveraged. Managers may also consider looking at the average Debt/Equity over a period of time to get a clearer picture of the risk.

What factors can influence this ratio?

Deposit-taking MFIs and savings-based organizations will usually have higher ratios than non-commercial MFIs. In many environments, Debt/Equity levels may be limited by local regulations or indirectly controlled through borrowing restrictions.

Note: Monitoring Debt/Equity alone is insufficient for MFI managers. Other common indicators include Equity/Assets or Equity/Risk-adjusted Assets, which are common banking measures of capital adequacy. The Equity Multiplier (Assets/Equity) is an easy ratio to assess the MFI's leverage because it shows how the MFI has used its equity to grow its assets by taking on debt. None of these Debt/Equity ratios reveal, however, whether the terms and conditions of the MFI's debt are appropriate for the institution's asset base. For management purposes, a manager may also construct tables to monitor the maturities and cost of its debt and monitor any significant difference between the maturity and yield of its assets.

Effects of Adjustments

Except for the Write-off Adjustment, the adjustments usually result in a decrease in equity. The reduction in equity will increase this ratio, indicating a higher level of risk to the MFI. If a significant difference exists between the unadjusted and adjusted ratios, a manager should determine if the MFI's equity base is sufficient to repay all liabilities in difficult times or without subsidies, particularly if the Adjustment for Impairment Loss Allowance is significant.

5. Current Ratio

What does this ratio indicate?

Measures how well an MFI matches the maturities of its short-term assets and liabilities. *Short term* means assets or liabilities or any portion thereof that have a due date, maturity date, or may be readily converted into cash within 12 months.

Why this ratio is important?

The Liquid Ratio is one measurement of the sufficiency of cash resources to pay the short-term obligations to depositors, lenders, and other creditors. Financial institutions are

particularly vulnerable to cash shortages because their entire business is based on the proper management of cash inflows and outflows.

For MFIs, maintaining sufficient cash is important not only to pay bills, salaries, or creditors, but also to uphold its promise to provide repeat loans to clients, which is a major incentive for clients to repay loans. Similarly, any financial institution that fails to repay client deposits on time is likely to lose client confidence and access to future funding.

SESSION 9: EFFICIENCY AND PRODUCTIVITY

Session Summary

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

- Define efficiency and productivity
- Examine types and components of efficiency and productivity ratios
- Calculate the SEEP efficiency and productivity ratios
- Explain the significance of the ratios with respect to the case study

TIME: 175–205 minutes

SUPPLIES: Flipchart and markers, overhead projector

TRAINER MATERIALS

FA9-M1 Executive Director's Scripts

FA5-H2 The SEEP 18 – Financial Analysis Ratios

PARTICIPANT MATERIALS

OVERHEADS: FA1-O3 Sustainability
FA9-O1 Efficiency and Productivity
FA9-O2a–b Efficiency and Productivity Ratios and Formulas
FA9-O3a–d GROW Efficiency and Productivity Ratios
FA9-O4a–b Operational Ratios

HANDOUTS: FA9-H1 Efficiency and Productivity Ratios and Formulas
FA9-H2 Efficiency and Productivity Ratios Worksheet
FA9-H3 GROW Efficiency and Productivity Ratios
FA9-H4 Questions about GROW's Efficiency and Productivity
FA9-H5 Technical Notes

Participants should have these handouts handy for the remainder of the course:

FA4-H7 GROW Income Statement
FA4-H9 GROW Balance Sheet
FA7-H5 GROW Adjusted Income Statement
FA7-H7 GROW Adjusted Balance Sheet

PREPARED FLIPCHARTS:

Loan Client Ratios (*step 3*)
Prepared Questions

Session 9: Efficiency and Productivity

INTRODUCTION

1. (10 minutes) Explain that this session will include a role play of a situation that might happen to any MFI. Tell the group that the supporting trainer is the executive director of GROW and the participants are his/her staff. Introduce the executive director. Ask participants to use their experiences of working in an MFI to participate fully in the role play.

Have the executive director read Script A (FA9-M1).

2. (5 minutes) Briefly lead a brainstorming session on defining efficiency/productivity. List main words and points on a flipchart. After several ideas have been presented, compare them to FA9-O1, Efficiency and Productivity. Efficiency is related to productivity in terms of serving clients and keeping costs low. Write on the flipchart: Efficiency = High Productivity and Low Cost.

There may be many definitions of efficiency that come out in the brainstorming. In the discussion of FA9-O1, point out the category in which the ideas belong. For example, income divided by expenses is not an efficiency ratio but a profitability ratio.

3. (5–10 minutes) Tell the group: Let's get back to the E.D.'s dilemma.

Have the E.D. read Script B (FA9-M1).

Ask: Who knows what this is? Introduce the Operating Expense ratio. Ask: Who uses this already? Lead a discussion on the ratio per the Framework notes. Examine the numerator and the denominator and also ask why they should calculate this ratio with adjusted figures.

Have the E.D. read Script C (FA9-M1). Ask the group: What about how much it costs to serve your clients? Is this also a good indicator of your efficiency?

Lead the group in a discussion of what the E.D. has said, asking if they can generate the information. Briefly discuss the Operating Expense ratio and what it means.

4. (15 minutes) Tell the group that its task now is to calculate these two ratios—the Operating Expense ratio and the Cost per Client ratio (R12, Adj R12, R13, Adj R13) for 2003 and 2004, and be prepared to discuss what they show about GROW's efficiency.

Pass out worksheet FA9-H2 and ask participants to stay where they are seated and work in pairs to answer the question.

Tell the group they have 10 minutes for the exercise. Remind them to use the financial statements from sessions 4 and 7. While participants work, check to be sure that the groups are on the right track.

After 10 minutes, put up FA9-O3a–b, showing the answers for these two ratios only. Review the answers and ask if this proves GROW is efficient—and if so, why?

5. (3 minutes) Have the E.D. read Script D (FA9-M1). Then say: GROW is very productive—look at all our loan clients! Our clients love us. Ask the group to calculate a ratio that would show how GROW keeps its clients and also how productive all its staff are in terms of loan clients.
6. (5–10 minutes) Discuss the next three ratios that measure client turnover, clients to staff, and clients to loan officers.
7. (15 minutes) Ask participants to calculate the three ratios (R14, 15, 16) for all years for GROW.
Have participants form into pairs or triads to discuss the ratios and what they mean. Ask: What story do they tell about GROW?
8. (15 minutes) Show FA9-O3c. Ensure everyone has the correct answers and lead a discussion on the story they tell about GROW and its productivity.
9. (10 minutes) Have the E.D. read Script E (FA9-M1).
Then ask what ratios the group can use, what those ratios measure, and what participants can compare them to, to convince the bank that GROW's loans are not too big.
10. (10–20 minutes) Ask participants to calculate the last two ratios (R17, Adj R17, and R18) and ask what the ratios measure and what they mean. Follow up by showing FA9-O3d.
11. (5–15 minutes) Have the E.D. read Script F (FA9-M1).

Follow this with a discussion about whether or not participants think seven ratios are sufficient to use to defend GROW's efficiency and profitability.

Explain to the group that the SEEP Framework arrived at seven efficiency and productivity ratios and thinks that these will give a very good picture of efficiency and productivity for an MFI. However, it also recognizes that an MFI may want or need more (for example, it may run branch indicators or savers indicators) and that each donor, network, and MFI has its own version or permutation of efficiency indicators and will use them as needed. For example, British DFID has 86 ratios that it computes for MFIs—36 of which are for what it calls “operational efficiency.” Show FA9-O4a–b to illustrate the point.

Lead a discussion on how the ratios cover the main aspects of efficiency and productivity:

- Address efficiency in terms of Average Gross Loan Portfolio and the loans that generate the income for the institution, and compare them.

Trainer Instructions

- Look at the staff productivity and staff costs and determine which are usually the biggest cost in an MFI.
- Cover key aspects of both institutional and staff efficiency, as well as how satisfaction is reflected in client turnover.

12. (30 minutes) Have the E.D. read Script G (FA9-M1).

Say: You now see these seven ratios are the best efficiency and productivity indicators for GROW. Let's further analyze them to see how you can use that information to make good decisions about improving efficiency.

Form participants into small groups and tell them that they have 20 minutes to prepare a presentation of not more than five minutes for the E.D., based on the following questions. Urge them to be as creative as they want. Hand out FA9-H4.

Keep a close eye on the groups. If participants have problems, remind them to focus on the numerator and denominator of each ratio and what the other ratios tell about them.

About 5–10 minutes before time is up, go around to the small groups and assign each a question to focus on for presentation. Do not give the group the question before this time.

13. (40 minutes) Tell the groups that they are going to present their Action Plan (that is, their assigned question) to the GROW executive director.

Have the E.D. read Script H (FA9-M1).

The trainer acting as the E.D. should ensure that the major points are addressed in the Action Plans presented to the bankers and funders. (This requires good paraphrasing!)

CONCLUSION

14. (5 minutes) Have the trainer, still acting as the E.D., briefly reiterate the best points of the presentations and draw out the relationships between efficiency, productivity, methodology, delinquency, outreach, and so forth—all of which affect sustainability. Take this opportunity to link back to the critical incidents in session 5—using FA5-H2 (The SEEP 18 – Financial Analysis Ratios)—and the sustainability equation (FA1-O3) and “mantra” in session 1, as well as participants' own experiences.

15. (2 minutes) Take any questions and include any last remarks about issues that were not brought up in the presentations. Encourage participants to track their own efficiency indicators from the financial statement if they have brought and formatted them. Bridge to the next session on Profitability. Hand out FA9-H5, Technical Notes.

Executive Director's Scripts

The executive director can jump into the group discussion any time to emphasize a point or challenge her/his “staff” as long as the character’s role is maintained. Remember to have fun with this role and if possible, memorize the main points!

SCRIPT A

As you know, our MFI, GROW, is in need of additional funds if we want to continue our growth. I have applied to both our long-term donor, the Dutch government, for a grant, and to our bank, the National Bank, for a loan. Both of their responses, which I received yesterday afternoon, said that GROW has great potential, but that they are worried about GROW’s client turnover and current dependencies, as well as its average large loan size. They both say that they will not be able to respond to my request until GROW proves its efficiency. Only when I can show them—with hard facts and numbers—GROW’s efficiency will they consider my request positively.

I am extremely surprised. GROW has good portfolio quality (even if only over 30 days), as you know, and we are one of the very large MFIs, with over 19,000 loan clients. Until now that has been enough to secure donor funding, but clearly the rules have changed. If I can go to the bank tomorrow and present data to show that we are efficient, then we may get a loan before we have to suspend our own loan disbursement. I do not think we are a high-cost MFI but we must understand why they need proof, and show them that in fact we are efficient and that they are wrong.

Pause and pose rhetorical questions to the staff, such as:

“Do you think we are inefficient? How can we show that we are efficient?”

OK, staff. It’s time for you to get thinking! Let’s show them GROW is efficient. Maybe we should start by defining efficiency. Let’s brainstorm.

SCRIPT B

I was at a recent network meeting where everyone was talking about an efficiency ratio. Do we calculate that? We should probably start there. Who knows what it is?

SCRIPT C

What about how much it costs to serve our clients? I think that will also be a good indicator to show our efficiency.

SCRIPT D

GROW is very productive... look at all our loan clients! Our clients love us. So how can we show how effective we are in keeping our clients? Perhaps we can also calculate a ratio that would show how productive all our staff are in terms of loan clients. How can we do that?

SCRIPT E

The bank mentioned our loan sizes, I think they were worried that we might be competition to them. They thought the loan amounts were high! They also thought we were not keeping to our mission. Do we know what our loan sizes are, and how can we argue that they are not too big for our clients?

SCRIPT F

We do not want to use 36 different ratios! Do you think our seven cover the main aspects of an MFI's efficiency? Why?

SCRIPT G

Now, I am relying on you to assess GROW's efficiency and productivity and to defend our current situation. I need your recommendations for improving. I will be listening carefully and will choose the best ideas to present to the bank.

SCRIPT H

Remember, I want the best assessment and ideas to present to the bank.

Overheads

THE COMPLETE SET OF OVERHEADS IS IN A SEPARATE POWERPOINT FILE ENTITLED "CGAP FINANCIAL ANALYSIS OVERHEADS."

(Don't forget session 1 overhead—FA1-03)

FA9-01

Efficiency and Productivity

Does my institution serve as many people as possible at the lowest possible cost with the best quality?



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FA9-02a

Efficiency and Productivity Ratios and Formulas

RATIO	FORMULA
Operating Expense	$\frac{\text{Operating Expense}}{\text{Average Gross Loan Portfolio}}$
Adjusted Operating Expense	$\frac{\text{Adjusted Operating Expense}}{\text{Average Adjusted Gross Loan Portfolio}}$
Cost per Active Client	$\frac{\text{Operating Expense}}{\text{Average Number of Active Clients}}$
Adjusted Cost per Active Client	$\frac{\text{Adjusted Operating Expense}}{\text{Average Number of Active Clients}}$
Borrowers per Loan Officer	$\frac{\text{Number of Active Borrowers}}{\text{Number of Loan Officers}}$

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Efficiency and Productivity Ratios and Formulas (continued)

RATIO	FORMULA
Active Clients per Staff Member	$\frac{\text{Number of Active Clients}}{\text{Total Number of Personnel}}$
Client Turnover	$\frac{\text{Number of Active Clients, Beginning of Period} + \text{Number of New Clients during Period} - \text{Number of Active Clients, End of Period}}{\text{Average Number of Active Clients}}$
Average Outstanding Loan Size	$\frac{\text{Gross Loan Portfolio}}{\text{Number of Loans Outstanding}}$
Adjusted Average Outstanding Loan Size	$\frac{\text{Adjusted Gross Loan Portfolio}}{\text{Adjusted Number of Loans Outstanding}}$
Average Loan Disbursed	$\frac{\text{Value of Loans Disbursed}}{\text{Number of Loans Disbursed}}$

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GROW Efficiency and Productivity Ratios

Ref.	DESCRIPTION	2002	2003	2004
R12	Operating Expense Ratio			
a	Operating Expense	2,760	3,264	4,562
b	Average Gross Loan Portfolio	15,967	21,648	34,411
R12	Operating Expense Ratio = a/b	17.29%	15.08%	13.26%
Adj. R12	Adjusted Operating Expense Ratio			
a	Adjusted Operating Expense	2,808	3,312	4,610
b	Adjusted Gross Loan Portfolio	15,955	21,612	34,345
Adj. R12	Adjusted Operating Expense Ratio = a/b	17.60%	15.32%	13.42%

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FA9-O3b

GROW Efficiency and Productivity Ratios *(continued)*

Ref.	DESCRIPTION	2002	2003	2004
R13	Cost per Active Client Ratio			
a	Operating Expense	2,760	3,264	4,562
b	Average Number of Active Clients	6,958	9,552	15,929
R13	Cost per Active Client Ratio = a/b	0.40	0.34	0.29
Adj. R13	Adjusted Cost per Active Client Ratio			
a	Adjusted Operating Expense	2,808	3,312	4,610
b	Adjusted Number of Active Clients	6,958	9,552	15,929
Adj. R13	Adjusted Cost per Active Client Ratio = a/b	0.40	0.35	0.29

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FA9-O3c

GROW Efficiency and Productivity Ratios *(continued)*

Ref.	DESCRIPTION	2002	2003	2004
R14	Borrowers per Loan Officer Ratio			
a	Number of Active Borrowers	7,139	11,966	19,891
b	Number of Loan Officers	47	62	85
R14	Borrowers per Loan Officer Ratio = a/b	152	193	234
R15	Active Clients per Staff Member Ratio			
a	Number of Active Clients	7,139	11,966	19,891
b	Total Number of Personnel	76	93	125
R15	Active Clients per Staff Member Ratio = a/b	94	129	159
R16	Client Turnover Ratio			
a	Number of Active Clients, Beginning of Period	6,777	7,139	11,966
b	Number of New Clients During Period	8,475	13,413	20,643
c	Number of Active Clients, End of period	7,139	11,966	19,891
d	Average Number of Active Clients	6,958	9,552	15,929
R16	Client Turnover Ratio = (a + b - c)/d	116.60%	89.89%	79.84%

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GROW Efficiency and Productivity Ratios *(continued)*

Ref.	DESCRIPTION	2002	2003	2004
R17	Average Outstanding Loan Size Ratio			
a	Gross Loan Portfolio	18,606	24,690	44,132
b	Number of Loans Outstanding	7,139	11,966	19,891
R17	Average Outstanding Loan Size Ratio = a/b	2.606	2.063	2.219
Adj. R17	Adjusted Average Outstanding Loan Size Ratio			
a	Adjusted Gross Loan Portfolio	18,582	24,642	44,047
b	Number of Loans Outstanding - Write-off Adjustment	7,130	11,926	19,834
Adj. R17	Adjusted Average Outstanding Loan Size Ratio = a/b	2.606	2.066	2.221
R18	Average Loan Disbursed Ratio			
a	Value of Loans Disbursed	31,481	45,830	79,517
b	Number of Loans Disbursed*	8,475	13,413	20,643
R18	Average Loan Disbursed Ratio = a/b	371.70%	297.98%	309.71%

*Assumption: Number of loans disbursed = Number of new clients during period

Operational Ratios

Operating Return from Lending Activities per Dollar Loaned	$\frac{\text{Loan Income} - (\text{Operating Costs} + \text{Loan Loss Provisions})}{\text{Average Value of Loans Outstanding}}$
Loan Income per Unit Loaned	$\frac{\text{Loan Income}}{\text{Average Value of Loans Outstanding}}$
Operating Costs per Unit Loaned	$\frac{\text{Operating Costs}}{\text{Average Value of Loans Outstanding}}$
Support Costs Ratio	$\frac{\text{Head Office Costs} + \text{Branch Costs}}{\text{Average Value of Loans Outstanding}}$
Front-line Costs	$\frac{\text{Operating Costs} + \text{Loan Loss Provisions} - (\text{Head Office Costs} + \text{Branch Costs})}{\text{Average Value of Loans Outstanding}}$
Loan Officer Operating Return	$\frac{\text{Loan Officer Income} - \text{Loan Officer Cost}}{\text{Loan Officer Portfolio} \times \text{Income per Unit Loaned}}$
Client Dropout Rate	$\frac{\text{Number of Members Exiting}}{\text{Number of Members}}$

Operational Ratios *(continued)*

Number of Loans Disbursed per Loan Officer	$\frac{\text{Number of Loans Disbursed}}{\text{Number of Loan Officers}}$
Average Loan Officer Cost per Unit Loaned	$\frac{\text{Operating Costs} - (\text{Head Office Costs} + \text{Branch Costs})}{\text{Average Value of Loans Outstanding}}$
Average Loan Losses per Loan Officer	$\frac{\text{Loan Loss Provisions}}{\text{Number of Loan Officers}}$
Average Number of Members per Group	$\frac{\text{Number of Members}}{\text{Number of Groups}}$
Average Loan Size	$\frac{\text{Value of Loans Outstanding}}{\text{Number of Loans Outstanding}}$
Total Lending Costs per Unit Loaned	$\frac{\text{Operating Costs} + \text{Loan Loss Provisions}}{\text{Average Value of Loans Outstanding}}$

...and so on right off the page

Source: *Financial Analysis of Micro-Finance Institutions, An Introductory Guide*, ODA, British Aid to Small Enterprise, Kenya, Second Draft, June 1996, prepared by David Ferrand, pp. 83–89.

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Handouts

Efficiency and Productivity Ratios and Formulas

RATIO	FORMULA	EXPLANATION
Operating Expense Ratio	$\frac{\text{Operating Expense}}{\text{Average Gross Loan Portfolio}}$	Highlight personnel and administrative expenses relative to the loan portfolio—the most commonly used efficiency indicator.
Adjusted Operating Expense Ratio	$\frac{\text{Adjusted Operating Expense}}{\text{Average Adjusted Gross Loan Portfolio}}$	The adjusted ratio usually increases this ratio when the effect of subsidies is included.
Cost per Active Client	$\frac{\text{Operating Expense}}{\text{Average Number of Active Clients}}$	Provides a meaningful measure of efficiency for an MFI, allowing it to determine the average cost of maintaining an active client.
Adjusted Cost per Active Client	$\frac{\text{Adjusted Operating Expense}}{\text{Average Number of Active Clients}}$	The adjusted ratio usually increases this ratio when the effect of subsidies is included.
Borrowers per Loan Officer	$\frac{\text{Number of Active Borrowers}}{\text{Number of Loan Officers}}$	Measures the average caseload of (average number of borrowers managed by) each loan officer.
Active Clients per Staff Member	$\frac{\text{Number of Active Clients}}{\text{Total Number of Personnel}}$	The overall productivity of the MFI's personnel in terms of managing clients, including borrowers, voluntary savers, and other clients.
Client Turnover	$\frac{\text{Number of Active Clients, beginning of period} + \text{Number of New Clients during period} - \text{Number of Active Clients, end of period}}{\text{Average Number of Active Clients}}$	Measures the net number of clients continuing to access services during the period; used as one measurement of client satisfaction.
Average Outstanding Loan Size	$\frac{\text{Gross Loan Portfolio}}{\text{Number of Loans Outstanding}}$	Measures the average outstanding loan balance per borrower. This ratio is a profitability driver and a measure of how much of each loan is available to clients.
Adjusted Average Outstanding Loan Size	$\frac{\text{Adjusted Gross Loan Portfolio}}{\text{Adjusted Number of Loans Outstanding}}$	The adjusted ratio incorporates the Write-off Adjustment.
Average Loan Disbursed	$\frac{\text{Value of Loan Disbursed}}{\text{Number of Loans Disbursed}}$	Measures the average value of each loan disbursed. This ratio is frequently used to project disbursements. This ratio or R17 can be compared to (N12) GNI per capita.

Efficiency and Productivity Ratios Worksheet

Ref.	DESCRIPTION	2002	2003	2004
R12	Operating Expense Ratio			
a	Operating Expense	2,760		
b	Average Gross Loan Portfolio	15,967		
R12	Operating Expense Ratio = a/b	17.29%		
Adj R12	Adjusted Operating Expense Ratio			
a	Adjusted Operating Expense	2,808		
b	Average Adjusted Gross Loan Portfolio	15,955		
Adj R12	Adjusted Operating Expense Ratio = a/b	17.60%		
R13	Cost per Active Client Ratio			
a	Operating Expense	2,760		
b	Average Number of Active Clients	6,958		
R13	Cost per Active Client Ratio = a/b	0.40		
Adj R13	Adjusted Cost per Active Client Ratio			
a	Adjusted Operating Expense	2,808		
b	Average Number of Active Clients	6,958		
Adj R13	Adjusted Cost per Active Client Ratio = a/b	0.40		
R14	Borrowers per Loan Officer Ratio			
a	Number of Active Borrowers	7,139		
b	Number of Loan Officers	47		
R14	Borrowers per Loan Officer Ratio = a/b	152		
R15	Active Clients per Staff Member Ratio			
a	Number of Active Clients	7,139		
b	Total Number of Personnel	76		
R15	Active Clients per Staff Member Ratio = a/b	94		

Ref.	DESCRIPTION	2002	2003	2004
R16	Client Turnover Ratio			
a	Number of Active Clients, Beginning of Period	6,777		
b	Number of New Clients during Period	8,475		
c	Number of Active Clients, End of Period	7,139		
d	Average Number of Active Clients	6,958		
R16	Client Turnover Ratio = (a+b-c)/d	116.60%		
R17	Average Outstanding Loan Size Ratio			
a	Gross Loan Portfolio	18,606		
b	Number of Loans Outstanding	7,139		
R17	Average Outstanding Loan Size Ratio = a/b	2.606		
Adj R17	Adjusted Average Outstanding Loan Size Ratio			
a	Adjusted Gross Loan Portfolio	18,582		
b	Number of Loans Outstanding – Write-off Adjustment	7,130		
Adj R17	Adjusted Average Outstanding Loan Size Ratio = a/b	2.606		
R18	Average Loan Disbursed Ratio			
a	Value of Loans Disbursed	37,481		
b	Number of Loans Disbursed*	8,475		
R18	Average Loan Disbursed Ratio = a/b	4.423		

*Assumption: Number of Loans Disbursed = Number of New Clients during Period

GROW Efficiency and Productivity Ratios

Ref.	DESCRIPTION	2002	2003	2004
R12	Operating Expense Ratio			
a	Operating Expense	2,760	3,264	4,562
b	Average Gross Loan Portfolio	15,967	21,648	34,411
R12	Operating Expense Ratio = a/b	17.29%	15.08%	13.26%
Adj R12	Adjusted Operating Expense Ratio			
a	Adjusted Operating Expense	2,808	3,312	4,610
b	Average Adjusted Gross Loan Portfolio	15,955	21,612	34,345
Adj R12	Adjusted Operating Expense Ratio = a/b	17.60%	15.32%	13.42%
R13	Cost per Active Client Ratio			
a	Operating Expense	2,760	3,264	4,562
b	Average Number of Active Clients	6,958	9,552	15,929
R13	Cost per Active Client Ratio = a/b	0.40	0.34	0.29
Adj R13	Adjusted Cost per Active Client Ratio			
a	Adjusted Operating Expense	2,808	3,312	4,610
b	Average Number of Active Clients	6,958	9,552	15,929
Adj R13	Adjusted Cost per Active Client Ratio = a/b	0.40	0.35	0.29
R14	Borrowers per Loan Officer Ratio			
a	Number of Active Borrowers	7,139	11,966	19,891
b	Number of Loan Officers	47	62	85
R14	Borrowers per Loan Officer Ratio = a/b	152	193	234
R15	Active Clients per Staff Member Ratio			
a	Number of Active Clients	7,139	11,966	19,891
b	Total Number of Personnel	76	93	125
R15	Active Clients per Staff Member Ratio = a/b	94	129	159

Ref.	DESCRIPTION	2002	2003	2004
R16	Client Turnover Ratio			
a	Number of Active Clients, Beginning of Period	6,777	7,139	11,966
b	Number of New Clients during Period	8,475	13,413	20,643
c	Number of Active Clients, End of Period	7,139	11,966	19,891
d	Average Number of Active Clients	6,958	9,552	15,929
R16	Client Turnover Ratio = (a+b-c)/d	116.60%	89.89%	79.84%
R17	Average Outstanding Loan Size Ratio			
a	Gross Loan Portfolio	18,606	24,690	44,132
b	Number of Loans Outstanding	7,139	11,966	19,891
R17	Average Outstanding Loan Size Ratio = a/b	2.606	2.063	2.219
Adj R17	Adjusted Average Outstanding Loan Size Ratio			
a	Adjusted Gross Loan Portfolio	18,582	24,642	44,047
b	Number of Loans Outstanding – Write-off Adjustment	7,130	11,926	19,834
Adj R17	Adjusted Average Outstanding Loan Size Ratio = a/b	2.606	2.066	2.221
R18	Average Loan Disbursed Ratio			
a	Value of Loans Disbursed	37,481	45,830	79,517
b	Number of Loans Disbursed*	8,475	13,413	20,643
R18	Average Loan Disbursed Ratio = a/b	4.423	3.417	3.852

*Assumption: Number of Loans Disbursed = Number of New Clients during Period

Technical Notes

Excerpted from SEEP Framework

4.4 Efficiency and Productivity Indicators

Efficiency and productivity indicators reflect how well an MFI uses its resources, particularly its assets and personnel. MFIs use many different efficiency and productivity indicators, tailoring them to reflect their own organizational structure, product lines, and monitoring priorities.

MFIs must decide if they want to use the number of personnel or the number of loan officers as their benchmark for human resources in their productivity measures. The purpose for considering loan officers as a separate category is that they are usually directly involved in revenue-generating tasks (that is, making and collecting loans), whereas other personnel are not. A trend toward using total personnel in productivity calculations exists, however, because loan officers' tasks may overlap with the tasks of administrative staff.

In addition to tailoring the denominator selection to the characteristics of the institution, managers should be aware of how loan terms, method of credit delivery, and broader macroeconomic conditions (for example, Gross National Income (GNI) per Capita, local labor costs) can impact the interpretation and usefulness of many of the ratios described in this section. Looking at several of these ratios together can give a more comprehensive and significant description of the current and projected success of an institution's financial management. For these reasons, readers should thoroughly understand the components of these indicators and use them in concert.

R12 OPERATING EXPENSE RATIO/ADJUSTED OPERATING EXPENSE RATIO

$\frac{\text{Operating Expense to Average Gross Loan Portfolio}}{\text{Average Gross Loan Portfolio}}$	$R12 = \frac{I16}{B4^{avg}}$
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Why This Ratio Is Important

The Operating Expense Ratio enables managers to compare quickly administrative and personnel expenses to the MFI's yield on the gross loan portfolio. For this reason, the Operating Expense ratio is frequently referred to as the *efficiency ratio*. Monitoring this trend is an easy way to observe if the MFI is increasing its efficiency as it grows its loan portfolio.

The lower the ratio, the more efficient the MFI is. MFIs should strive for a downward trend in this ratio—even when portfolio growth is flat—until they are convinced that no more efficiencies can be found. This ratio may fluctuate from month to month, but it should decline from year to year. Although commercial MFIs and credit unions should have higher operating costs due to the savings services, they have proven themselves extraordinarily efficient in maintaining low operating costs relative to other noncommercial MFIs.

Countless efficiency indicators are available, most of which include an income or expense account divided by a balance sheet account. For example, managers may want to monitor

Personnel Expense separately (Personnel Expense/Average Gross Loan Portfolio) to see where staff efficiency gains could be achieved. In calculating these efficiency indicators, MFIs need to select which denominator to use. The most common denominators are as follows:

- Average Gross Loan Portfolio,
- Average Performing Assets, and
- Average Total Assets.

Most MFIs choose the average gross loan portfolio because they calculate other ratios, such as portfolio yield, using this same denominator. Strong arguments exist for using performing assets, however, which is the standard for the commercial banking industry, or average total assets, which is the most easily measured of the three. Regardless of the denominator selected, the MFI should be consistent in its use. To simplify presentation, the Average Gross Loan Portfolio is used throughout this Framework.

Making small loans and delivering financial services in underserved areas is an expensive business. The delivery mechanisms that an MFI chooses can significantly add to the cost per active client. For example, providing on-site service in communities may be more expensive than having clients come to the MFI's branch office. Managers must continue to decrease the Operating Expense Ratio, even after portfolio growth has slowed. Managers should investigate the cause of changes in operating efficiency—are they due to increasing loan sizes, improving economies of scale, or some new technology? MFIs that tend to make smaller loans will appear to be less efficient. At the same time, tracking changes in this ratio can inform management how well their efforts to find increased efficiencies are producing results.

Effects of Adjustments

$\text{Adjusted Operating Expense to Average Gross Loan Portfolio} = \frac{\text{Adjusted Operating Expense}}{\text{Average Adjusted Gross Loan Portfolio}}$	$R12^{ADJ} = \frac{\text{Adjusted I16}}{\text{Adjusted B4}^{avg}}$
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The In-Kind Subsidy Adjustment and Write-off Adjustment affect this ratio by increasing Operating Expense and reducing the Gross Loan Portfolio, respectively. Managers should pay close attention to the adjusted ratio because it reveals how efficient the MFI truly is when all subsidies are removed.

R13 COST PER CLIENT/ADJUSTED COST PER CLIENT

$\text{Cost per Client} = \frac{\text{Operating Expense}}{\text{Average Number of Active Clients}}$	$R13 = \frac{I16}{N1^{avg}}$
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Why This Ratio Is Important

In concrete terms, the Cost per Client Ratio indicates to an institution how much it currently spends in Personnel and Administrative Expenses to serve a single active client. It informs the MFI how much it must earn from each client to be profitable. MFI managers are often shocked when they learn that the cost per active client is half the (R18) Average Disbursed Loan Size. This ratio can be used to compare institutions of different sizes because the Average Gross Portfolio is not part of the calculation. Comparing the Cost per Client Ratio with the local GNI per capita provides a rough proxy of labor costs in the local market.

Because local labor costs are largely beyond the MFI's control, managers can determine if a reduction in Cost per Client is the result of reduced cost of labor or more efficient use of labor. When comparing this ratio internationally, managers must consider the difference in national incomes.

Effects of Adjustments

Adjusted Cost per Client = $\frac{\text{Adjusted Operating Expense}}{\text{Average Number of Active Clients}}$	R13 ^{ADJ} = $\frac{\text{Adjusted I16}}{N1^{\text{avg}}}$
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The In-Kind Subsidy Adjustment increases Operating Expense. Managers should pay close attention to the adjusted indicator to understand the true cost of serving clients without subsidies. This adjusted indicator can be a useful indicator for planning—managers can project future costs related to client growth.

R14 BORROWERS PER LOAN OFFICER

Borrowers per Loan Officer = $\frac{\text{Number of Active Borrowers}}{\text{Number of Loan Officers}}$	R14 = $\frac{N3}{N8}$
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Why This Ratio Is Important

The Borrowers per Loan Officer Ratio, used often by MFIs, helps measure personnel productivity of loan staff. Creating caseload targets for loan officers is useful in planning, and this ratio is an easy and effective way to measure progress against such targets.

This ratio will increase until it reaches the optimal range and then plateaus. Managers should monitor it on a monthly basis. Plateaus can be surpassed through structural or technological changes, such as streamlining the methodology or introducing technology. Plateaus also may be overcome by increasing staff incentives for efficiency, such as loan officer bonuses. The Borrowers per Loan Officer Ratio helps managers monitor the gains realized from implementing these changes.

This ratio depends on the local environment, such as population density and ease of access to clients. It can also vary drastically due to product terms and conditions (for example, individual versus group loans) and methodology (frequency of meetings). MFIs should monitor gains with an eye on the portfolio-at-risk to ensure that productivity gains are not achieved at the expense of asset quality. The Borrowers per Loan Officer Ratio may be distorted if an MFI adds a group of new loan officers near the end of the period. If the MFI is growing quickly, adding both borrowers and loan officers, managers may want to use period averages for the numerator and denominator.

MFIs are recommended to follow the definition of loan officer in chapter 2 (see N8 in table 2.13). For management purposes, MFIs may also substitute Number of Loans Outstanding as a surrogate for Number of Active Borrowers provided that they explain the definition of the numerator and denominator.

Effects of Adjustments

The adjustments recommended in this Framework do not affect this indicator. If the MFI chooses to use Number of Loans Outstanding per Loan Officer (see paragraph above),

managers should incorporate the Write-off Adjustment, which reduces the Number of Loans Outstanding.

R15 ACTIVE CLIENTS PER STAFF MEMBER

Active Clients per Staff Member =	$\frac{\text{Number of Active Clients}}{\text{Number of Personnel}}$	R15 =	$\frac{N1}{N7}$
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Why This Ratio Is Important

Measuring the overall productivity of staff is vital and requires examining the ability of the MFI's personnel to manage all its clients, including borrowers, voluntary savers, and other clients. As MFIs offer more products to meet their clients' diverse financial needs, Active Clients per Staff Members is more relevant than Borrowers per Loan Officer as the primary productivity ratio for personnel.

This ratio will vary according to the same conditions described in (R14), Borrowers per Loan Officer, above. Managers should see a positive trend in this productivity ratio. A low ratio does not mean that staff members are not working hard. Internal issues, such as excess paperwork or procedures, or external factors, such as remote service locations, contribute to lower productivity. Each MFI will have its own optimal number of clients per staff person and should set this target in its business plan. If MFIs follow the definition of active client presented in the Framework, this ratio is also a useful measurement for managers to compare the MFI with other institutions.

Effects of Adjustments

The adjustments recommended in this Framework do not affect this indicator.

R16 CLIENT TURNOVER

Client Turnover =	$\frac{\text{Number of Active Clients, Beginning of Period} + \text{Number of New Clients During Period} - \text{Number of Active Clients, End of Period}}{\text{Average Number of Active Clients}}$	R16 =	$\frac{N1^0 + N2 + N1^1}{N1^{avg}}$
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Why This Ratio Is Important

The Client Turnover Ratio is frequently used by managers to determine the level of client satisfaction with the MFI's products and services. Many reasons exist for a client to leave an MFI, but studies indicate that lack of flexible and demand-driven products continues to be a major cause of client departures. The generally accepted tenet is that the cost of retaining clients is significantly lower than the cost of recruiting new clients.¹⁹ Therefore, measuring client turnover is a valuable management tool to understand when clients are leaving. Management must then determine why.

The term *turnover* rather than *loss* is used for this ratio because although some clients may leave or become inactive for a period of time, not all these clients are lost to the MFI. If

¹⁹ See Brigit Helms and Imran Matin, 2000, Those Who Leave and Those Who Never Join: Insights from East African Microfinance Institutions, Focus Note No. 16 (Washington, D.C.: CGAP).

inactive clients can be brought back into activity, loans to them tend to be less risky and require less staff time. Some additional cost to the MFI of client turnover exists, however, even when clients return. If managers notice that many clients are leaving and returning, they may want to modify their policies to retain good clients and make it easier for returning good clients to access loans and other services. Managers may want to look at Borrower Turnover only, using the Number of Active Borrowers for analysis.

As MFIs mature and add products, client turnover is more difficult to measure and less meaningful. It may not be in clients' best interests to be perpetually in debt. Determining the active status of clients who occasionally use non-credit services, such as remittance services, is difficult. This ratio may also be lower for MFIs that take deposits and have multiple small deposit accounts.

Although not perfect, the ratio is still commonly used but calculated in different ways by managers. Managers are recommended to use this calculation for client turnover for the purpose of comparison.

Effects of Adjustments

The adjustments recommended in this Framework do not affect this indicator.

R17 AVERAGE OUTSTANDING LOAN SIZE/AVERAGE ADJUSTED OUTSTANDING LOAN SIZE

Average Outstanding Loan Size =	$\frac{\text{Gross Loan Portfolio}}{\text{Number of Loans Outstanding}}$	R17 =	$\frac{B4}{P3}$
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Why This Ratio Is Important

There is increasing evidence that Average Outstanding Loan Size is not an accurate proxy of the poverty level of clients. However this ratio is still widely used by MFIs to monitor the depth of outreach among lower-income clients. Loan size is also a major driver of profitability and can be used by managers to project portfolio growth.

The average outstanding loan size is one proxy for an MFI to measure its ability to reach poorer clients. Although several factors other than the income level of the client contribute to smaller outstanding loan sizes, a correlation exists between this ratio and the average income level of the areas served. It is informative for MFI managers to monitor this ratio in light of the GNI per capita and the Cost per Client.

Effect of Adjustments

Average Outstanding Loan Size =	$\frac{\text{Adjusted Gross Loan Portfolio}}{\text{Adjusted Number of Loans Outstanding}}$	R17 ^{ADJ} =	$\frac{\text{Adjusted B4}}{P3 - A5.2}$
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The Write-off adjustment has the effect of reducing the Gross Loan Portfolio and the Number of Loans Outstanding. This adjusted ratio will eliminate distortions of the Average Outstanding Loan Size by eliminating loans that have been past due for a long period of time, many of which have small outstanding balances.

R18 AVERAGE LOAN DISBURSED

Average Loan Disbursed =	$\frac{\text{Value of Loans Disbursed}}{\text{Number of Loans Disbursed}}$	R18 =	$\frac{P2}{P1}$
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Why This Ratio Is Important

Managers frequently track the Average Loan Disbursed Ratio because it drives profitability and indicates the increase in the demand for loans and clients' capacity to manage debt.

Although this ratio may fluctuate, managers should not see significant spikes or declines between periods. The ratio tells only part of a story—that average loan sizes are increasing or decreasing. To understand why, managers must determine if the growth in average loan size is demand driven, reflecting the growth in client business and their capacity to manage debt, or if it is supply or structural, driven by programmed step-credit methodologies or loan officers' incentives to increase the size of their accounts. It should be monitored with (R9) Portfolio-at-Risk to see if increased loan size is having a detrimental effect on portfolio quality.

Table 4.2 provides a summary of the SEEP 18 and calculations using the accounts in the sample statements and reports from chapters 2 and 3. This table assumes that the MFI has data from the beginning of 2002, which is used to calculate the averages used in the ratios for 2003.

Table 4.2. Calculating the SEEP 18

Ref.	Account Name	Formula	As of 31/12/2004	As of 31/12/2003
R1	Operational Self-sufficiency (OSS)	$R1 = \frac{I1}{(I7 + I13 + I16)}$	113%	138%
	Financial self-sufficiency (FSS)	$R1^{ADJ} = \frac{I1}{(\text{Adjusted } I7 + \text{Adjusted } I13 + \text{Adjusted } I16)}$	85%	73%
R2	Return on Assets (ROA)	$R2 = \frac{(I21 - I26)}{B12^{avg}}$	1.9%	3.4%
	Adjusted Return on Assets (AROA)	$R2^{ADJ} = \frac{\text{Adjusted } I21 - I26}{\text{Adjusted } B12^{avg}}$	- 5.5%	- 17.6%
R3	Return on Equity (ROE)	$R3 = \frac{(I21 - I26)}{B32^{avg}}$	3.1%	5.4%
	Adjusted Return on Equity (AROE)	$R3^{ADJ} = \frac{\text{Adjusted } I21 - I26}{\text{Adjusted } B32^{avg}}$	- 8.9%	- 28.4%
R4	Yield on Gross Portfolio	$R4 = \frac{C1}{B4^{avg}}$	36.3%	29.6%
R5	Portfolio to Assets	$R5 = \frac{B4}{B12}$	71%	50%

Table 4.2. Calculating the SEEP 18 (continued)

Ref.	Account Name	Formula	As of 31/12/2004	As of 31/12/2003
R6	Cost of Funds Ratio	$R6 = \frac{\bar{I8}}{(B13^{avg} + B14^{avg} + B15^{avg} + B18^{avg} + B19^{avg})}$	4.3%	4.4%
	Adjusted Cost of Funds	$R6^{ADJ} = \frac{(\text{Adjusted } I8)}{(B13^{avg} + B14^{avg} + B15^{avg} + B18^{avg} + B19^{avg})}$	7.4%	8.6%
R7	Debt to Equity	$R7 = \frac{B21}{B32}$	63%	64%
	Adjusted Debt to Equity	$R7^{ADJ} = \frac{B21}{\text{Adjusted } B32}$	63%	64%
R8	Liquid Ratio	$R8 = \frac{B1 + B2}{(B13 + B14 + B15 + B16 + B17)}$	201%	915%
R9	PAR Ratio	$R9 = \frac{P14 > 30 \text{ Days} + P16}{B4}$	3.8%	4.5%
	Adjusted PAR Ratio	$R9^{ADJ} = \frac{\text{Adjusted } P14 > 30 \text{ Days} + P16}{\text{Adjusted } B4}$	3.8%	6.8%
R10	Write-off Ratio	$R10 = \frac{P7}{B4^{avg}}$	1.0%	0%
	Adjusted Write-off Ratio	$R10^{ADJ} = \frac{P7 + A5}{\text{Adjusted } B4^{avg}}$	1.6%	4.4%
R11	Risk Coverage Ratio	$R11 = \frac{B5}{P14 > 30 \text{ Days}}$	60%	78%
	Adjusted Risk Coverage Ratio	$R11^{ADJ} = \frac{\text{Adjusted } B5}{\text{Adjusted } P14 > 30 \text{ Days} - A5}$	54%	26%
R12	Operating Expense Ratio	$R12 = \frac{I16}{B4^{avg}}$	33%	22%
	Adjusted Operating Expense Ratio	$R12^{ADJ} = \frac{\text{Adjusted } I16}{\text{Adjusted } B4^{avg}}$	40%	34%
R13	Cost per Active Client	$R13 = \frac{I16}{N1^{avg}}$	1,154	650
	Adjusted Cost per Active Client	$R13^{ADJ} = \frac{\text{Adjusted } I16}{N1^{avg}}$	1,351	951
R14	Borrowers per Loan Officer	$R14 = \frac{N3}{N8}$	180	226
R15	Active Clients per Staff Member	$R15 = \frac{N1}{N7}$	127	129
R16	Client Turnover	$R16 = \frac{N1^0 + N2 - N1^1}{N1^{avg}}$	7.9%	10.3%
R17	Average Outstanding Loan Size	$R17 = \frac{B4}{P3}$	3,812	3,103
	Adjusted Average Outstanding Loan Size	$R17^{ADJ} = \frac{\text{Adjusted } B4}{P3 - A5.2}$	3,849	3,239
R18	Average Loan Disbursed	$R18 = \frac{P2}{P1}$	4,965	4,500

SESSION 10: SUSTAINABILITY AND PROFITABILITY ANALYSIS

Session Summary

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

- Define profitability
- Define, compute, and discuss profitability ratios: ROA, AROA, ROE, and AROE
- Define, compute, and discuss operational and financial self-sufficiency

TIME: 229–239 minutes

SUPPLIES: Flipchart and markers
LED projector or overhead projector and overhead markers
Index cards—one side marked P, the other marked S

PARTICIPANT MATERIALS

OVERHEADS: FA10-O1a Sustainability Equals

FA10-O1b	Sustainability Equation	Optional
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FA10-O2 An MFI Is Profitable When

FA10-O3 Annualized Percentage Rate

FA10-O4a–c Balance Sheet Distribution Worksheet

FA10-O5a–c GROW Balance Sheet Distribution

FA10-O6a–b Sustainability and Profitability Ratios and Formulas

FA10-O7a–c GROW Sustainability and Profitability Ratios

HANDOUTS: FA10-H1 Balance Sheet Distribution Worksheet

FA10-H2 GROW Balance Sheet Distribution

FA10-H3 Sustainability and Profitability Ratios and Formulas (5 copies with the definitions, formulas, and names of the ratios cut up and separated)

FA10-H4 Sustainability and Profitability Ratio Worksheet

FA10-H5 GROW Sustainability and Profitability Ratios

FA10-H6 Technical Notes

Optional handouts or electronic readings—to be downloaded from http://www.cgap.org :	
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FA10-H7	CGAP Occasional Paper No. 1
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FA10-H8	<i>Core Performance Indicators for Microfinance</i> , Richard Rosenberg, CGAP, April 2006
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Participants should have these handouts handy for the remainder of the course:

- FA4-H7 GROW Income Statement
- FA4-H9 GROW Balance Sheet
- FA7-H5 GROW Adjusted Income Statement
- FA7-H7 GROW Adjusted Balance Sheet

PREPARED FLIPCHARTS:

- Sustainability and Profitability (*step 3*)
- Questions for Stakeholders
- Matrix
- Profitability Question

Session 10: Sustainability and Profitability Analysis

INTRODUCTION

1. (8 minutes) Link to previous sessions on Asset/Liability Management and Efficiency and Productivity, as well as other earlier sessions. Hand out index cards and ask participants to write in words or a ratio their definition of profitability on the side of the card marked with P. Wait a few moments until most everyone has finished. Then ask participants to turn the card over and on the side marked with an S write a definition or ratio for sustainability.

Collect the cards and read out a few of the definitions that are particularly interesting.

2. (3 minutes) Ask: What is the relationship between sustainability and profitability? Take a few responses. Make the point that they are essentially the same. Tell the group that they have to be profitable to be sustainable, and vice versa. Announce that they will go through the definitions to show how sustainability and profitability relate.

Consider reading to the group from the SEEP Framework:

“Profitability and sustainability ratios reflect the MFI’s ability to continue operating and grow in the future. Most reputable MFIs are striving for sustainability, regardless of their nonprofit or for-profit status; donors and investors alike look to fund sustainable institutions. Several factors can affect profitability and sustainability. Although startup or rapidly growing institutions may have low profitability, they are building the basis for a sustainable future. The ratios recommended in this section are the most widely accepted in the industry.”

KEY DETERMINANTS OF SUSTAINABILITY

3. (4 minutes) Ask: Who remembers the definition for sustainability given at the beginning of the course?

Review by showing FA10-O1a and also have it written on a flipchart. If time, also use FA10-O1b, which visually represents the equation.

4. (5 minutes) Ask if someone can define profitability. Explain the elements and show their relationship to sustainability. Ask: Is GROW profitable? Why or why not? Briefly discuss.

Put up FA10-O2, and also have it written on a flipchart. Position this flipchart and the one with the information from FA10-O1a so that both can be seen.

Point out the formula:

Profitability = Financial Revenue – Adjusted (Financial + Operating) Expenses

Remind participants that they have already calculated the adjusted operating income in session 7. Review this calculation and show how it includes the same

elements as sustainability: administrative costs, loan losses, inflation, and cost of funds from financial revenue. Point out that the only difference is that sustainability requires growth.

Note that the profit is sometimes referred to as the return, because this is the money which is “returned” to the institution. The amount of profit is the amount by which the MFI can grow; it builds the MFI’s equity. Explain that profitability also includes the element of growth included in sustainability. The more profitable the MFI, the more sustainable it is.

5. (2 minutes) Take any other questions from the group. Ask participants to put in their own words why sustainability is the same as profitability. (This is important because everyone agrees sustainability is important, but many are ambivalent about profitability. The direct relationship needs to be clear.)

FINANCIAL REVENUE AND *ADJUSTED* TOTAL FINANCIAL AND OPERATING EXPENSES

6. (10 minutes) Suggest that the group take a closer look at how they can manage their profitability through managing operating income and adjusted operating expenses.

Introduce financial revenue by telling the group that the interest rate is the major source of income for the MFI. In the equation on profitability, interest is the major component of financial revenue, and thus one of the most important contributors to the profitability of the MFI.

Make the point that they have several choices for how they set interest rates. Show FA10-O3. To further illustrate the point, have participants complete the example for GROW. Then go over the example with the group, eliciting the answers.

Avoid being drawn into a discussion about how to set interest rates. Refer the group to CGAP Occasional Paper No. 1.

Ask: Why use *Adjusted* Total Financial and Operating Expenses when calculating sustainability and profitability?

Emphasize that, if they want an accurate understanding of the MFI’s expenses, they need to include the *adjusted* expenses due to inflation and subsidies as introduced and discussed in session 7. The same is true when calculating profitability ratios.

7. (1 minute) Tell the group that the message of this section is that they can manage both the financial revenue and adjusted total financial and operating expenses to generate a profit.

Explain that they can also manage their adjusted operating income (AOI) by the way they use their assets, because it is assets that generate the income.

8. (10 minutes) Tell the group that they have looked at assets and liabilities in a previous session. Now they will look at them in order to discuss profitability and

sustainability. Explain that the percentage distribution of Balance Sheet items shows how an MFI's assets—liabilities and equity—are distributed, and how this will affect its profit.

Show FA10-O4a–c. Calculate a few worksheet items with the participants, choosing at least one from each group—A, L, and E—to show how it is done.

Have the group discuss: What does this tell us? How might the distribution of Assets affect profitability? How might the distribution of Liabilities and Equity affect profitability?

9. (15 minutes) Pass out FA10-H1, Balance Sheet Distribution Worksheet, with 2002 completed and two empty columns for 2003 and 2004. Ask participants to fill in the empty columns on their own.

Put up FA10-O5a–c, GROW Balance Sheet Distribution, and then hand out the answers (FA10-H2). Ask participants to think about what story the trends in the distribution tell. Lead a brief discussion on the Balance Sheet Distribution. (See Trainer Notes.)

10. (10 minutes) Remind the group that they said one of the reasons to do financial analysis is to track their performance over time, in order to see how they are progressing, as well as to compare their MFI with others.

Ask: Having just understood how you can manage your profit, is Adjusted Operating Income useful for tracking yourselves over time or for comparing your MFI with others? Participants will probably say yes, so ask why—and then give the following example, writing it down on a flipchart if you wish.

Take two typical MFIs that have the same AOI.

MFI X has assets of 500,000, equity of 50,000, and an adjusted operating income of 10,000.

MFI Y has assets of 200,000, equity of 100,000, and an adjusted operating income of 10,000.

Their AOP is the same.

Ask: Is that a fair indicator of their profitability? (Answer: No.) Ask: Why not? (Answer: Because MFI X has larger assets, it should be able to generate a greater AOI than MFI Y.) See Trainer Notes.

11. (2 minutes) Ask the group how it would want to standardize this data to make a fair comparison. (Answer: Compare the AOI with the size of the assets or equity. In the business world, that is return on assets (ROA) and return on equity (ROE).) Explain the numerator and denominator, using Trainer Notes.

PERFORMANCE INDICATORS

12. (10 minutes) Ask: Who knows what ratios can be used to measure sustainability and profitability? Take answers, writing them on a flipchart. Ask who in the group uses them, and how.

After a short discussion, pass out FA10-H3 and show FA10-O6a–b, Sustainability and Profitability Ratios and Formulas, and review them, drawing comparisons with those on the flipchart.

Ask participants about the key difference between OSS and AROA, and their usefulness as indicators of profitability and sustainability.

13. (50 minutes) Tell the group that now that they understand all the ratios, it is time to calculate them and use them to make managerial decisions.

Hand out FA10-H4 to participants in preassigned groups. Explain that they have 30 minutes to calculate the profitability indicators for 2003 and 2004. Remind them to use the financial statements from sessions 4 and 7.

While participants complete the ratio calculations, walk around and check that the groups are not having any problems. After 30–45 minutes, hand out FA10-H5 for participants to check their answers. Put up FA10-O7a–c, and address any questions that need answering.

Use the information provided through the analysis. Tell the group that these points will be discussed at a board meeting, so it would be helpful to be able to explain what caused the changes in the ratios over the years. Suggest that they may find the balance sheet distribution helpful for drawing conclusions.

14. (20 minutes) At this point, tell participants that they are to prepare a five-minute analysis of GROW's options to improve profitability, which will be discussed with GROW at a board meeting. Put the instructions for the exercise on a flipchart. Have the group comment on GROW's profitability and offer suggestions as to how it can be improved. Participants should work in their small groups and develop a convincing argument based on the ratios the participants have calculated for GROW. Tell them to focus on the sustainability and profitability ratios, but add that they can include references to other ratios, too.

OPTIONS TO IMPROVE GROW'S PROFITABILITY

15. (30–40 minutes) Reconvene the group and put up FA10-O7a–c. Have the small groups make their presentations. Encourage participants to challenge each other about their recommendations.

As a quick review of profitability and sustainability before moving on, ask participants to give one phrase or example that captures what they have learned about profitability in this session—for example, to be sustainable, an MFI must be profitable.

16. (30 minutes) State: Now that you are familiar with the portfolio quality, asset/liability management, efficiency and productivity, and sustainability and profitability indicators, let's see what they tell you when put all together. Explain that this helps prepare for the case study tomorrow, when they will be using all the indicators together. Have participants start by thinking about who is interested in these indicators and why. Ask participants to have in front of them all ratio answer sheets and financial statements.

Assign each group one of the stakeholder identities listed below:

- The board and senior managers of GROW
- A commercial bank
- A donor's Ministry of Development Co-operation
- The Central Bank regulators
- The employees of GROW

Write the following questions on a flipchart and ask each group to describe:

- Which indicators would their stakeholder identity find useful to judge the performance of GROW, in order of priority?
- Why?
- How would they use the indicators?

Participants will not be required to present as a group, but each group member must understand what the indicators reveal, and why the group has chosen the priority order.

While the groups are working, go around and talk with them to ensure they are on track. It is important that participants understand what the ratios tell us and why they are calculated.

17. (15 minutes) Lead the discussion group by group, asking *individual* members of each group what they concluded about the order of importance of the indicators, and paraphrasing what they say to focus key issues. Add in local examples if appropriate. Draw a matrix of stakeholders and ratios on a flipchart to show the priority ordering.

	Stakeholders			
Ratios				

18. (5 minutes) Tell the group that there are no "right" answers for who is interested in which indicators. *All* show a unique perspective on the MFI's performance. The MFI manager's task is to ensure the trends on all the ratios improve over time and are consistent with the MFI's own goals.

Hand out FA10-H6, Technical Notes.

Trainer Notes

- Step 3—The trainer should note that sustainability requires that in addition to covering all your costs, without the help of donors, you are also able to generate enough income to grow.

Trainer then asks participants: Where have we seen these key determinants in the course?

Elicit the following answers:

- Personnel and Other Administrative Costs—in the SEEP Income Statement and In-kind Adjustments
 - Loan Loss—Allowance for Loan Impairment and Write-off
 - Cost of Funds—in the adjustments
 - Inflation—in the adjustments
 - Capitalization for Growth—in CGAP Occasional Paper No. 1 that will be handed out soon
 - Operating Income—in the SEEP Income Statement
- Step 5—Operating Income:
The trainer should tell the class: We are not going to address how to set interest rates here. There is another CGAP course specially focused on interest rate setting. If you are interested in this topic, then sign up for the course. It uses CGAP Occasional Paper No. 1, “Microcredit Interest Rates,” as a centerpiece; (FA10-H7).

Tell the group: The objective here is just to show you a little of what is covered in that CGAP Occasional Paper and to emphasize that it is your decision how you set interest rates, and therefore it is your decision whether you generate a profit.

Ask: If your usual interest rate is a 2 percent nominal monthly interest rate on a declining balance and no other fees, how could you generate twice the income while still keeping the same nominal rate?

Answer: Charge it on the flat amount with an up-front fee or commission.

Overhead FA10-O3 from the CGAP Occasional Paper No. 1 is optional and shows an example of the difference in the income you can earn from the way you structure your interest and fees. It shows that if you charge 2 percent nominal monthly interest rate on a declining balance and no other fees, you can generate twice the income if you charge it on the flat amount with a 3 percent commission. This is just for illustrative purposes. This does not mean that we recommend one way or another to set interest rates—it is just to show that there are many different ways you can choose to affect your operating income.

- Steps 6–10—Adjusted Total Financial and Operating Expenses

Just as we have choices about our interest income, we have choices about how to manage our expenses. See session 9, where we had a discussion about how to reduce GROW's expenses and so improve efficiency.

Ask: What were some of the ideas we came up with to reduce expenses and increase efficiency? Answers: Improving loan officer productivity, reducing loan losses, reducing in-kind donations, and so forth.

Say: But the efficiency/productivity indicators did not include the inflation and cost of funds adjustment. Do you remember how we discussed reducing these adjustments in session 7? Increasing fixed rate liabilities would reduce the inflation adjustment. One way to reduce the cost of funds adjustment and reach profitability sooner is to look for cheaper sources of

commercial funding, such as voluntary savings. This may require a commitment to getting a license to take deposits from the public, but the long-term goal is to achieve profitability.

- Step 9—For reference: MFI X ROA = 2%, ROE = 20%
MFI Y ROA = 5%, ROE = 10%

MFI Y has an Operating Income of 100,000 and Adjusted (Financial+ Operating) Expenses of 90,000.

$$\text{Its Financial Self-Sufficiency} = \frac{100,000}{90,000} = 111\%$$

- Steps 10, 11, 15, 16—Notes for discussion on ratios (Refer to SEEP Framework)

$$\text{Adjusted Return on Assets (AROA)} = \frac{\text{Adjusted Net Operating Income} - \text{Taxes}}{\text{Average Adjusted Assets}}$$

The Return on Assets is a ratio used all the time in the business world and all the stakeholders should find this ratio useful. (But in the business world, the subsidies inherent in MFIs do not exist. So for an MFI, we have to include the adjustments. Therefore, it is calculated using the Adjusted Net Operating Income less taxes divided by the Average Adjusted Assets.) Also point out that “we do not just want to look at end of year assets, therefore we will use Average Adjusted Assets in the denominator to reflect the whole year.”

- The main point AROA tells us is the productivity of the assets of the MFI. The assets are what earn the income for the business. So we can tell if the MFI has managed its assets to generate a reasonable return. In other words, the AROA reflects how much the MFI has earned on the investment of the financial resources committed to it.
- MFIs have achieved unusually high ROA in recent years. A positive correlation exists between this ratio and portfolio to assets; the ratio is higher for institutions that maintain a large percentage of the assets in the Gross Loan Portfolio.
- If an MFI has a positive AROA, then the MFI is profitable and sustainable because it is covering all its costs and also is able to capitalize itself for growth. If it is negative but improving, then the MFI is not profitable but is moving toward it.
- The key to follow is the trend in AROA. Understanding the reasons why it has fluctuated as the MFI has grown will tell much about the MFI’s future prospects.
- If an institution’s ROA is fairly constant, this ratio can be used to forecast earnings in future periods.
- AROA tells us whether the MFI can generate a return that would meet national microfinance standards or the standards necessary for banks to think it is a good credit risk.
- We can also use the AROA to compare the productivity of the assets of one MFI over time, or of different MFIs both nationally and internationally. We can also use the AROA to compare an MFI with other financial institutions nationally.
- Unlike ROE, this ratio measures profitability regardless of the institution’s underlying funding structure; it does not discriminate against MFIs that are funded primarily through equity. Therefore, ROA is a good measurement to compare commercial and noncommercial MFIs. In fact, noncommercial MFIs with low debt/equity ratios can often achieve higher ROA than their commercial counterparts, because they have low financial expenses and pay fewer taxes.

Note: When an MFI has other activities apart from finance—say, training or agriculture development—some institutions use Average Performing Assets (loan portfolio and other revenue earning assets but not fixed assets) for the denominator of AROA, because they

think it more accurately reflects the assets that are generating the income. CGAP, SEEP, and others argue that it is important for an MFI to manage all its assets, which include the fixed assets of the institution. So it is more useful to compare the return on the average adjusted assets rather than a subset of the assets.

In either case it is the trends that are more important.

$$\text{Adjusted Return on Equity (AROE)} = \frac{\text{Adjusted Net Operating Income} - \text{Taxes}}{\text{Average Adjusted Equity}}$$

Again, ROE is a ratio used all the time in the business world, so all the stakeholders should be interested in it to assess GROW's profitability. But in the business world, the subsidies inherent in MFIs do not exist. So for an MFI we have to include the adjustments. Therefore, we use AROE, which is calculated using the Adjusted Net Operating Income less taxes divided by the Average Adjusted Equity. The trainer should also point out that we do not just want to look at end-of-year assets; therefore, we will use Average Equity in the denominator to reflect the whole year.

In a for-profit MFI, ROE is the most important profitability indicator; it measures an MFI's ability to reward its shareholders' investment, build its equity base through retained earnings, and raise additional equity investment. For a nonprofit MFI, ROE indicates its ability to build equity through retained earnings, and increased equity enables the MFI to leverage more financing to grow its portfolio. By excluding donations and nonoperating revenues, this ratio demonstrates an institution's ability to generate income from its core financial service activity.

Some mature MFIs have achieved remarkably high ROE, exceeding those of banks.

The trainer should ensure the following points are covered:

- AROE reflects how much the MFI has earned on its capital, or the return to equity.
- Even a mature MFI's ROE can be temporarily depressed due to unplanned events (such as natural disasters) or planned undertakings (such as expansion).
- ROE tends to fluctuate more than ROA. Monthly measurements of ROE can be misleading because many MFI costs may not be recorded until the end of the fiscal year. Managers should look for a positive trend over several years and a ratio similar to or better than competitors. As the market becomes saturated and competition increases, ROE may plateau.
- If an MFI has a positive ROE, then the MFI is profitable and is also sustainable because it is covering all its costs and is able to capitalize itself for growth.
- This is the key ratio used in commercial circles for assessing institutions, because in most businesses, the equity is in the hands of shareholders who want a dividend.
- AROE measures whether or not an MFI earns enough for equity investors to be attracted to the MFI. With equity investors, an MFI can move away from donor dependency.
- MFIs that are financed solely through equity donations will find this ratio less meaningful, because donors rarely base their future investment decisions on ROE. ROE is, however, a good indicator of how well the MFI has used retained earnings and donor money to become sustainable.
- The adjusted ROE can be used to compare an MFI with similar businesses and determine whether the MFI has the potential to generate a rate of return that is commercially acceptable to future equity investors. All but a very few MFIs are very far from being able to have equity investors, but it is good to set high targets.

- AROE is expressed by the formula: $\frac{\text{AOI} - \text{Taxes}}{\text{Av. Adj. Equity}}$

This is equivalent to the AROA multiplied by a leverage factor (that is, Assets divided by Equity). This is expressed by:

$$\frac{\text{AOI} - \text{T}}{\text{Av. Adj. Assets}} \times \frac{\text{Av. Assets}}{\text{Av. Equity}} \times \frac{\text{AOI}}{\text{Av. Adj. Equity}}$$

In other words, the Return on Equity tells us about the relationship between the extent of leverage by the MFI (Assets/Equity) and the productivity of the assets (ROA).

- Steps 11, 15, 16—Operating and Financial Self-Sufficiency

The trainer explains: To date, the microfinance world has mostly used operating self-sufficiency instead of more business-like ratios. So probably the board, donors, and employees are the only stakeholders interested in these ratios. The bankers would not be interested because they are used to dealing with ROA and ROE, and because the same information is expressed in ROA and ROE.

Traditionally, MFIs have used operating and financial self-sufficiency as indicators of sustainability. They are simple calculations. They express the financial revenue as a percentage of the Adj. Financial Expenses + Adj. Net Impairment Losses on Loans + Adj. Operating Expenses. Financial self-sufficiency, as defined by SEEP, includes all the adjusted costs, not just the financial costs which are more typically used.

- Operating and financial self-sufficiency are useful internal measurement tools for tracking cost coverage by operating income.
- Financial self-sufficiency below 100 percent is equivalent to an AROA less than 0 percent because it includes similar data. Please refer to the example in point 9 above, which illustrates this point. However, by using AROA we are standardizing the data based on the assets of the MFI, so it is a better ratio.
- Some MFIs say they find it more encouraging to calculate operating self-sufficiency, because it does not include either the cost of funds or all the adjustments. But CGAP argues that this is like hiding your head in the sand and pretending that those costs are not there. It is better to start using AROA and AROE from the beginning, so you can see ongoing improvement.

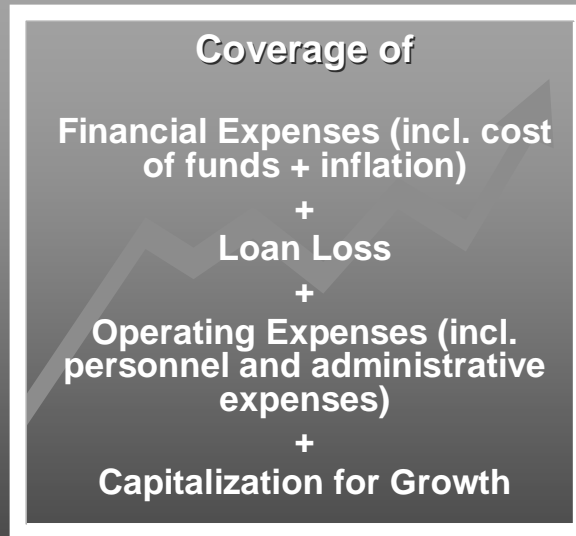
- Step 17—Optional handouts FA10-H7 and FA10-H8 can be downloaded from <http://www.cgap.org> or given in electronic format like a CD.
-

Overheads

THE COMPLETE SET OF OVERHEADS IS IN A SEPARATE POWERPOINT FILE ENTITLED "CGAP FINANCIAL ANALYSIS OVERHEADS."

FA10-O1a

Sustainability Equals



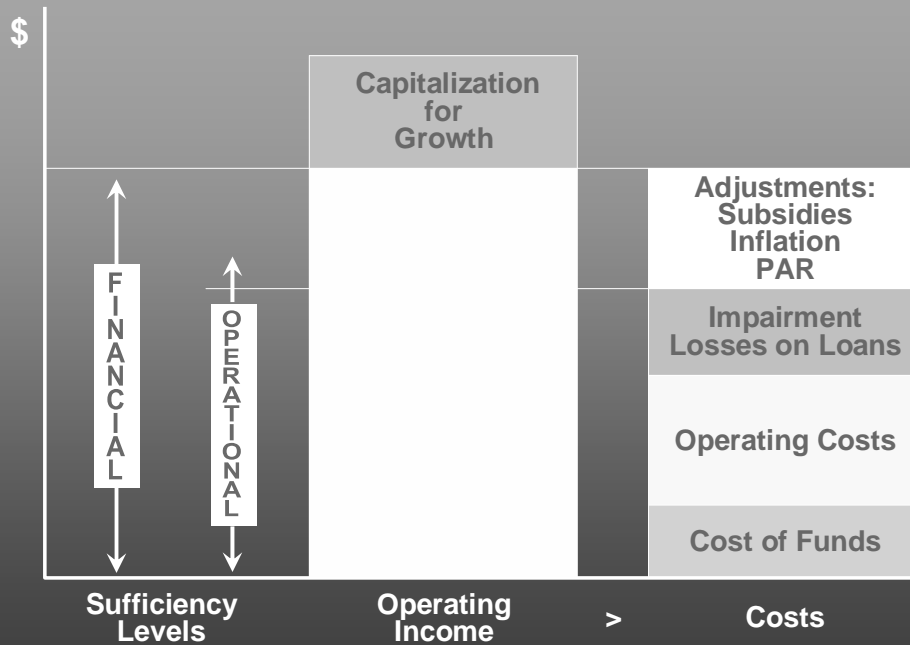
from Financial Revenue

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FA10-O1b

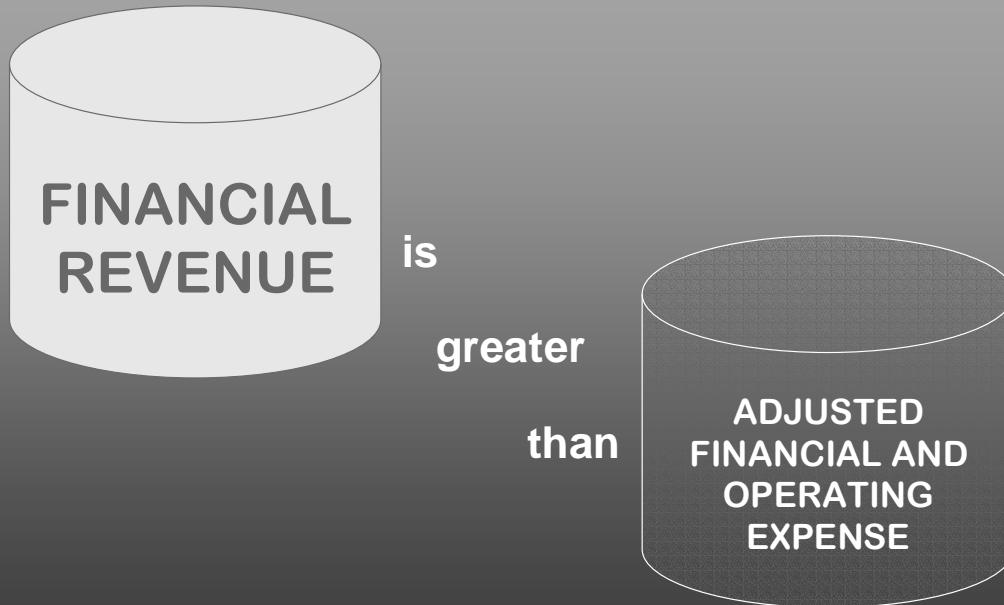
Sustainability Equation



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An MFI is PROFITABLE when



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Annualized Percentage Rate

Stated Monthly Rate	Interest charged on declining balance, 4 equal monthly installments	Flat interest charged on initial balance prorated over 4 monthly payments	Flat interest charged on initial balance plus 3% commission deducted up-front from loan disbursement
2%	24%	37.8%	58%
3%	36%	56.3%	82%

The chart illustrates how a wide range of yields can be produced by loans with the same nominal (stated) interest rate, depending on how charges and payments are structured.

Source: CGAP Occasional Paper No. 1, p. 8.

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FA10-O4a

Balance Sheet Distribution Worksheet

Ref.	Account Name	2002 (adj) (%)	2003 (adj) (%)	2004 (adj) (%)
	ASSETS			
B1	Cash and Due from Banks			
B2	Trade Investments			
B3	Net Loan Portfolio			
B4/A5	Gross Loan Portfolio			
B5	Impairment Loss Allowance			
A4, A5	Adjustment to Impairment Loss Allowance			
B6	Interest Receivable on Loan Portfolio			
B7	Accounts Receivable and Other Assets			
B8	Other Investments			
B9	Net Fixed Assets			
B10	Fixed Assets			
A3.2	Adjustment to Fixed Assets			
B11	Accumulated Depreciation and Amortization			
B12	Total Assets			

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FA10-O4b

Balance Sheet Distribution Worksheet *(continued)*

Ref.	Account Name	2002 (adj) (%)	2003 (adj) (%)	2004 (adj) (%)
	LIABILITIES			
B13	Demand Deposits			
B14	Short-term Time Deposits			
B15	Short-term Borrowings			
B16	Interest Payable on Funding Liabilities			
B17	Accounts Payable and Other Short-term Liabilities			
B18	Long-term Time Deposits			
B19	Long-term Borrowings			
B20	Other Long-term Liabilities			
B21	Total Liabilities			

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FA10-O4c

Balance Sheet Distribution Worksheet *(continued)*

Ref.	Account Name	2002 (adj) (%)	2003 (adj) (%)	2004 (adj) (%)
	EQUITY			
B22	Paid-in Capital			
B23	Donated Equity			
B24	Prior Years			
B25	Current Year			
B26	Retained Earnings			
B27	Prior Years			
B28	Current Year			
A1-A4	Adjustments to Income			
B29	Reserves			
B30	Other Equity Accounts			
B31	Adjustments to Equity			
B31-A1	Subsidized Cost of Funds Adjustment*			
B31-A2	In-kind Subsidy Adjustment			
B31-A3	Inflation Adjustment*			
B32	Total Equity			
	Total Liabilities + Equity			

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FA10-O5a

GROW Balance Sheet Distribution

Ref.	Account Name	2002 (adj) (%)	2003 (adj) (%)	2004 (adj) (%)
	ASSETS			
B1	Cash and Due from Banks	1.8	2.9	3.7
B2	Trade Investments			
B3	Net Loan Portfolio	89.6	86.6	88.8
B4/A5	Gross Loan Portfolio	91.9	89.1	91.3
B5	Impairment Loss Allowance	-2.1	-2.4	-2.3
A4, A5	Adjustment to Impairment Loss Allowance	-0.2	0.0	-0.2
B6	Interest Receivable on Loan Portfolio	1.0	1.0	0.9
B7	Accounts Receivable and Other Assets	0.0	0.1	0.0
B8	Other Investments			
B9	Net Fixed Assets	7.6	9.3	6.6
B10	Fixed Assets	9.1	10.6	7.8
A3.2	Adjustment to Fixed Assets	0.4	1.0	0.9
B11	Accumulated Depreciation and Amortization	-1.9	-2.2	-2.1
B12	Total Assets	100.0	100.00	100.0

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FA10-O5b

GROW Balance Sheet Distribution *(continued)*

Ref.	Account Name	2002 (adj) (%)	2003 (adj) (%)	2004 (adj) (%)
	LIABILITIES			
B13	Demand Deposits			
B14	Short-term Time Deposits			
B15	Short-term Borrowings	34.4	37.7	35.5
B16	Interest Payable on Funding Liabilities	0.1	0.1	0.1
B17	Accounts Payable and Other Short-term Liabilities	2.1	1.5	0.7
B18	Long-term Time Deposits			
B19	Long-term Borrowings	22.8	19.5	26.5
B20	Other Long-term Liabilities	0.0	0.0	0.0
B21	Total Liabilities	59.4	58.9	62.8

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FA10-O5c

GROW Balance Sheet Distribution *(continued)*

Ref.	Account Name	2002 (adj) (%)	2003 (adj) (%)	2004 (adj) (%)
	EQUITY			
B22	Paid-in Capital			
B23	Donated Equity	12.9	10.6	6.8
B24	Prior Years	7.8	9.4	6.1
B25	Current Year	5.1	1.2	0.7
B26	Retained Earnings	7.7	9.2	8.5
B27	Prior Years	20.3	20.1	16.9
B28	Current Year	7.2	9.5	9.4
A1–A4	Adjustments to Income	-19.8	-20.3	-17.9
B29	Reserves		0.0	3.3
B30	Other Equity Accounts			
B31	Adjustments to Equity	20.0	21.3	18.6
B31-A1	Subsidized Cost of Funds Adjustment*	14.7	15.8	14.2
B31-A2	In-kind Subsidy Adjustment	0.2	0.2	0.1
B31-A3	Inflation Adjustment*	5.1	5.3	4.4
B32	Total Equity	40.6	41.1	37.2
	Total Liabilities + Equity	100.0	100.0	100.0

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Sustainability and Profitability Ratios and Formulas

FA10-O6a

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)	$\frac{\text{Adjusted Net Operating Income - Taxes}}{\text{Average Adjusted Assets}}$

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Sustainability and Profitability Ratios and Formulas *(continued)*

FA10-O6b

RATIO	FORMULA
Return on Equity (ROE)	$\frac{\text{Net Operating Income - Taxes}}{\text{Average Equity}}$
Adjusted Return on Equity (AROE)	$\frac{\text{Adjusted Net Operating Income - Taxes}}{\text{Average Adjusted Equity}}$

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GROW

Sustainability and Profitability Ratios

FA10-O7a

Ref.	DESCRIPTION	2002	2003	2004
R1	Operational Self-Sufficiency Ratio			
a	Financial Revenue	4,719	6,342	10,082
b	Financial Expense	371	292	823
c	Impairment Losses on Loans	145	262	430
d	Operating Expense	2,760	3,264	4,562
e	b + c + d	3,276	3,818	5,815
R1	Operational Self-Sufficiency Ratio = a/e	144.05%	166.11%	173.38%
Adj R1	Financial Self-Sufficiency Ratio			
a	Financial Revenue	4,719	6,342	10,082
b	Adjusted Financial Expense	4,286	5,876	9,349
c	Adjusted Impairment Losses on Loans	186	262	507
d	Adjusted Operating Expense	2,808	3,312	4,610
e	b + c + d	7,280	9,450	14,466
Adj R1	Financial Self-Sufficiency Ratio = a/e	64.82%	67.11%	69.69%

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GROW Sustainability and Profitability Ratios *(continued)*

FA10-O7b

Ref.	DESCRIPTION	2002	2003	2004
R2	Return on Assets (ROA) Ratio			
a	Net Operating Income	1,443	2,524	4,267
b	Taxes	–	20	31
c	a – b	1,443	2,504	4,236
d	Average Assets	17,283	23,824	37,718
R2	Return on Assets (ROA) Ratio = a/d	8.35%	10.51%	11.23%
Adj R2	Adjusted ROA (AROA) Ratio			
a	Adjusted Net Operating Income	(2,561)	(3,108)	(4,384)
b	Taxes	–	20	31
c	a – b	(2,561)	(3,128)	(4,415)
d	Adjusted Average Assets	17,301	23,974	38,032
Adj R2	Adjusted ROA (AROA) Ratio = a/d	-14.80%	-13.05%	-11.61%

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GROW Sustainability and Profitability Ratios *(continued)*

Ref.	DESCRIPTION	2002	2003	2004
R2	Return on Equity (ROE) Ratio			
a	Net Operating Income	1,443	2,524	4,267
b	Taxes	–	20	31
c	a – b	1,443	2,504	4,236
d	Average Equity	6,937	9,653	14,378
R2	Return on Equity (ROE) Ratio = a/d	20.80%	25.94%	29.46%
Adj R2	Adjusted ROE (AROE) Ratio			
a	Adjusted Net Operating Income	(2,561)	(3,108)	(4,384)
b	Taxes	–	20	31
c	a – b	(2,561)	(3,128)	(4,415)
d	Adjusted Average Equity	6,955	9,803	14,691
Adj R2	Adjusted ROE (AROE) Ratio = a/d	-36.83%	-31.91%	-30.05%

Handouts

Balance Sheet Distribution Worksheet

Ref.	Account Name	2002 (adj) (000)	2003 (adj) (000)	2004 (adj) (000)
ASSETS				
B1	Cash and Due from Banks	1.8%		
B2	Trade Investments			
B3	Net Loan Portfolio	89.6%		
B4/A5	Gross Loan Portfolio (adjusted)	91.9%		
B5	Impairment Loss Allowance (adjusted)	-2.1%		
A4, A5	Adjustment for Impairment Loss Allowance	-0.2%		
B6	Interest Receivable on Loan Portfolio	1.0%		
B7	Accounts Receivable and Other Assets	0.0%		
B8	Other Investments			
B9	Net Fixed Assets	7.6%		
B10	Fixed Assets	9.1%		
A3.2	Adjustment to Fixed Assets	0.4%		
B11	Accumulated Depreciation and Amortization	-1.9%		
B12	TOTAL ASSETS	100.0%		
LIABILITIES				
B13	Demand Deposits			
B14	Short-term Time Deposits			
B15	Short-term Borrowings	34.4%		
B16	Interest Payable on Funding Liabilities	0.1%		
B17	Accounts Payable and Other Short-term Liabilities	2.1%		
B18	Long-term Time Deposits	0.0%		
B19	Long-term Borrowings	22.8%		
B20	Other Long-term Liabilities	0.0%		
B21	TOTAL LIABILITIES	59.4%		
EQUITY				
B22	Paid-in Capital			
B23	Donated Equity	12.9%		
B24	Prior Years	7.8%		
B25	Current Year	5.1%		
B26	Retained Earnings	7.7%		
B27	Prior Years	20.3%		
B28	Current Year	7.2%		
A1-A4	Adjustments to Income	-19.8%		
B29	Reserves			
B30	Other Equity Accounts			
B31	Adjustments to Equity	20.0%		
B31-A1	Subsidized Cost of Funds Adjustment	14.7%		
B31-A2	In-kind Subsidy Adjustment	0.2%		
B31-A3	Inflation Adjustment	5.1%		
B32	TOTAL EQUITY	40.6%		
	TOTAL LIABILITIES + EQUITY	100.0%		

GROW Balance Sheet Distribution

Ref.	Account Name	2002 (adj) (000)	2003 (adj) (000)	2004 (adj) (000)
ASSETS				
B1	Cash and Due from Banks	1.8%	2.9%	3.7%
B2	Trade Investments			
B3	Net Loan Portfolio	89.6%	86.6%	88.8%
B4/A5	Gross Loan Portfolio (adjusted)	91.9%	89.1%	91.3%
B5	Impairment Loss Allowance (adjusted)	-2.1%	-2.4%	-2.3%
A4, A5	Adjustment for Impairment Loss Allowance	-0.2%	0.0%	-0.2%
B6	Interest Receivable on Loan Portfolio	1.0%	1.0%	0.9%
B7	Accounts Receivable and Other Assets	0.0%	0.1%	0.0%
B8	Other Investments			
B9	Net Fixed Assets	7.6%	9.3%	6.6%
B10	Fixed Assets	9.1%	10.6%	7.8%
A3.2	Adjustment to Fixed Assets	0.4%	1.0%	0.9%
B11	Accumulated Depreciation and Amortization	-1.9%	-2.2%	-2.1%
B12	TOTAL ASSETS	100.0%	100.0%	100.0%
LIABILITIES				
B13	Demand Deposits			
B14	Short-term Time Deposits			
B15	Short-term Borrowings	34.4%	37.7%	35.5%
B16	Interest Payable on Funding Liabilities	0.1%	0.1%	0.1%
B17	Accounts Payable and Other Short-term Liabilities	2.1%	1.5%	0.7%
B18	Long-term Time Deposits	0.0%		
B19	Long-term Borrowings	22.8%	19.5%	26.5%
B20	Other Long-term Liabilities	0.0%	0.0%	0.0%
B21	TOTAL LIABILITIES	59.4%	58.9%	62.8%
EQUITY				
B22	Paid-in Capital			
B23	Donated Equity	12.9%	10.6%	6.8%
B24	Prior Years	7.8%	9.4%	6.1%
B25	Current Year	5.1%	1.2%	0.7%
B26	Retained Earnings	7.7%	9.2%	8.5%
B27	Prior Years	20.3%	20.1%	16.9%
B28	Current Year	7.2%	9.5%	9.4%
A1-A4	Adjustments to Income	-19.8%	-20.3%	-17.9%
B29	Reserves		0.0%	3.3%
B30	Other Equity Accounts			
B31	Adjustments to Equity	20.0%	21.3%	18.6%
B31-A1	Subsidized Cost of Funds Adjustment	14.7%	15.8%	14.2%
B31-A2	In-kind Subsidy Adjustment	0.2%	0.2%	0.1%
B31-A3	Inflation Adjustment	5.1%	5.3%	4.4%
B32	TOTAL EQUITY	40.6%	41.1%	37.2%
	TOTAL LIABILITIES + EQUITY	100.0%	100.0%	100.0%

Sustainability and Profitability Ratios and Formulas

Profitability and sustainability ratios reflect the MFI's ability to continue operating and grow in the future.

RATIO	FORMULA	EXPLANATION
Operational Self- Sufficiency	$\frac{\text{Financial Revenue}}{(\text{Financial Expense} + \text{Impairment Losses on Loans} + \text{Operating Expense})}$	Measures how well an MFI can cover its costs through operating revenues.
Financial Self- Sufficiency	$\frac{\text{Adjusted Financial Revenue}}{(\text{Adjusted Financial Expense} + \text{Adjusted Impairment Losses on Loans} + \text{Adjusted Operating Expense})}$	Measures how well an MFI can cover its costs taking into account adjustments to operating revenues and expenses.
Return on Assets (ROA)	$\frac{\text{Net Operating Income} - \text{Taxes}}{\text{Average Assets}}$	Measures how well the MFI uses its assets to generate returns. This ratio is net of taxes and excludes nonoperating items and donations.
Adjusted Return on Assets (AROA)	$\frac{\text{Adjusted Net Operating Income} - \text{Taxes}}{\text{Average Adjusted Assets}}$	
Return on Equity (ROE)	$\frac{\text{Net Operating Income} - \text{Taxes}}{\text{Average Equity}}$	Calculates the rate of return on the average equity for the period. Because the numerator does not include nonoperating items or donations and is net of taxes, the ratio is frequently used as a proxy for commercial viability.
Adjusted Return on Equity (AROE)	$\frac{\text{Adjusted Net Operating Income} - \text{Taxes}}{\text{Average Adjusted Equity}}$	

Source: SEEP, 2005.

Sustainability and Profitability Ratio Worksheet

Using GROW Income Statement (FA4-H7), Balance Sheet (FA4-H9), Adjusted Income Statement (FA7-H5), and Adjusted Balance Sheet (FA7-H7), calculate Sustainability and Profitability ratios.

Ref.	DESCRIPTION	2002	2003	2004
R1	Operational Self-Sufficiency Ratio			
a	Financial Revenue	4,719		
b	Financial Expense	371		
c	Impairment Losses on Loans	145		
d	Operating Expense	2,760		
e	b + c + d	3,276		
R1	Operational Self-Sufficiency Ratio = a/e	144.05%		
Adj R1	Financial Self-Sufficiency Ratio			
a	Financial Revenue	4,719		
b	Adjusted Financial Expense	4,286		
c	Adjusted Impairment Losses on Loans	186		
d	Adjusted Operating Expense	2,808		
e	b + c + d	7,280		
Adj R1	Financial Self-Sufficiency Ratio = a/e	64.82%		
R2	Return on Assets (ROA)			
a	Net Operating Income	1,443		
b	Taxes	-		
c	a - b	1,443		
d	Average Assets	17,283		
R2	Return on Assets (ROA) = c/d	8.35%		
Adj R2	Adjusted Return on Assets (AROA)			
a	Adjusted Net Operating Income	(2,561)		
b	Taxes	-		
c	a - b	(2,561)		
d	Adjusted Average Assets	17,301		
Adj R2	Adjusted Return on Assets (AROA) = c/d	-14.80%		
R3	Return on Equity (ROE) = c/d			
a	Net Operating Income	1,443		
b	Taxes	-		
c	a - b	1,443		
d	Average Equity	6,937		
R3	Return on Equity (ROE) = c/d	20.80%		
Adj R3	Adjusted Return on Equity (AROE) = c/d			
a	Adjusted Net Operating Income	(2,561)		
b	Taxes	-		
c	a - b	(2,561)		
d	Adjusted Average Equity	6,955		
Adj R3	Adjusted Return on Equity (AROE) = c/d	-36.82%		

GROW Sustainability and Profitability Ratios

Ref.	DESCRIPTION	2002	2003	2004
R1	Operational Self-Sufficiency Ratio			
a	Financial Revenue	4,719	6,342	10,082
b	Financial Expense	371	292	823
c	Impairment Losses on Loans	145	262	430
d	Operating Expense	2,760	3,264	4,562
e	b + c + d	3,276	3,818	5,815
R1	Operational Self-Sufficiency Ratio = a/e	144.05%	166.11%	173.38%
Adj R1	Financial Self-Sufficiency Ratio			
a	Financial Revenue	4,719	6,342	10,082
b	Adjusted Financial Expense	4,286	5,876	9,349
c	Adjusted Impairment Losses on Loans	186	262	507
d	Adjusted Operating Expense	2,808	3,312	4,610
e	b + c + d	7,280	9,450	14,466
Adj R1	Financial Self-Sufficiency Ratio = a/e	64.82%	67.11%	69.69%
R2	Return on Assets (ROA)			
a	Net Operating Income	1,443	2,524	4,267
b	Taxes	-	20	31
c	a - b	1,443	2,504	4,236
d	Average Assets	17,283	23,824	37,718
R2	Return on Assets (ROA) = c/d	8.35%	10.51%	11.23%
Adj R2	Adjusted Return on Assets (AROA)			
a	Adjusted Net Operating Income	(2,561)	(3,108)	(4,384)
b	Taxes	-	20	31
c	a - b	(2,561)	(3,128)	(4,415)
d	Adjusted Average Assets	10,118	23,974	38,032
Adj R2	Adjusted Return on Assets (AROA) = c/d	-25.31%	-13.05%	-11.61%
R3	Return on Equity (ROE) = c/d			
a	Net Operating Income	1,443	2,524	4,267
b	Taxes	-	20	31
c	a - b	1,443	2,504	4,236
d	Average Equity	6,937	9,653	14,378
R3	Return on Equity (ROE) = c/d	20.80%	25.94%	29.46%
Adj R3	Adjusted Return on Equity (AROE) = c/d			
a	Adjusted Net Operating Income	(2,561)	(3,108)	(4,384)
b	Taxes	-	20	31
c	a - b	(2,561)	(3,128)	(4,415)
d	Adjusted Average Equity	6,955	9,803	14,691
Adj R3	Adjusted Return on Equity (AROE) = c/d	-36.82%	-31.91%	-30.05%

Technical Notes

SUSTAINABILITY

This requires that in addition to covering all your costs, without the help of donors, you are also able to generate enough income to grow.

These key determinants have already appeared in the course as:

- Personnel costs + other administrative costs—in the SEEP Income Statement
- In-kind Adjustments
- Loan Loss—Loan Loss Reserve and Write-off
- Cost of Funds—in the adjustments
- Inflation—in the adjustments
- Capitalization for Growth—covered in CGAP Occasional Paper No. 1
- Operating Income—in the SEEP Income Statement

OPERATING INCOME

Interest rates and how they affect income is the basis for another course based on the CGAP Occasional Paper No. 1, “Microcredit Interest Rates” (FA10–H7).

Here is an example to show you a little of what is covered in that CGAP Occasional Paper and to emphasize that it is your decision how you set interest rates, and therefore it is your decision whether you generate a profit:

If your usual interest rate is 2 percent nominal monthly interest on a declining balance and no other fees, how could you generate twice the income while still keeping the same nominal rate? Charge it on the flat amount with an up-front fee or commission.

Annualized Percentage Rate

Stated Monthly Rate	Interest charged on declining balance, 4 equal monthly installments	Flat interest charged on initial balance prorated over 4 monthly payments	Flat interest charged on initial balance plus 3% commission deducted up-front from loan disbursement
2%	24%	37.8%	58.0%
3%	36%	56.3%	82.0%

Source: CGAP Occasional Paper No. 1, p. 8.

The chart illustrates how a wide range of yields can be produced by loans with the same nominal (stated) interest rate, depending on how charges and payments are structured.

The chart shows an example of the difference in the income you can earn from the way you structure your interest and fees. It shows that if you charge 2 percent nominal monthly interest

rate on a declining balance and no other fees, you can generate twice the income if you charge it on the flat amount with a 3 percent commission.

This is just for illustrative purposes. This does not mean that we recommend one way or another to set interest rates—it is here just to show how there are many different ways you can choose to affect your operating income.

Adjusted Total Financial Operations Expenses (Interest and Fee Expense + Loan Loss Provision Expense + Personnel Expense + Other Admin. Expense)

Just as you have choices about our interest income, you have choices about how to manage your expenses. Some of the ideas that were discussed in session 8 about how to reduce expenses and so improve efficiency were (1) improving loan officer productivity, (2) reducing loan losses, (3) reducing in-kind donations, and so forth.

But the efficiency indicators did not include the inflation and cost of funds adjustment. Do you remember how we discussed reducing these adjustments in session 7? Increasing fixed rate liabilities would reduce the inflation adjustment.

One way to reduce the cost of funds adjustment and reach profitability sooner is to look for cheaper sources of commercial funding, such as voluntary savings. This may require a commitment to getting a license to take deposits from the public, but the long-term goal is to achieve profitability.

Using Adjusted Operating Profit to track performance over time and/or to compare with other MFIs.

Take two typical MFIs that have the same AOP: MFI X has assets of 500,000, equity of 50,000 and an adjusted operating profit of 10,000. MFI Y has assets of 200,000, equity of 100,000, and an adjusted operating profit of 10,000.

Their AOP is the same. Is that a fair indicator of their profitability? Answer: No. Why not? Answer: Because MFI X has larger assets, it should be able to generate a greater AOP than MFI Y.

For reference: MFI X ROA = 2%, ROE = 20%
MFI Y ROA = 5%, ROE = 10%

MFI Y has an operating Income of 100,000 and adjusted operating expenses of 90,000. Therefore its financial self-sufficiency =

$$\frac{100,000}{90,000} = 111\%$$

Ratios

$$\text{Adjusted Return on Assets (AROA)} = \frac{\text{Adjusted Operating Profit}}{\text{Average Total Assets}}$$

The Return on Assets is a ratio used all the time in the business world; all stakeholders should find this ratio useful. But in the business world, the subsidies inherent in MFIs do not exist. So for an MFI, we have to include the adjustments. Therefore, it is calculated using the Adjusted Operating Profit divided by the Average Total Assets. We do not just want to look at end-of-year assets; therefore we will use Average Total Assets in the denominator to reflect the whole year.

- The main point AROA tells us is the productivity of the assets of the MFI. The assets are what earn the income for the business. So we can tell if the MFI has managed its

assets to generate a reasonable return. In other words, the AROA reflects how much the MFI has earned on the investment of the financial resources committed to it.

- If an MFI has a positive AROA, then the MFI is profitable and sustainable because it is covering all its costs and also is able to capitalize itself for growth. If it is negative but improving, then the MFI is not profitable but is moving towards it.
- The key to follow is the trend in AROA. Understanding the reasons why it has fluctuated as the MFI has grown will tell much about the future prospects of the MFI.
- AROA tells us whether the MFI can generate a return that would meet national microfinance standards or the standards necessary for banks to think it is a good credit risk.
- We can also use the AROA to compare the productivity of the assets of one MFI over time, or of different MFIs both nationally and internationally. We can also use the AROA to compare an MFI with other financial institutions nationally.

Note: When an MFI has other activities apart from finance—say, training or agriculture development—some institutions use Average Performing Assets (Loan Portfolio and other revenue-earning assets, but not fixed assets) for the denominator of AROA, because they think it more accurately reflects the assets that are generating the income. CGAP and others argue that it is important for an MFI to manage all its assets, which include the fixed assets of the institution. So it is more useful to compare the return on the Average Total Assets rather than a subset of the assets.

In either case it is the *trends* that are more important.

$$\text{Adjusted Return on Equity} = \frac{\text{Adjusted Operating Profit}}{\text{Average Equity}}$$

Again, ROE is a ratio used all the time in the business world, so all the stakeholders should be interested in it to assess profitability. But in the business world, the subsidies inherent in MFIs do not exist. So for an MFI, we have to include the adjustments. Therefore, it is calculated using the Adjusted Operating Profit divided by the Average Equity. Also, we do not just want to look at end of year assets, therefore we will use Average Equity in the denominator to reflect the whole year.

Some other points to keep in mind:

- AROE reflects how much the MFI has earned on its capital, or the return to equity.
- If an MFI has a positive ROE, then the MFI is profitable and is also sustainable, because it is covering all its costs and is able to capitalize itself for growth.
- This is the key ratio used the in commercial circles for assessing institutions, because in most businesses, the equity is in the hands of shareholders who want a dividend.
- AROE measures if an MFI earns enough for equity investors to be attracted to it. With equity investors, an MFI can move away from donor dependency.
- The adjusted ROE can be used to compare an MFI with similar businesses and determine whether the MFI has the potential to generate a rate of return that is commercially acceptable to future equity investors. All but a very few MFIs are very far from being able to have equity investors, but it is good to set high targets.
- AROE is expressed by the formula:
$$\frac{\text{AOP}}{\text{Av. Equity}}$$

This is equivalent to the AROA multiplied by a leverage factor (that is, assets divided by equity). This is expressed by:

$$\frac{\text{Av. Assets} \times \text{Av. Assets}}{\text{Av. Assets}} = \text{Av. Equity}$$
$$\frac{\text{AOP}}{\text{Av. Assets}} \times \frac{\text{Av. Assets}}{\text{Av. Equity}} = \frac{\text{AOP}}{\text{Av. Equity}}$$

In other words, the return on equity tells us about the relationship between the extent of leverage by the MFI (assets/equity) and the productivity of the assets (ROA).

Operating and Financial Self-sufficiency Ratios

The microfinance world has to date mostly used operating self-sufficiency instead of more business-like ratios. So probably the board, donors, and employees are the only stakeholders interested in these ratios. The bankers would not be interested because they are used to dealing with ROA and ROE, and because the same information is expressed in ROA and ROE.

Traditionally, MFIs have used operating and financial self-sufficiency as indicators of sustainability. They are simple calculations that express operating income as a percentage of the total financial operations expenses or the adjusted total financial operations expenses, respectively. Financial self-sufficiency, as defined by CGAP, includes all the adjusted costs, not just the financial costs that are more typically used.

- Operating and financial self-sufficiency are useful internal measurement tools for tracking cost coverage by operating income.
- Financial self-sufficiency over 100 percent is equivalent to an AROA greater than 0 percent because it includes similar data. Refer to the example above. However, by using AROA we are standardizing the data based on the assets of the MFI, so it is a better ratio.
- Some MFIs say they find it more encouraging to calculate operating self-sufficiency because it does not include either the cost of funds or all the adjustments. But CGAP argues that this is like hiding your head in the sand and pretending that those costs are not there! It is better to start using AROA and AROE from the beginning, so you can see ongoing improvement.

CGAP Occasional Paper No. 1

To be downloaded from <http://www.cgap.org>.

Core Performance Indicators for Microfinance

Richard Rosenberg, CGAP, April 2006

To be downloaded from <http://www.cgap.org>.

SESSION 11: PUTTING IT ALL TOGETHER

Session Summary

- OBJECTIVE:** By the end of the session participants will have:
- Practiced calculating adjustments and ratios and the efficiency and profitability ratios
 - Used benchmarking to better understand ratios and MFI performances
 - Practiced using all the ratios to make managerial decisions

TIME: 390–395 minutes

SUPPLIES: Flipchart and markers
LED projector or overhead projector, and overhead markers

PARTICIPANT MATERIALS

OVERHEADS: FA11-O1 Putting It All Together – Schedule for Day 4
FA11-O2 Annualizing
FA11-O3 VISION Questions – 1
FA11-O4 VISION Questions – 2
FA11-O5 VISION Questions – 3

HANDOUTS: FA11-H1a VISION: A Case Study
FA11-H1b VISION Income Statement
FA11-H1c VISION Balance Sheet
FA11-H1d VISION Summary of Key Data
FA11-H2 Annualizing Ratios: Why and How
FA11-H3 VISION Questions – 1
FA11-H4 VISION Adjustments for Inflation and Subsidies Worksheet
FA11-H5 VISION Sustainability and Profitability Ratios Worksheet
FA11-H6 VISION Asset/Liability Management Worksheet
FA11-H7 VISION Efficiency and Productivity Ratios Worksheet
FA11-H8 VISION Ratios – Answers
FA11-H9 VISION Questions – 2
FA11-H10 GROW and VISION Comparison Table
FA11-H11 Benchmarking of Key Indicators
FA11-H12 VISION Questions – 3

Session 11: Putting It All Together

COURSE REVIEW TO DATE

1. (10–15 minutes) Divide participants into five or six groups and assign each group one day of the course, with two groups per day. Ask each group to summarize the main points that they learned on that day, then prepare a presentation of these points and an explanation of how they fit in with the rest of the course. For example, on day 1, one of the main points was understanding how the financial statements relate to each other, which is necessary for appreciating the profitability ratios. Let the groups use a flipchart or an overhead to make their presentations and tell them to be as creative as they want to be—to have fun!
2. (30 minutes) Choose one group to start the day 1 discussion and ask the other day 1 group to check that the first group covered all the points, and to add anything they missed or explain any point that was confusing.

Consider having the overheads from each of the sessions available for reference or to expand on a point, if needed.

INTRODUCTION

3. (5 minutes) Explain that, having reviewed the course, participants will now have a chance to put all they have learned into practice using another case study—for VISION MFI.

Tell the group that VISION is growing very fast. It has decided that it wants an independent assessment of its performance to see how it can maintain its current trends and continue to grow and improve its performance. VISION thinks that the participants, as fellow microfinance practitioners who understand the basic financial analysis ratios for MFIs, would be in a good position to give it the advice it needs.

Introduce the group to the schedule in FA11-O1 (or as revised, based on participants' skill level). Explain that participants first will calculate adjustments for all the ratios (except portfolio quality), and understand what they mean. Then the group will compare VISION with GROW, using benchmarking data. Finally, based on those findings, they will make recommendations to VISION for improving its performance.

4. (10 minutes) Hand out FA11-H1a–d, the VISION case study, financial statements, and supporting data. Point out to participants that the financial statements have already been formatted according to SEEP guidelines to speed up the analysis process. Also explain that the currency is local currency, not the same as GROW's.

Give participants time to read the case study and ask any questions.

5. (10 minutes) Begin a discussion about VISION. Call participants' attention to the financial statements and ask what is different about them. Probe until someone notices that 2004 only has data until the end of October, not December, as in previous years.

Ask: How will having only partial data impact or change the ratios? Do you think it is fair and accurate to compare partial-year to full-year numbers from the income statement and balance sheet? Finally, how can they be compared? Annualize!

Ask the group for ideas on how to do this. Take a few answers and then show FA11-O2. Explain the overhead, take questions, and distribute FA11-H2. Remind participants that they will have to annualize the ratios in 2004 for VISION.

6. (90 minutes) Break the group into six smaller groups. Hand out FA11-H3, FA11-H4, FA11-H5, FA11-H6, and FA11-H7, and tell participants they will have 45 minutes to calculate VISION's adjustments and ratios, and another 45 minutes to analyze them. Remind them to calculate the worksheets before answering the questions in FA11-H3. You can show FA11-O3 throughout the exercise.

Have the groups start with December 2004 and December 2003, and work back to 2002 if time permits. Suggest that they split up the calculation of the ratios after they have done the adjustments, so they can complete the exercise faster.

They should specifically answer the following, found on FA11-O3 and FA11-H3, about VISION:

- What has the financial performance of VISION been for the last four years?
- Calculate the cost adjustments, and all the ratios (excluding portfolio, for which they do not have information).
- What are the key financial factors that have contributed to the efficiency and profitability results?

Be sure to walk around the groups to deal with any problems and check that they are coming up with the right answers. Consider stopping the group exercise to go over any problems that all participants seem to be facing.

After 45 minutes, give out FA11-H8, with the answers they need in order to go on to the analysis if they have not completed the calculations. Remind the groups that their focus here should be more on the analysis, rather than on calculating the ratios. However, participants must know how to calculate the indicators before they can begin analysis.

7. (45 minutes) Ask each of the six groups is asked to report on two to three different financial factors that have contributed to the efficiency and profitability results. Try to stimulate their thinking about all that the ratios show and to make the connection that good microfinance requires good financial analysis. Ask follow-up questions to challenge participants or bring in local examples of the key points. Draw out from their analysis the points in the Trainer Notes.

COMPARISON OF GROW AND VISION

8. (30 minutes) Have participants reform into *new* small groups, if possible, and give them FA11-H9, VISION Questions, and FA11-H10 to facilitate comparisons. Also hand out FA11-H11 with the MicroBanking Bulletin Benchmarks. Show FA11-O4 on the overhead projector. Tell the group that they have 30 minutes to answer the questions.
- Explain the differences and similarities between VISION and GROW.
 - How do they compare with the benchmarks?

Remind the participants that the ratios do not need to be in the same currency, but the average outstanding loan size and adjusted average outstanding loan size should be. They can assume GROW's currency is the same hard currency as stated in the VISION case.

9. (45 minutes) Once the groups have completed the assignment, ask follow-up questions and paraphrase answers to focus on key points. Refer to the SEEP Framework, as well as relevant local examples.

Tell the group that comparisons between MFIs in different countries may of limited use in some ways—there may be legal requirements in one place that put an MFI at a disadvantage compared to those in other countries. The same is true for inflation, usury laws, reporting requirements to national authorities, and legislation on loan loss reserves (if they affect MFIs). Remind them that local context does matter, which is why FA11–H11 looks at MFIs by region. (If helpful, explain that GROW is based on an MFI in Eastern/Central Europe and VISION on one in Southeast Asia.)

Explain that the financial data in FA11-H11 is provided by the MicroBanking Standards Project. Say: We see in this handout that the calculations for the cost of funds and inflation adjustments, footnotes 1–4, differ from those used by SEEP in session 7 on adjustments. This is primarily attributable to the different purpose and use of the financial data collected.

The primary objective of the MicroBanking Standards Project, which, through the MicroBanking Bulletin (MBB) organizes and reports peer group data for leading MFIs, is to help MFI managers and board members understand the performance of their MFI in comparison with other MFIs. The MBB benchmarking practice helps establish industry performance standards and enhances transparency. For calculating financial ratios, SEEP and the MBB both use ratios consistent with those used by microfinance ratings agencies. The difference in calculations between the two groups is found in adjustments. For benchmarking purposes, the MBB employs calculations for adjustments that may be most consistently applied to financial data across a wide range of MFIs, operating in many different countries.

The SEEP adjustments aim to provide institution-specific financial information to MFI management. Individual managers must make decisions that are best suited to their MFIs and in the context of the country or environment in which the MFI is

located. MBB's benchmarks provide potential direction for MFI managers when making institution-specific decisions.

Both the MBB and SEEP calculations are acceptable. The choice of the most appropriate adjustment formula depends on how the resulting information will be used at any point in time. The SEEP methodology provides for a tailored approach, depending on the amount and quality of information available for a particular institution. SEEP calculations, in the context of an appraisal mission, for example, are tailored to the specific context of the MFI, using full information available. Even with access to complete information on any MFI, the MBB employs data as appropriate for the purposes of benchmarking and standardization.

See Trainer Notes for differences in calculation between MBB and SEEP.

10. (45 minutes) Tell the group that financial analysis is used both to assess an MFI and to make informed decisions for its future. Participants must now apply what they have learned. Armed with these ratios, and reformed into the six groups assigned at the beginning of the day, participants must now prepare recommendations for the management of VISION to improve its profitability.

Explain that the specific questions VISION wants answered are shown on overhead FA11-O5 and in FA11-H12.

- What would you recommend VISION do to improve its profitability?
- If VISION wanted to decrease the interest rate it charges on loans, is this possible while still being profitable?
- How could VISION use a Cash Flow Statement to improve its financial analysis?
- If all donor support was withdrawn, would VISION still be profitable?
- If the PAR rose to 10 percent, how would this affect VISION's profitability?

Give participants 45 minutes to answer question A and, if they have time, questions B through E, and to make any other recommendations they think are important for VISION. Give participants blank overhead transparencies or flipcharts with which to make their presentations.

11. (60 minutes) Make sure all the groups understand that they have exactly eight minutes to give their presentations—and that there will be no comments from the rest of the participants, in order to keep to the schedule.

Ask the other participants to imagine they are the VISION team members listening to the presentations. Tell them to write down any questions, since there will be time to ask them after all the presentations.

After all the groups have given their presentations, announce that it is now time for each group to be grilled by the VISION team—the other participants. Encourage the other participants to ask the questions they have previously noted, and be prepared to point out issues or ask follow-up questions that the group might have missed.

CONCLUSION – USING FINANCIAL ANALYSIS

12. *(10 minutes or longer as scheduled)* At this point, lead a discussion of any broader questions raised by participants that did not get answered during the course. Consider making connections between earlier sessions and the analysis undertaken today. For example, in session 10, the group learned that profitability ratios could help the MFI make choices between different loan products. In that case, if the MFI calculated yield for each loan product, then it could see which was more profitable.

Transition to discussing issues that relate to applying financial analysis to the participants' MFIs. This links to the action planning in the next session. For example, ask: If you wanted to undertake the analysis done today at your MFI, what are the first three steps you would take? Have the group discuss the answers, and tell participants that they will have the opportunity to plan what they will do in their MFIs in the next session.

Trainer Notes

- **Step 6.** You may want to spend more session time on the analysis. If this is the case, provide the answers for 2002 and even 2003, so that participants only have to calculate one or two years' ratios, leaving more time for analysis. You will need to include this information on the handouts/worksheet. The decision to focus on analysis versus calculations must be based on your knowledge of the group's work to date.
- **Step 7.** Points to cover in the VISION Case Study:
 - VISION's overall financial performance for the last three years:
 - ◆ Numbers of branches, staff members, and portfolio size have steadily increased.
 - ◆ All profitability indicators have a positive trend and it broke even (without adjustments) in December 2004.
 - ◆ However, the portfolio has grown vertically. Growth in the number of active borrowers has been very slow. This is a big concern, considering its target of 100,000 active borrowers by December 2007.
 - How did VISION reach an operating profit by year 3?
 - ◆ The portfolio has almost doubled and this has increased financial revenue.
 - ◆ Growth in outreach, in terms of growth in the number of active clients, has been slow. This has reduced costs.
 - ◆ The above factors resulted in better margins and helped VISION to break even.
 - How has VISION financed its growth?
 - ◆ So far it has used a combination of long-term borrowings, forced savings, and donor contributions.
 - ◆ Still, donor funds through the NGO are a major source of funds.
 - What are causes and implications of the efficiency ratios and recommendations?
 - ◆ Active borrowers per loan officer dropped from 613 in 2003 to 276 in 2004. This is because new loan officers were recruited (increased from 30 to 70) in view of the 100,000 outreach goal. However, these training officers are probably still undergoing training and have not yet started to expand the outreach.

- ◆ It indicates strong training and capacity-building measures are needed before loan officers are sent to the field. Well-trained field officers can help to develop good will and expand outreach significantly in the future.
 - ◆ The borrowers per branch office have dropped from 1,838 to 1,488. This may be related to the commencement of operations in new branches. Overall, there is scope to consolidate operations in the existing branches.
 - ◆ Average outstanding loan size has grown from 8,000 to 12,500 in the last year. According to policy, repeat new loan size cannot have more than 2,000 increments. However, the current increase is much beyond this level. Management needs to revisit policy compliance, or they should change the policy, which might be old.
 - ◆ Since the growth in loan size is very high, it indicates a demand for larger loans. VISION will soon reach the 30,000 limit for the general loan. Thus VISION should expand its loan range and possibly introduce individual loans to enable graduates to continue receiving services.
 - ◆ The Operating Expense ratio is gradually decreasing. In spite of its recruiting several new staff, the MFI's personnel expense ratio is steadily declining. This shows that VISION has active cost-reduction measures. As outreach increases and new branches open, the cost is likely to increase. Overall, there is room to bring the costs down from 30 percent to less than 20 percent, but given the future growth targets, this will be difficult.
- What are the causes and implications of asset/liability management ratios and recommendations?
- ◆ The growth of yield from 28 percent to 33 percent has increased the revenue from the portfolio.
 - ◆ The liquidity position is comfortable.
 - ◆ VISION maintains a healthy 72 percent of total assets as loans.
 - ◆ The APR is 35.3 percent and the current yield gap is 23 percent. Since this is a significant gap, management should explore the causes. It could be related to higher delinquency levels, or due to high loan disbursements toward the end of the year.
 - ◆ The increase in yield and lowering of the yield gap shows that portfolio quality is improving. This is a good foundation for future expansion.
 - ◆ Funding expenses have increased from 7 percent to 9 percent. Adjusted operating expenses are 31 percent. Together they add up to 40 percent, whereas the APR is only 35.5 percent and yield is even less, at 33 percent. Thus current revenue structure is not sufficient to cover all the expenses that are likely to grow with further expansion.
 - ◆ VISION should continue with its efforts to minimize costs. At the same time, it should explore ways to increase the APR, especially through the introduction of new loan products.
- What are the causes and implications of profitability ratios and recommendations?
- ◆ Return on assets and return on equity are gradually increasing. This will enable VISION to raise funds from lenders and investors to fund future growth.
 - ◆ There have been some tradeoffs in the effort to break even in December 2004. Rapid vertical growth has taken place with existing clients who have a proven credit history. This has possibly led to policy aberrations through VISION's disbursing larger loans than what is recommended in the policy. Sudden disbursement of

larger loans could have adverse delinquency consequences in the future. Vertical growth has also compromised the target to reach 100,000 active clients by 2007. Now, when VISION starts operations in new areas, it might not be able to maintain the same portfolio quality.

- What are VISION's finance funding options?
 - ◆ As branches are gradually managed through VISION Rural Bank, donor funding will decrease and VISION will have to explore alternative funding sources.
 - ◆ It should stress savings mobilization at a 5 percent interest rate. Since the bank will have the legal ability to mobilize savings, it should introduce new savings products to optimize savings mobilization.
 - ◆ VISION should also try to mobilize investments. Its return on equity has steadily improved and should interest investors.
 - ◆ VISION also has a steadily improving return on assets, which should encourage lenders to lend to VISION.
- **Step 8.** For the discussion on comparisons between VISION and GROW:
 - Refer to the back-up notes from sessions 7, 8, 9, and 10 and step 7 in this session. Tell the group that they are comparing data for GROW at December 2004 and VISION at December 2004, which give a baseline for comparison, since these two MFIs are at roughly the same time in operations.
 - Point out that they have completely different lending methodologies and structure. VISION, with 19,344 clients, is much more efficient and much more profitable than GROW, with 19,891 clients.
 - GROW's adjusted operating expense ratio is 13.4 percent, whereas VISION's is 30.6 percent. This is counterintuitive, because VISION is using group lending which, in theory, should be more cost-effective.

When looking at where GROW and VISION are now, generally allow the participants to draw their own conclusions. Note to the group that decisions taken by institutions may have lasting impacts well into the future. In the case of GROW, it chose to expand rapidly and has still not achieved operational or financial self-sufficiency. Total operating expenses are high per industry benchmarks, particularly salary expenses, which may be linked with expansion. While the number of active clients has grown, the small average loan balance and high expenses challenge GROW's ability to turn a positive ROA. GROW's AROA at the end of 2004 is -11.6 percent.

VISION is more profitable and has carefully managed its expenses. Because of its strong performance and AROA of -1 percent, it is successfully accessing commercial sources of funding.

- **Step 9.** Differences between MBB and SEEP on Cost of Funds and Inflation Adjustments on FA11-H12:

Cost of Funds Adjustment

- SEEP: average borrowings x market rate for borrowing – all interest & fee expense on borrowings
- MBB: average subsidized liability x deposit rate – interest paid on these liabilities
- MBB's average subsidized liability:
 - ◆ Includes all soft loans on which the MFI pays less than the standard deposit rate. The MBB determines the deposit rate from the IMF's International Financial

Statistics for each country and categorizes all loan sources as subsidized if the interest rate paid on each loan is less than 75 percent of the deposit rate.

- ◆ Does not adjust for savings, either voluntary or forced (unlike SEEP which adjusts for savings in its average funding liability). The MBB's logic is that savings is a product line for which the MFI should not be penalized. Further, the MBB considers forced savings almost as reserves or collateral, not true funding sources, even if MFIs pay interest on them.

Example—Funding source: \$200 at 2% p.a.

Commercial rate for funds: 7% p.a.

IMF deposit rate: 6%

SEEP adjustment: average borrowings x market rate for borrowing – all interest & fee expense on borrowings
 $= (200 \times .07) - (200 \times .02) = 14 - 4 = 10$

MBB adjustment: average subsidized liability x deposit rate – interest paid on these liabilities

That is: (subsidized funding source x IMF deposit rate) – (subsidized funding source x interest rate on subsidized funding source)
 $= (200 \times .06) - (200 \times .02) = 12 - 4 = 8$

NOTE: Please see session 7, M3, regarding adjustments of forced savings.

- ◆ Allows for MFI-specific adjustment in determining the commercial rate for funds. This difference may not be significant, but it allows more customizing based on individual MFI circumstances.
- ◆ Views forced savings as a short-term activity that the MFI will need to address by either developing voluntary savings products or by seeking external sources of commercial funding. Funding through savings may look attractive, since the interest rate paid on deposits may be lower than the interest rate paid for commercial funding sources. However, a standard cost-of-funds calculation may not reflect the operational costs of managing a savings program. These costs may be significant enough to offset the benefits of the nominal lower savings rate.

Inflation Adjustment

- SEEP: (equity, beginning of period – fixed assets, beginning of period) x inflation
- MBB: (beginning year equity – beginning year fixed assets) x inflation
- MBB and SEEP look at the capital at a fixed point in time, January 1 of the year analyzed (using the data reported as of 12/31 of the year before).

Example—Dec '04 total equity: 450

Dec '05 total equity: 1550

Dec '04 fixed assets: 158

Dec '05 fixed assets: 199

Dec '05 inflation: 8.2%

SEEP and MBB adjustment: (average equity, beginning of period - average fixed assets, beginning of period) x inflation
 $= (450 - 158) \times 8.2\% = 24$

Overheads

THE COMPLETE SET OF OVERHEADS IS IN A SEPARATE POWERPOINT FILE ENTITLED "CGAP FINANCIAL ANALYSIS OVERHEADS."

Putting It All Together

FA11-O1



TIME	ACTIVITY
08:30–09:00	Review of the course
09:00–09:15	Introduction to VISION Case Study
09:15–10:45	Review of financial analysis of VISION
10:45–11:00	Break
11:00–11:45	Report back on analysis
11:45–12:15	Compare with GROW and industry benchmarks
12:15–13:00	Report back on comparison
13:00–14:00	Lunch
14:00–14:45	Decision making based on analysis
14:45–16:15	Final discussion on using financial analysis
16:15–16:30	Break
16:30–16:45	Participant action plans
16:45–17:00	Training post-test
17:00–17:15	Evaluation
17:15–17:30	Closing

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FA11-O2

Annualizing

HOW?

Divide the ratio by the number of months it represents and then multiply by 12

WHAT?

10 months of financial data and an AROA = 9%

Annualized = $(9/10) \times 12 = 10.8\%$

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VISION Questions – 1

FA11-O3



- A. Calculate
- The cost adjustments
 - The efficiency and productivity indicators
 - Asset/Liability management indicators
 - The sustainability and profitability indicators
- B. Describe VISION's financial performance for the last three years.
- C. What have been the key financial factors that have contributed to the efficiency and profitability results? For example:
- How did they reach an operating profit by 2004?
 - How have they financed their growth?
 - What are the causes and implications of the changes in the:
 - Efficiency ratios?
 - Asset/liability management ratios?
 - Profitability and sustainability ratios?
 - Have they made financial tradeoffs to achieve their growth? If so, what?

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VISION Questions – 2

FA11-O4



Explain the differences and similarities in financial data and ratios between the efficiency and profitability of VISION and GROW.

How do they compare with benchmarks?

- When looking at the differences, describe the reason for surprises where one is unexpectedly doing better or worse than the other.
- When comparing them with best practice results, try to understand how the information in the case contributes to the financial reasons for their standings.
- Don't forget to compare the yield with the effective annual percentage interest rate and operating efficiency indicator.
- Think about the tradeoffs that are being made consciously or otherwise in the different results.

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VISION Questions – 3

1. What would you recommend VISION do to improve its efficiency and asset/liability management?
2. What would you recommend VISION do to improve its profitability?

For example:

- How can the components of AROA and AROE improve?
- If VISION wanted to decrease the interest rate it charges on loans, is this possible while still being profitable?
- How could VISION use a cash flow statement to improve its financial analysis?
- If all donor support were withdrawn, would VISION still be profitable? What should its plan be to reduce this dependency?
- If the PAR rose to 10 percent, how would this affect VISION's profitability?

3. What growth steps should VISION follow in order to reach 100,000 active clients by 2007?



Handouts

VISION: A Case Study

VISION started microfinance lending operations in the Republic of Stanindoa as a nongovernmental organization (NGO) in the year 1993. It addressed the financial needs of landless rural women by using an adapted Grameen Bank methodology. By 2004 year-end, the organization managed 13 branch offices across 5 provinces.

The VISION NGO established the VISION Rural Bank and the latter obtained a license from the Stanindoa Central Bank in September 2003. VISION Rural Bank manages 4 of the 13 branch offices, while VISION NGO continues to manage the remaining 9 branches. Both institutions have a uniform operating methodology and are jointly referred to as VISION. Though they prepare separate financial statements, these are consolidated regularly to provide a complete picture.

VISION's clients are involved in a range of enterprises in the areas of agriculture, trade, production, and service. The organization offers two types of loan products: (1) general loans and (2) housing loans. General loans use the peer-based collateral model and small sums of savings serve as partial guarantee. These loans range from 3,000 to 30,000 (local currency, or LC) and are payable in 25 or 50 equal weekly installments. They carry an interest rate of 15 percent on the initial balance (flat basis) and a fee of 3 percent is charged on the disbursed amount. This results in an APR of approximately 35.3 percent.

VISION has recently started making housing loans that range between 9,000 and 20,000 (LC) and are payable in 200 equal weekly installments (about 4 years). They carry a 15 percent interest rate a year, which is charged on yearly declining balances. Clients become eligible for housing loans after completing at least two years with VISION. Since this product has started recently, its current portfolio is negligible.

VISION also mobilized two types of savings deposits—(1) mandatory savings and (2) compulsory savings. Since all the branches will be subsequently managed by the VISION Rural Bank, VISION is assured that it will be able to legally mobilize deposits as a cheap source of funds in the future. In anticipation of this, VISION has tried to maximize savings mobilization by offering 5 percent interest rate on all deposits, which is the same as the rate offered by commercial banks in the region. In addition, it is planning to introduce new savings products.

At the end of 2004, VISION had 19,344 borrowers and operated through 70 loan officers. It has an ambitious plan to reach 100,000 borrowers by 2007 year-end through 356 loan officers in 30 bank branches. VISION's portfolio-at-risk, for 1 week or more past dues, is currently 15.3 percent. However, the PAR for 4 weeks past due is currently 4.13 percent.

Since January 2002, VISION has enjoyed the services of an expatriate consultant, on assignment from an international partner bank. The partner pays 2 million and VISION pays 1 million of her 3,000,000 salary.

VISION Income Statement

(in thousands – nominal local currency)

Years		Dec-01	Dec-02	Dec-03	Oct-04
1	Financial Revenue	12,088	24,346	41,444	84,754
2	Financial Revenue from Loan Portfolio	11,895	19,849	32,481	64,600
3	Interest on Loan Portfolio	11,895	19,849	32,481	64,600
4	Fees and Commissions on Loan Portfolio	0	0	0	0
5	Financial Revenue from Investments	193	122	832	4,844
6	Other Operating Revenue	0	4,375	8,131	15,310
7	Financial Expense	1,378	2,946	7,846	17,923
8	Financial Expense on Funding Liabilities	1,378	2,946	7,846	17,923
9	Interest and Fee Expense on Deposits	0	476	1,757	3,300
10	Interest and Fee Expense on Borrowings	1,378	2,470	6,089	14,623
11	Other Financial Expense	0	0	0	0
12	Net Financial Income	10,710	21,400	33,598	66,831
13	Loan Impairment	0	796	2,179	1,829
14	Provision for Loan Impairment	0	796	2,179	1,829
15	Value of Loans Recovered	0	0	0	0
16	Operating Expense	12,423	25,826	35,054	57,792
17	Personnel Expense	8,099	12,836	19,617	28,481
18	Administrative Expense	4,324	12,990	15,437	29,311
19	Depreciation Expense	0	0	0	0
20	Other Administrative Expense	4,324	12,990	15,437	29,311
21	Net Operating Income	-1,713	-5,222	-3,635	7,210
22	Net Nonoperating Income/(Expense)	1,463	-1,258	-647	-7,590
23	Nonoperating Revenue	2,619	4,510	3,831	5,884
24	Nonoperating Expense	1,156	5,768	4,478	13,474
25	Net Income (Before Taxes and Donations)	-250	-6,480	-4,282	-380
26	Taxes	0	0	1,205	802
27	Net Income (After Taxes and Before Donations)	-250	-6,480	-5,487	-1,182
28	Donations	6,860	33,013	27,048	40,883
29	Donations for Loan Capital	6,860	33,013	27,048	40,883
30	Donations for Operating Expense	0	0	0	0
31	Net Income (After Taxes and Donations)	6,610	26,533	21,561	39,701

VISION Balance Sheet

(in thousands)

Years		Dec-01	Dec-02	Dec2003	Oct-04
Assets					
1	Cash and Due from Banks	13,510	12,933	24,438	40,365
2	Trade Investments	0	0	1,000	1,904
3	Net Loan Portfolio	50,653	82,004	145,797	237,121
4	Gross Loan Portfolio	50,653	82,800	148,772	241,925
5	Allowance for Impairment	0	796	2,975	4,804
6	Interest Receivable on Loan Portfolio	0	0	0	0
7	Accounts Receivable and Other Assets	5,981	2,571	14,037	18,198
8	Other Investments	0	0	0	0
9	Net Fixed Assets	6,068	16,854	27,260	38,063
10	Fixed Assets	6,068	16,854	27,260	38,063
11	Accumulated Depreciation and Amortization	0	0	0	0
12	TOTAL ASSETS	76,212	114,362	212,532	335,651
Liabilities					
13	Demand Deposits: Voluntary Savings	0	0	7	5,245
14	Demand Deposits: Forced Savings	24,674	23,460	69,277	100,799
15	Short-term Time Deposits	0	0	0	0
16	Short-term Borrowings	0	0	0	0
17	Interest Payable on Funding Liabilities	0	0	0	0
18	Accounts Payable and Other Short-term Liabilities	40	326	2,426	6,158
19	Long-term Time Deposits	0	0	0	0
20	Long-term Borrowings	29,432	37,221	60,566	100,396
21	Other Long-term Liabilities	7,149	11,905	4,054	5,398
22	TOTAL LIABILITIES	61,295	72,912	136,330	217,996
Equity					
23	Paid-in Capital	0	0	13,191	14,943
24	Donated Equity	26,558	59,571	86,619	127,502
25	Prior Years	19,698	26,558	59,571	86,619
26	Current Year	6,860	33,013	27,048	40,883
27	Retained Earnings	-11,641	-18,121	-23,608	-24,790
28	Prior Years	-11,391	-11,641	-18,121	-23,608
29	Current Year	-250	-6,480	-5,487	-1,182
30	Reserves	0	0	0	0
31	Other Equity Accounts	0	0	0	0
32	Adjustments to Equity	0	0	0	0
33	TOTAL EQUITY	14,917	41,450	76,202	117,655

VISION Summary of Key Data

	Dec-01	Dec-02	Dec-03	Oct-04
1. Number of currently active borrowers (# active loans)	1,008	6,530	18,376	19,344
2. Total outstanding loan balance (in 000s, local currency)	50,653	82,800	148,772	241,925
3. Number of staff, end of period	54	67	70	125
4. Number of loan officers, end of period	27	37	30	70
5. Branch offices	7	4	10	13
6. Inflation rate	12%	11%	9%	6%
7. Rate VISION pays to local banks on its loans	27%	25%	25%	23%
8. Exchange rate to HC	50	50	50	50
9. APR	35.3%	35.3%	35.3%	35.3%

Annualizing Ratios: Why and How

When the ratio includes numbers from the income statement and the balance sheet, is it fair to compare a partial year with a full year?

- No—these ratios are annual ratios. They can only be expressed on an annual basis. You cannot compare ratios for part of the year with ratios for a whole year.
- The ratios (ROA, ROE, efficiency indicators, and so on) are annual concepts, and therefore annualizing is very important.

Should we forget the partial year then?

- No! We all know how fast an MFI's performance can improve or deteriorate and the partial year statements give the most recent report of the performance of the MFI, so we want to include the partial year numbers in our analysis.

How then can we compare the efficiency ratios from the partial year with the ratios from the full year?

- We need to “annualize” them. In other words, we need to treat the partial-year performance as if it were a full year. We do this by assuming that the performance of the first few months of the year will continue for the rest of the year. This does not take into account other planned or unplanned factors that might affect the performance of the MFI for the rest of the year. But it is the standard, internationally recognized method because history is the best predictor of future performance.

The method of annualizing any partial year ratio is to divide the ratio by the number of months it represents and then multiply it by 12. For example, VISION's partial-year financial statement is for 10 months. So the ratio for those 10 months would be divided by 10 and multiplied by 12.

Note: If your program has a high degree of seasonality, which is a particular concern for rural programs, you could seriously over- or underestimate both the numerator (income/costs) and the denominator in the ratio. This could lead to very distorted annual figures. In these cases, it may be better to compare the partial-year data with the same period in earlier years.

If the very simple method outlined in the course is too distortionary, you can consider two alternative methods:

1. Project both the numerator and the denominator based on previous years' experience.
2. Take a 12-month moving average (for instance, if you have 4 months of data, January to April, take the previous 12 months, last May to this April).

VISION Questions – 1

A. Calculate

- The cost adjustments
- The efficiency and productivity indicators
- Asset/liability management indicators
- The sustainability and profitability indicators

Don't forget to annualize the ratios for 2004.

B. Describe VISION's financial performance for the last three years.

C. What have been the key financial factors that have contributed to the efficiency and profitability results? For example:

- How did they reach an operating profit by 2004?
- How have they financed their growth?
- What are the causes and implications of the changes in the:
 - Efficiency ratios?
 - Asset/liability management ratios?
 - Profitability and sustainability ratios?
- Have they made financial tradeoffs to achieve their growth? If so, what?

VISION Adjustments for Inflation and Subsidies Worksheet

	DESCRIPTION	2002	2003	2004
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			
	c. Inflation Adjustment to Equity = (a x b)			
	d. Net Fixed Assets, Beginning of Period			
	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			
<i>TOTAL ADJUSTMENTS</i>				

VISION Sustainability and Profitability Ratios Worksheet

Ref.	DESCRIPTION	2002	2003	2004
R1	Operational Self-Sufficiency Ratio			
a	Financial Revenue			
b	Financial Expense			
c	Impairment Losses on Loans			
d	Operating Expense			
e	b + c + d			
R1	Operational Self-Sufficiency Ratio = a/e			
Adj R1	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			
Adj R1	Financial Self-Sufficiency Ratio = a/e			
R2	Return on Assets (ROA)			
a	Net Operating Income			
b	Taxes			
c	a - b			
d	Average Assets			
R2	Return on Assets (ROA) = c/d			
Adj R2	Adjusted Return on Assets (AROA)			
a	Adjusted Net Operating Income			
b	Taxes			
c	a - b			
d	Adjusted Average Assets			
Adj R2	Adjusted Return on Assets (AROA) = c/d			

Ref.	DESCRIPTION	2002	2003	2004
R3	Return on Equity (ROE)			
a	Net Operating Income			
b	Taxes			
c	a - b			
d	Average Equity			
R3	Return on Equity (ROE) = c/d			
Adj R3	Adjusted Return on Equity (AROE)			
a	Adjusted Net Operating Income			
b	Taxes			
c	a - b			
d	Adjusted Average Equity			
Adj R3	Adjusted Return on Equity (AROE) = c/d			

VISION Asset/Liability Management Worksheet

Ref.	DESCRIPTION	2002	2003	2004
R4	Yield on Gross Portfolio Ratio			
a	Cash Received from Interest, Fees, and Commissions on Loan Portfolio			
b	Average Gross Loan Portfolio			
R4	Yield on Gross Portfolio Ratio = a/b			
R5	Portfolio to Assets Ratio			
a	Gross Loan Portfolio			
b	Assets			
R5	Portfolio to Assets Ratio = a/b			
R6	Cost of Funds Ratio			
a	Financial Expenses on Funding Liabilities			
b	Average Deposits			
c	Average Borrowings			
d	b + c			
R6	Cost of Funds Ratio = a/d			
Adj R6	Adjusted Cost of Funds Ratio			
a	Adjusted Financial Expenses on Funding Liabilities			
b	Average Deposits			
c	Average Borrowings			
d	b + c			
Adj R6	Adjusted Cost of Funds Ratio = a/d			
R7	Debt to Equity Ratio			
a	Liabilities			
b	Equity			
R7	Debt to Equity Ratio = a/b			
Adj R7	Adjusted Debt to Equity Ratio			
a	Liabilities			
b	Adjusted Equity			
Adj R7	Adjusted Debt to Equity Ratio = a/b			

Ref.	DESCRIPTION	2002	2003	2004
R8	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			
R8	Liquid Ratio = c/i			

VISION Efficiency and Productivity Ratios Worksheet

Ref.	DESCRIPTION	2002	2003	2004
R12	Operating Expense Ratio			
a	Operating Expense			
b	Average Gross Loan Portfolio			
R12	Operating Expense Ratio = a/b			
Adj R12	Adjusted Operating Expense Ratio			
a	Adjusted Operating Expense			
b	Average Adjusted Gross Loan Portfolio			
Adj R12	Adjusted Operating Expense Ratio = a/b			
R13	Cost per Active Client Ratio			
a	Operating Expense			
b	Average Number of Active Clients			
R13	Cost per Active Client Ratio = a/b			
Adj R13	Adjusted Cost per Active Client Ratio			
a	Adjusted Operating Expense			
b	Average Number of Active Clients			
Adj R13	Adjusted Cost per Active Client Ratio = a/b			
R14	Borrowers per Loan Officer Ratio			
a	Number of Active Borrowers			
b	Number of Loan Officers			
R14	Borrowers per Loan Officer Ratio = a/b			
R15	Active Clients per Staff Member Ratio			
a	Number of Active Clients			
b	Total Number of Personnel			
R15	Active Clients per Staff Member Ratio = a/b			
R16	Client Turnover Ratio			
a	Number of Active Clients, Beginning of Period			
b	Number of New Clients during Period			
c	Number of Active Clients, End of Period			
d	Average Number of Active Clients			
R16	Client Turnover Ratio = (a+b-c)/d			

Ref.	DESCRIPTION	2002	2003	2004
R17	Average Outstanding Loan Size Ratio			
a	Gross Loan Portfolio			
b	Number of Loans Outstanding			
R17	Average Outstanding Loan Size Ratio = a/b			
Adj R17	Adjusted Average Outstanding Loan Size Ratio			
a	Adjusted Gross Loan Portfolio			
b	Number of Loans Outstanding – Write-off Adjustment			
Adj R17	Adjusted Average Outstanding Loan Size Ratio = a/b			
R18	Average Loan Disbursed Ratio			
a	Value of Loans Disbursed			
b	Number of Loans Disbursed*			
R18	Average Loan Disbursed Ratio = a/b			

*Assumption: Number of Loans Disbursed = Number of New Clients during Period

VISION Ratios – Answers

	DESCRIPTION	2002	2003	2004 (ann)
SUSTAINABILITY AND PROFITABILITY				
R1	Operational Self-sufficiency	82%	92%	109%
Adj R1	Financial Self-sufficiency	63%	75%	97%
Adj R2	Adjusted Return on Assets	-14.7%	-9.2%	-1.2%
Adj R3	Adjusted Return on Equity	-49.3%	-22.5%	-3.3%
	Asset/Liability Management			
R4	Yield on Gross Portfolio	29.7%	28.1%	33.1%
R5	Portfolio to Assets	72.4%	70.0%	72.1%
R6	Cost of Funds Ratio	5.1%	8.2%	10.79%
Adj R6	Adjusted Cost of Funds	15.3%	14.7%	13.4%
R7	Debt to Equity	175.9%	178.9%	185.3%
Adj R7	Adjusted Debt to Equity	173.1%	175.4%	182.8%
R8	Liquid Ratio	54.4%	35.5%	38%
	Portfolio Quality			
R9	Portfolio-at-Risk over 30 days			
R10	Write-off Ratio			
R11	Risk Coverage Ratio			
EFFICIENCY AND PRODUCTIVITY				
R12	Operating Expense Ratio	38.7%	30.3%	29.6%
Adj R12	Adjusted Operating Expense Ratio	41.7%	32.3%	30.6%
R13	Cost per Active Client	6.85	2.814	3.064
Adj R13	Adjusted Cost per Active Client	7.38	2.975	3.170
R14	Borrowers per Loan Officer	176	613	276
R15	Active Clients per Staff Member	97	263	155
R16	Client Turnover			
R17	Average Outstanding Loan Size	12,670	8,090	12,506
Adj R17	Adjusted Average Outstanding Loan Size	12,670	8,090	12,506
R18	Average Loan Disbursed			

VISION Questions – 2

Explain the differences and similarities in financial data and ratios between the efficiency and profitability of VISION and GROW.

How do they compare to the benchmarks?

- When looking at the differences, describe the reason for surprises where one is unexpectedly doing better or worse than the other.
- When comparing them with best practice results, try to understand how the information in the case contributes to the financial reasons for their standings.
- Don't forget to compare the yield with the effective annual percentage interest rate and operating efficiency indicator.
- Think about the tradeoffs that are being made consciously or otherwise in the different results.

GROW and VISION Comparison Table

DESCRIPTION	GROW	VISION	Benchmark All MFIs
Sustainability and Profitability			
Operational Self-sufficiency	173.4%	109%	115.4%
Financial Self-sufficiency	69.7%	97%	105.7%
Adjusted Return on Assets	-11.6%	-1.2%	0.9%
Adjusted Return on Equity	-30.0%	-3.3%	4.0%
Asset/Liability Management			
Yield on Gross Portfolio	29.3%	33.1%	30.2%
Portfolio to Assets	91.96%	72.1%	77.9%
Cost of Funds Ratio	3.59%	10.79%	
Adjusted Cost of Funds	33.5%	13.4%	13.4%
Debt to Equity	172.2%	185.3%	
Adjusted Debt to Equity	168.7%	182.8%	2.6%
Liquid Ratio	10.14%	38%	
Portfolio Quality			
Portfolio-at-Risk over 30 days	1.08%		2.8%
Write-off Ratio			1.1%
Risk-Coverage Ratio	232.3%		.9%
Efficiency and Productivity			
Operating Expense Ratio	13.3%	29.6%	
Adjusted Operating Expense Ratio	13.4%	30.6%	15.3%
Cost per Active Client	.29	3	108
Adjusted Cost per Active Client	.29	3	
Borrowers per Loan Officer	234	276	115
Active Clients per Staff Member	159	155	112
Client Turnover	79.84%		
Average Outstanding Loan Size	2,219	250	
Adjusted Average Outstanding Loan Size	2,221	250	451 USD
Average Loan Disbursed	3,852		

Benchmarking of Key Indicators

Category of MFI		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
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.

VISION Questions – 3

1. What would you recommend VISION do to improve its efficiency and asset/liability management?

2. What would you recommend VISION do to improve its profitability?

For example:

- How can the components of AROA and AROE improve?
- If VISION wanted to decrease the interest rate it charges on loans, is this possible while still being profitable?
- How could VISION use a cash flow statement to improve its financial analysis?
- If all donor support were withdrawn, would VISION still be profitable? What should its plan be to reduce this dependency?
- If the PAR rose to 10 percent, how would this affect VISION's profitability?

3. What growth steps should VISION follow in order to reach 100,000 active clients by 2007?

SESSION 12: ACTION PLAN, AUDIT, EVALUATION, AND CLOSURE

Session Summary

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

- Develop individual action plans on how they will apply new learning
- Contribute to the improvement of the course through an audit
- Complete course evaluation forms

TIME: 74 minutes

SUPPLIES: LED projector or overhead projector
Expectation flipcharts (*from session 1*)

Certificates for participants

Optional

PARTICIPANT MATERIALS

OVERHEADS: FA1-O1 Goals
FA1-O4 Objectives

HANDOUTS: FA12-H1 Action Plan
FA12-H2 Financial Analysis – Post-Training Audit
FA12-H3 Financial Analysis Course Evaluation

Session 12: Action Plan, Audit, Evaluation, and Closure

ACTION PLAN

1. (2 minutes) Begin by saying that all the training in the world is of little use if it cannot or is not applied in the workplace. Explain that participants will be preparing an action plan for their use once they return to work.

Participants are asked to visualize themselves back in their jobs with new ideas and attitudes. They are asked to think in concrete terms about what it is they would like to do differently as a result of this training, and what impact these actions will have on their institution as a whole. Handout FA12-H1.

2. (15 minutes) Ask participants to identify the most important financial analysis issue facing them and complete the action plan. Explain that there will be 15 minutes for individual work or work with colleagues from the same MFI.

You may also want to note that this action plan will provide a basis for future technical service follow-up. Remind the group that these will be the issues for which they can and will receive technical assistance.

3. (2 minutes) When all have finished, collect the action plans for photocopying and return them to the participants before the end of the day.

TRAINING AUDIT

4. (2 minutes) Explain that the training audit is needed to help improve the course—it is not an exam! Introduce the audit and explain the purpose. Emphasize that it is a very quick review for the participants and provides useful information to the trainers on the quality of the course.

Be light-hearted when explaining that this will not be used as a test or performance review of specific individuals, and that signing the audit is optional. This exercise is actually an audit of the course design and trainers' performance in communication and presentation.

5. (5 minutes) Distribute handout FA12-H2, explain the instructions, and tell participants that they have five minutes to complete the audit.
6. (3 minutes) Collect the audit and go over any items that participants wish to discuss.

COURSE EVALUATION

7. (15 minutes) Explain that participants' feedback is needed to improve the course, which is why they are being asked to fill out a course evaluation before the end of the session. Hand out FA12-H3 and tell them they have 15 minutes to complete it.

8. (10 minutes) Revisit the original seminar goals and objectives on overheads FA1-O1 and FA-O4, asking participants which goals have been met, and how.

Then post the expectation flipchart from session 1 and ask which expectations have been met, and which ones have not. Discuss how they were or were not met.

9. (5 minutes) Bring the workshop to a close.

Summarize the course experience by emphasizing the control an MFI can exercise to reach sustainability through careful monitoring of key financial indicators and reacting appropriately to the trends it sees.

Thank participants for their efforts and wish them success in applying their new knowledge and skills.

CLOSING

10. (15 minutes) Have the representative(s) from the host institution and/or official guest make closing remarks, then hand out the certificates (*optional*).

Handouts

Action Plan

The final phase of this part of the program is designed to give you an opportunity to apply the concepts and skills that you have learned to actual on-the-job problem(s) of your choice. This should provide real and lasting meaning to your training experience. It will also give you the maximum return from your investment of time and effort in this workshop.

Thinking about your organization, select a financial analysis topic about which you have genuine concerns—a problem area that requires some worthwhile improvement or remedial action. The problem may involve overcoming a deficiency or meeting a new challenge or opportunity. You alone know where a real need for change or betterment exists. Use this worksheet to help you work through the details of your problem-solving activity.

DEFINING THE PROBLEM

The exact nature of the financial analysis problem(s) I want to solve is:

These are the causes of the financial analysis problem:

SEEKING A SOLUTION

The steps I will take to solve this problem are:

The deadlines for completing each of these steps are:

Financial Analysis – Post-Training Audit

(Please use a pen.)

Name: _____ Organization: _____

Please mark your answers on this sheet. If you are not sure of the answer, please mark “I don’t know” instead of guessing. Thank you—this will help the trainers.

1. Which of the following statements describes a Balance Sheet?

- 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.

2. Please circle the action or actions for improving efficiency indicators:

- a. Increase loan portfolio outstanding
- b. Reduce staff salaries
- c. Reduce other administrative costs
- d. All of the above
- e. I don’t know.

3. 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.

4. Which of the following is, or are, meaningful measures of portfolio-at-risk?

I	II
<u>Amount of Late Payments</u>	<u>Outstanding Amount of Loans with One or More Payments Late</u>
Gross Loan Portfolio	Gross Loan Portfolio

- a. Both of the above
- b. Neither of the above
- c. Only I
- d. Only II
- e. I don’t know.

5. A balance sheet is comprised of three basic components: Assets, Liabilities, and Equity. On which part of the balance sheet would you find each of the items below? Please mark A for Assets, L for Liabilities, E for Equity, or N for none of these.

- | | | |
|----------------------------|-------------------|-------|
| a. Investment income | Assets | _____ |
| b. Salary expense | Liabilities | _____ |
| c. Loan portfolio | Equity | _____ |
| d. Deferred income | None of the above | _____ |
| e. Buildings and equipment | | |
| f. Client savings | | |

6. To reflect the fair value of the portfolio, MFIs account for probable future impairment losses on loans in their financial records. Circle the financial statement(s), if any that will be affected by such entries:

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

7. Inflation has an effect on the equity of an MFI. Is this statement, true or false?

True False Don't know (Circle one)

Financial Analysis 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
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Comments:

Length of Course	1	2	3	4	5
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Comments:

Course Content	1	2	3	4	5
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Comments:

Course Methods	1	2	3	4	5
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Comments:

Course Materials	1	2	3	4	5
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Comments:

Trainer	1	2	3	4	5
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Name _____

Comments:

Trainer	1	2	3	4	5
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Name _____

Comments:

Course Organization	1	2	3	4	5
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Comments:

Precourse Organization, Communication, Advertising	1	2	3	4	5
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Comments:

Facilities	1	2	3	4	5
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Comments:

