

# "Measuring Performance of Microfinance Institutions: A Framework for Reporting, Analysis, and Monitoring"

Developed by the SEEP Network Financial Services Working Group and Alternative Credit Technologies, LLC







#### **OVERVIEW**

- Presentation follows the structure of the Framework document:
  - Chapter 1: Introduction
  - Chapter 2: Financial Statements and Reports
  - Chapter 3: Analytical Adjustments
  - Chapter 4: Financial Ratios and Indicators
  - Chapter 5: Creating and Analyzing Performance Monitoring Reports
- Promotion of the Framework



#### **CHAPTER 1: INTRODUCTION**



#### INTRODUCTION

Developing Standard Definitions of Financial Terms, Ratios, and Adjustments for Microfinance

#### Purpose

 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)

#### History

- 1995: "Financial Ratio Analysis of Microfinance Institutions"
- 2002: "Microfinance Financial Definitions Guidelines: Definitions of Selected Financial terms, Ratios and Adjustments for Microfinance"
- 2004: Development of "Measuring Performance of Microfinance Institutions: A Framework for Reporting, Analysis, and Monitoring" (the "Framework").



#### INTRODUCTION

#### Future

- Framework document is only the first step. Next steps for SEEP are:
  - To develop Training materials and training courses
  - To encourage acceptance and use of Framework by donors, investors, rating firms, and others
  - To establish Microfinance Standards Committee
  - To incorporate standards for deposit-taking MFIs and set of social performance indicators as consensus builds on such standards and indicators

#### Editions

#### Use

- For performance monitoring only; not a chart of accounts or a set of accounting policies
- Mainly for internal management purposes, board reporting or external reporting
- Should completed one step at a time following each chapter in order.



### CHAPTER 2: FINANCIAL STATEMENTS AND REPORTS



#### FINANCIAL STATEMENTS AND REPORTS

- Income Statement (profit and loss statement)
- Balance Sheet (statement of financial position)
- Cash Flow (sources and uses of funds statement)
  - Direct Method
  - Indirect Method
- Portfolio Report
- Non-Financial Data Report

Each statement/report contains:

- Brief
   explanation of
   its purpose
- Suggested format
- Definition of each account name



#### **INCOME STATEMENT**

- Flow statement activity over a given period
- Summarizes revenue and expense transactions
- Divided between revenue accounts and expense accounts
- Includes division of operating accounts and nonoperating accounts



#### **INCOME STATEMENT**

#### Income Statement Detail – Example

| Ref. | Account Name                              | Definition   | Calculation |
|------|---|--|-------------|
| 12   | 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.  | 13 + 14     |
| 13   | Interest on Loan Portfolio                | Interest earned on the loan portfolio. If the MFI is earning interest on loans to employees or board members, this interest should be disclosed. If this interest is significant, the MFI should create two subaccounts for (I3)—one for interest from clients and the other for interest from related parties.  |             |
| 14   | Fees and Commissions on<br>Loan Portfolio | Penalties, commissions, and other fees earned on the loan portfolio. This may also include revenue under Islamic finance methods. If the MFI is earning fees and commissions on loans to employees or board members, these should be disclosed. If these fees and commissions are significant, the MFI should create two subaccounts for (I3)—one for fees and commissions from clients and the other for fees and commissions from related parties. |             |



#### **BALANCE SHEET**

- Stock statement captures financial position of an MFI at a moment in time
- Summary of:
  - Assets what the MFI has or is owed
  - Liabilities what the MFI owes
  - Equity what the MFI owns

Assets = Liabilities + Equity



#### **BALANCE SHEET**

- Short-term and Long-term Accounts
  - Short-term: can be turned into cash within a year from the date of the report
  - Gross Loan Portfolio contained in a single account
  - Investments classified as Trade Investments and Other Investments
- Contra Asset Accounts
  - Accounts with negative numbers
  - Represent a reduction of an asset
    - For example: Impairment Loss Allowance



#### **BALANCE SHEET**

#### Balance Sheet Detail - Example

| Ref. | Account Name                 | Definition  | Calculation |  |
|------|------------------------------|---|-------------|--|
|      | Assets                       |   |             |  |
| В3   | Net Loan<br>Portfolio        | The (B4) Gross Loan Portfolio less the (B5) Impairment Loss Allowance.  | B4 – B5     |  |
| B4   | Gross Loan<br>Portfolio      | All outstanding 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 written off. All delinquent loans should be considered short-term and included here. It does not include interest receivable. If the MFI makes loans to employees, board members, or others associated with the institution, it should disclose this and, if the amount is significant, create subaccounts to (B4) to separate loans to clients and loans to related parties. |             |  |
| B5   | Impairment Loss<br>Allowance | Previously known as the loan loss allowance, the portion of the (B4) Gross Loan Portfolio that has been expensed (provisioned for) in anticipation of losses due to default. This item represents the cumulative value of the impairment losses on loans less the cumulative value of loans written off. Express this item as a contra asset account and state it as a negative number. <sup>a</sup>  |             |  |



- Summarizes each transaction or event that causes cash to increase (sources of cash) or decrease (uses of cash)
- Classifies inflows and outflows of cash into 3 main categories:
  - Operating Activities
  - Investing Activities
  - Financing Activities



- Direct Method
  - Reconstructs income statement by tracing the movement of cash and adding events not on the income statement that cause and inflow or outflow of cash



Direct Method Detail - Example

| Ref. | Account Name   | Definition   | Calculation |  |
|------|--|--|-------------|--|
|      | Cash Flows from Operating Activities                                       |  |             |  |
| C1   | Cash Received from Interest,<br>Fees, and Commissions on<br>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<br>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.  |             |  |



- Indirect Method
  - Deductive
  - Begins with Net Income (After Taxes and Before Donations)
  - Adds back all other sources of cash and subtracts all other uses of cash that can be deduced by changes in Balance Sheet accounts
  - Adds non-cash expenses that appear on the Income Statement, such as Impairment Losses on Loans.



#### Indirect Method Detail - Example

| 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<br>Amortization Expense for the period. This<br>non-cash expense represents the<br>theoretical decrease in value of a Fixed<br>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.  |             |  |  |



#### PORTFOLIO AND ACTIVITY REPORT

- Links the loan portfolio information of the three previous statements
- Represents in detail an MFI's microlending activity
- Presents the quality of the loan portfolio
- Provides detail on how the MFI has provisioned against potential losses



#### PORTFOLIO AND ACTIVITY REPORT

- Must include at least:
  - Portfolio Activity Information
  - Movement in the Impairment Loss Allowance
  - A Portfolio Aging Schedule
- Portfolio at Risk vs. Arrears
- MFIs should have:
  - Policy for calculating and creating an Impairment Loss
     Allowance and writing off loans



#### PORTFOLIO AND ACTIVITY REPORT

Portfolio Report Detail - Example

| Ref. | Account Name                      | Definition  | Calculation     |
|------|-----------------------------------|---|-----------------|
| P1   | Number of<br>Loans<br>Disbursed   | The number of all loans disbursed during the period. For MFIs using a group lending methodology, the number of loans should refer to the number of individuals receiving loans as part of a group or as part of a group loan. If one person receives more than one loan in the period, count each loan. |                 |
| P2   | Value of Loans<br>Disbursed       | Same as (C9) Value of Loans Disbursed.  |                 |
| P3   | Number of<br>Loans<br>Outstanding | The number of loans in the (B4) Gross Loan Portfolio. For MFIs using a group lending methodology, the number of loans should refer to the number of individuals receiving loans as part of a group or as part of a group loan.  | P11 + P13 + P15 |
| P4   | Value of Loans<br>Outstanding     | Same as the (B4) Gross Loan Portfolio.  | P12 + P14 + P16 |
| P5   | Impairment<br>Loss Allowance      | Same as (B5) Impairment Loss Allowance.   |                 |



#### NON-FINANCIAL DATA REPORT

- Additional operational and macroeconomic data needed to calculate key financial ratios
- Non-Financial Data Report Detail Example

| Ref. | Account Name                           | Definition  |  |  |
|------|--|---|--|--|
|      | Operational Data                       |   |  |  |
| N1   | Number of Active<br>Clients            | The number of active borrowers, depositors, and other clients who are currently accessing any of the MFI's financial services; i.e., they have a loan, deposit, and/or insurance account that is active as of the report date. Individuals who access multiple services with an MFI should be counted as a single client. Individuals who are not currently receiving services are not included. Neither borrowers whose loans have been written off nor depositors who have not had a deposit, withdrawal, or interest earned in the past 12 months are considered to be active. |  |  |
| N2   | Number of New<br>Clients during period | The number of clients who did not have an active account at the beginning of the period but do have an active account at the end of the period.   |  |  |
| N3   | Number of Active<br>Borrowers          | The number of individuals who currently have an outstanding loan balance with the MFI or are primarily responsible for repaying any portion of the (B4) Gross Loan Portfolio. Individuals who have multiple loans with an MFI should be counted as a single borrower.   |  |  |



#### **ADDITIONAL INFORMATION**

- Mapping accounts
- Adding accounts
- Segregating Financial and Non-Financial Services
- How Financial Statements are Linked



## CHAPTER 3: ANALYTICAL ADJUSTMENTS



#### **ANALYTICAL ADJUSTMENTS**

- This chapter:
  - Examines differences and similarities in common adjustment methodologies used in microfinance
  - Analyzes effect of adjustments on bottom line
  - Recommends standard adjustment calculations
- Even if user does not calculate adjustments, he/she can still calculate many of the ratios in the next chapter



#### **ADJUSTMENTS: KEY POINTS**

- Availability of data is a key issue
- If 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.



#### **PURPOSE OF ADJUSTMENTS**

- True performance Adjustments
  - Help reverse accounting policies or circumstances that can present a distorted picture of the MFI's performance
  - Help simulate an MFI's performance under conditions similar to those of a commercially funded operation
- Benchmarking Adjustments
  - Enable managers to compare or benchmark an MFI's performance with other MFIs
  - Create common <u>minimum</u> standards for recognizing and managing credit, country, and operational risk in financial reporting



#### TYPES OF ADJUSTMENTS

- 3 types of Adjustments:
  - Subsidies
    - Cost of Funds
    - In-Kind
  - Inflation
  - Portfolio at risk

### For each category of adjustment:

- Description of the adjustment
- Differences in calculation methodologies
- 3. Recommendations for adjustments for *true* performance
- Recommendations for a standard adjustment for benchmarking
- 5. A description of the effects of the adjustments on the financial statements.



A1: Subsidized Cost of Funds Adjustment

#### Description:

"The subsidized cost of funds adjustment was developed to put a market value on any special borrowing arrangements that an MFI may have. Such arrangements, frequently referred to as concessional borrowings, are common through special government or donor programs or low-interest loans from the MFI's network organization. The adjustment is made to determine the likely cost of these borrowings if an MFI had to pay a market rate for them".



#### A1: Subsidized Cost of Funds Adjustment

Differences

| Adjustment<br>Criteria | Examples  |
|------------------------|---|
| Accounts Used          | Total borrowings Borrowings below market rate Total funding liabilities (includes deposits) Total funding liabilities less voluntary deposits Interest and fee expense on funding liabilities Interest and fee expense on borrowings Interest expense on funding liabilities Interest expense on borrowing                |
| Market Rate            | Local certificate of deposit (CD) rate/savings rate Three-month CD rate from the International Monetary Fund (IMF) Statistics (line 60l) Discount rate from the IMF Statistics (line 60) Weighted average of the MFI's current commercial borrowings Rates proposed by banks to MFIs that are approximately the same size |



A1: Subsidized Cost of Funds Adjustment

- Formula:
  - All adjustments methodologies analyzed use a similar formula even if the accounts and the rate used are different:

A1 = (Period Average[Accounts] x [Rate] –
Interest (and Fee) Expense on [Accounts]



#### A1: Subsidized Cost of Funds Adjustment

- Analyzing True Performance
  - MFI must determine which accounts and rate are most appropriate
  - For each funding liability that carries a below-market rate:
    - Calculate difference between the market rate for that type of deposit or borrowing and actual interest and fee expense and add it to the Adjustment
  - Market rate options:
    - If MFI has significant commercial funding: weighted average rate of those funds
    - Weighted average rate on competitors' commercial borrowings



#### A1: Subsidized Cost of Funds Adjustment

True Performance Example:

#### **Subsidized Cost of Funds Adjustment for True Performance**

MICRO MFI is primarily funding its loan portfolio with its own equity and a \$100,000 six-year loan from an international development agency. The loan was received two years ago and carries an interest rate of 5 percent per annum in local currency. The management team has recently begun negotiations with a local bank to obtain additional funding and was quoted a rate of 13 percent per annum on those commercial funds. To analyze true performance of its MFI for the year, the manager opts to use the 13-percent rate as the alternate market rate of funds, as illustrated below:

**Average Accounts:** \$100,000 (no movement occurred in the account during the year)

Period: 1 year Rate: 13 %

**Interest and Fee Expense:** \$5,000 for the 1-year period

 $A1 = (\$100,000 \times 13\%) - \$5,000 = \$13,000 - \$5,000 = \$8,000$ 



A1: Subsidized Cost of Funds Adjustment

Standard for Benchmarking:

A1 = [(Average Short-term Borrowings + Average Long-term Borrowings) x Market Rate for Borrowing] – Interest and Fee Expense on Borrowings

 $A1 = [(B15^{avg} + B19^{avg}) \times N10] - I10$ 



A1: Subsidized Cost of Funds Adjustment

- For Benchmarking, the Microbanking Bulletin recommends the following criteria:
  - Accounts:
    - (B15) Short-term Borrowings
    - (B19) Long-term Borrowings
    - (I10) Interest and Fee Expense on Borrowings
  - Period: Average
  - Rate: Discount Rate published in the IMF Statistics, line 60.
     N10 in the Non-Financial Data Report.



#### A1: Subsidized Cost of Funds Adjustment

 Sample Subsidized Cost of Funds Adjustment for Benchmarking:

| Adjustment for Subsidized Cost of Fund                             | Formula   | Adjustment |
|--|---|------------|
| Average Short-Term Borrowings Plus<br>Average Long-term Borrowings | B15 <sup>avg</sup> + B19 <sup>avg</sup>         | 18,716,138 |
| Market Rate, End of Period   | N10 <sup>1</sup>                                | 9.5%       |
| Market Cost of Funds   | (B15 avg + B19 avg) x N10 <sup>1</sup>          | 1,778,033  |
| Interest and Fee Expense   | 110   | 1,039,719  |
| Adjustment for Subsidized Cost of Fund**                           | [(B15 avg + B19 avg) x N10 <sup>1</sup> ] - I10 | 738,314    |



#### **EFFECT OF ADJUSTMENTS**

- Increase expenses on the income statement
- Increase or decrease assets on the balance sheet
- Example: Adjustment for Subsidized Cost of Funds
  - Increase Interest and Fee Expense on Funding Liabilities (I18)
  - Decrease Retained Earnings, Current Year (B28)
  - Increase Adjustments to Equity (B31), in order for balance sheet to remain "in balance"



#### **ADJUSTED FINANCIAL STATEMENTS**

- Once the MFI has calculated all its adjustments, it should create an adjusted income statement and balance sheet to analyze impact of adjustments
- Using adjusted financial statements, the MFI can calculate adjusted financial ratios presented in Chapter 4.



# CHAPTER 4: FINANCIAL RATIOS AND INDICATORS



#### **SEEP 18 RECOMMENDED RATIOS**

#### **Profitability and Sustainability**

- Operational Self-Sufficiency (OSS)
   Financial Self-Sufficiency (FSS)
- Return on Assets (ROA),
   Adjusted Return on Assets (AROA)
- 3. Return on Equity (ROE)

  Adjusted Return on Equity
  (AROE)

#### **Asset/Liability Management**

- 4. Yield on Gross Portfolio
- Portfolio to Assets
- Cost of Funds Ratio
   Adjusted Cost of Funds
   Ratio
- 7. Debt to Equity,

  Adjusted Debt to Equity
- 8. Liquid Ratio



#### **SEEP 18 RECOMMENDED RATIOS**

#### **Portfolio Quality**

- 9. PAR

  Adjusted PAR
- Write-off Ratio
   Adjusted Write-off Ratio
- Risk Coverage Ratio
   Adjusted Risk Coverage Ratio

#### **Efficiency and Productivity**

- 12. Operating Expense Ratio
- 13. Cost per Active Client

  Adjusted Cost per Active
  Client
- 14. Borrowers per loan officer
- Active Clients per Staff Member
- 16. Client Turnover
- 17. Average Outstanding Loan
  Size

  Adjusted Average Outstanding
  Loan Size
- 18. Average Loan Disbursed



#### FINANCIAL RATIOS AND INDICATORS

- For each ratio, the Framework includes a description of the following"
  - The formula
  - Why the ratio is important, and
  - How to use the adjusted data in the calculations and the effects of using adjustments.



#### RATIOS AND INDICATORS – EXAMPLE

R2: Return on Assets/Adjusted Return on Assets

Formula

| ROA = | Net Operating Income -Taxes | R2 = | (I21 - 126) |  |
|-------|-----------------------------|------|-------------|--|
|       | Average Assets              |      | B12***      |  |

### Why this Ratio is Important

Return on Assets (ROA) indicates how well an MFI is managing its assets to optimize its profitability. The ratio includes not only the return on the portfolio, but also all other revenue generated from investments and other operating activities. If an institution's ROA is fairly constant, this ratio can be used to forecast earnings in future periods...



#### RATIOS AND INDICATORS – EXAMPLE

R2: Return on Assets/Adjusted Return on Assets

Effects of Adjustments

|     | AROA = | Adjusted Net Operating Income - Taxes | R2 <sup>ABJ</sup> = Adjusted I21 – I26 |
|-----|--------|---------------------------------------|--|
| 1 7 |        | Adjusted Average Assets               | Adjusted B12***                        |

 All five adjustments affect this ratio and, as with AROE, the primary effect is to reduce Net Operating Income. Most MFIs cannot expect to fund their future growth with continuing infusions of new subsidies. Adjusted Return on Assets (AROA) provides an indication of their ability to expand profitably with unsubsidized funding...



# CHAPTER 5: CREATING AND ANALYZING PERFORMANCE MONITORING REPORTS



#### THREE TYPES OF ANALYSIS

Trend analysis

Formula for determining relative change between periods:

$$\mathsf{P}^{\mathsf{trend}} = \underline{\mathsf{P}^1 - \mathsf{P}^0}$$
$$\mathsf{P}^0$$

For Ratios, absolute change analysis is customary:

$$R^{trend} = R^1 - R^0$$

Variance analysis

Formula: 
$$P^{\text{var}} = \frac{P^{\text{actual}}}{P^{\text{plan}}}$$

For Ratios, 
$$R^{\text{var}} = R^{\text{actual}} - R^{\text{plan}}$$

Benchmarking



## **Sample Performance Monitoring Reports**

- Management
  - Monthly & Quarterly/Semi-annual
- Board of Directors (quarterly)
- Investors/Donors (semi-annual)
- Reports are samples only. Design and content issues should take into account:
  - Timeliness of data
  - Accuracy and integrity of data
  - Relevance of data
  - Requirements by audience



#### PROMOTION OF THE FRAMEWORK

- Translation
- Training Modules
- FRAME tool
- Consensus Building and Networking on Standards



# **QUESTIONS?**