FINANCIAL ANALYSIS MEASUREMENTS

Financial analysis is simple -- compare, compare and compare

- *Comparing results with projections and targets*
- *Comparing results of the period with previous results and looking at the trends*
- *Comparing results with those of other comparable organizations*

1. What are the Key Areas to Measure?

Analytical tools or indicators for financial and portfolio analysis can be divided into six categories or key areas to measure, which are[1]:

Profitability - measures the return to the assets and loan portfolio. It shows the financial returns to the use of the capital and assets employed. The profit level also shows and the organization's self-sufficiency in relation to covering costs and building its equity.

Efficiency - measures the costs of a program in relation to the outputs. It shows how proficient the organization and management is in operating.

Solvency - measures the financial "health" and stability of the organization in relation to its equity and financial base.

Liquidity - measures the ability of the organization to repay its short-term debt obligations.

Portfolio Quality - measures the "health" of the loans outstanding in terms of its risk and recuperation.

Growth - measures the changes over time of the institution in both assets and clients.

[1]The following section focuses on key elements within the critical areas to measure. The Annex contains the SEEP/Calmeadow "Financial Ratio Analysis of Micro-finance Institutions" guidebook which gives a complete discussion of 16 key variables.

2. Profitability and Sustainability

- Profit is a means to an end, not an end to itself.

- Sustainability in the longer run depends upon making a profit -- generating enough income to cover costs and build an equity “cushion” from which to grow and to build reserves for future needs and economic changes.

2.1 Financial Indicators

INDICATOR	FORMULA	PURPOSE
Profitability (Return on Assets)	operating income - operating expenses/ liquid assets	measures the return to the assets and loan portfolio. It guides on the efficiency of the use of the assets and the ability to cover costs
Portfolio Yield	loan income/average loan portfolio	indicates financial productivity of credit services
Institutional Self-Sufficiency	total income/total expenses	shows ability of institution to be fully sustainable in the long run
Solvency (Net Worth)	net worth/total assets	measures the equity of the financial organization in relation to the total assets
Liquidity	cash on hand/total disbursement next 30 day	measures the ability of the organization to repay its short-term debt obligations
Portfolio at Risk	Balance of loans overdue/loan portfolio	measures the “health” of the loans outstanding in terms of its risk and recuperation
Repayment Rate	payment received /payment due	shows how much of the money that was due was actually paid-measures loan recovery performance
Arrears Rate	principle overdue/loan portfolio	indicates amount of loan payments past due
Growth in Assets	current assets-initial assets/initial assets *100	measures the change over time of the institution in assets
Growth in Clients	cumulative clients-initial clients/initial clients*100	measures the change over time of the number of clients

2.2 Cost Considerations

Micro and small producers and entrepreneurs borrow and save very small amounts of money. In order for them to be able to borrow or save, the costs of doing so must be very low. These costs are:

Transaction Costs

- **Time** - time in travel, meetings and fulfilling paperwork
- **Travel costs** - costs in travel to agency etc.
- **Fees** - costs or commissions which are charged for paperwork, training or other costs, which can be prohibitive barriers for small loans or short-term loans
- **Loan "guarantee" funds** - a fee or compensatory deposit required of the client in order to receive a loan
- **Savings charges** - savings requirements which a borrower must deposit or are deducted from the loan

Use of Capital Fees

- **Interest charges** - interest rates charged. (They are not a common barrier for short-term loans, but are important for investment and other loans.)

Social Barriers

- **Literacy** - low levels prohibit or at least inhibit participation of microentrepreneurs
- **Language** -cultural and language differences, lack of understanding and biases
- **Fear** - of rejection of a loan or guarantor
- **Gender** - social or even legal barriers for women to be involved with loans

Guarantee Barriers

- **Unacceptable Collateral** - lack of mortgage or acceptable collateral for guarantees
- **Registration** - lack of legal registry of microentrepreneur's business
- **Guarantors** - difficulties in finding an acceptable co-signer or group, or having to pay for the loan of a group member who defaults

2.3 What Does It Cost?

With small producers and microfinance, an institution or organization must handle many loans with many people and who have little or no experience and guarantees. Large number of clients in urban settings allow for efficient systems that can allow make it possible to do well at lending small amounts to microentrepreneurs. In rural areas, this can be more difficult and thus more costly.

Steps to Success in Microfinance

Micro-Finance lending to individuals requires streamlined procedures that emphasize the clients character and "business plan". Collateral is of minor or secondary importance for loan analysis of micro borrowers. Primary importance is given to the **character** of the person and the **cash flow** of his/her business.

What is the Process?

Individual Loans	Group Loans
Preparatory Stage 1. Request for information from borrower 2. Orientation 3. Loan application 4. Visit to workshop and discussion of client's "business plan" 5. Analysis of: a. Business Plan and loan request b. Character 6. Preparation of documents	Preparatory Stage 1. Request for information from borrowers or groups 2. Orientation session for groups or "pre-groups" 3. Visit to group and group formation training 4. Preparation of loan plans by group members 5. Review of plans with group 6. Preparation of loan documents
Approval Stage 7. Approval by Micro-Credit Committee 8. Verification of co-signers 9. Contract signing by borrower and co-signers 10. Disbursement	Approval Stage 7. Approval by Credit Committee 8. Verification/coordination with group (for new groups) 9. Signing of group loans 10. Disbursement
Follow-up Supervision 11. Verify purchases (for investments and new borrowers) 12. Periodic visits	Follow-up Supervision 11. Periodic visits to group and/or group leader
Payment 13. Reception of payments (in agency, office or mobile officers) 14. Control of arrears (letters of notice to borrower & co-signers, visits and collection of goods and/or legal action)	Payment 12. Payment by group members to group leader (possible direct payment to office) 13. Payment by leader to office 14. Control of arrears (letters of notice to group, visit to group leader, collection of payments or goods from other group members

2.4 What are the Costs for the Institution?

It is not enough for a financial institution to provide access to credit and savings, but also to consider how it goes about doing it. The predominant cost is **time**. Other costs are transportation to visit and verify client information and activities, costs of forms used in the loan process and the costs of loan supervision and control. These costs can be summarized into **transaction costs** and **control costs** for the institution. Both are of critical importance to the lender.

Transaction Costs

Transaction costs for the lender are those costs attributed to the process of making and managing a loan -- staff time, transportation, paperwork and administrative costs. Often 80% of the cost is **time**. Within the other costs of lending, the most significant costs are incurred in transportation to follow up the loan.

Lender transaction costs must be must not be confused with borrower transaction costs of receiving the loan -- borrower time, transportation, fees for forms, required savings, etc. There can be a trade-off between the two interests -- lenders and borrowers. In other words the lender may make it easy and low-cost for the borrower to receive a loan by taking its services directly to the community, charging no fees or commissions, etc., all of which raise the costs for the lender. Or it can be less accessible and less service-focused in order to minimize its costs by passing more of these transactions costs to the borrower. The **goal is to minimize transaction costs for both the lender and the borrower,** while maintaining adequate control, since transaction costs do not benefit anyone.

Supervision and Control Costs

A lender also cannot afford to make loans which are not repaid which is why careful follow-up is essential. Yet, the cost of follow up and control of a loan is the second essential cost factor for microfinance. A lender who makes small and normally short-term loans cannot afford to have a costly system of visits and registries, which is why many programs rely on solidarity groups to assist in the process by monitoring of each other. Efficient management information systems are also required in order to be cost-effective in loan control.

Example of Costs

TRANSACTION AND SUPERVISION COSTS <u>FOR THE INSTITUTION</u> FOR EACH INDIVIDUAL CLIENT ON FIRST LOAN[2]				
PROCESS	**CALCULATION** (4 month loan)	**TIME (person-hours)**	**COST IN CASH (in dollars)**	**TOTAL VALUE[3] (in dollars)**
Promotion	<u>time:</u> 20 minutes/new client administrative staff time <u>costs:</u> brochure and forms	0.3	0.50	$1.40
Pre-credit visits	<u>time:</u> 1 visit x 2 hours credit officer time, <u>costs:</u> bus &/or vehicle	2.0	1.50	9.50
Registry & paper work	<u>time:</u> 1 hour/officer & ½ hour/administrative support <u>costs</u>: paperwork	1.5	0.75	6.25
Orientation training	<u>time:</u> 4 hours/group with 2 trainer/officers and 16 clients <u>costs:</u> $2/client materials	0.5	2.00	4.00
Loan analysis and preparation for committee	<u>time:</u> 1 hour/loan by credit officer	1.0	0	4.00
Credit approval	<u>time:</u> 6 minutes/loan with 5 persons on committee	0.5	0	4.00
Verification of guarantors	<u>time:</u> 1 officer hour <u>costs:</u> transportation	1.0	1.50	5.50
Loan disbursements and control	<u>time:</u> 0.5 hours administrative support staff	0.5	0	2.00
Follow up visits and supervision	<u>time:</u> 1 hour x 2 visits <u>costs:</u> transportation	2.0	3.00	11.00
Payments and control	<u>time:</u> 10 minutes/month of admin. staff for 4 months	0.7	0	2.80
Arrears control	<u>time:</u> 10 hours/loan/officer per each 100 clients <u>costs:</u> $100 in legal, transport & other costs/case	0.1	1.00	1.40
TOTAL COSTS PER CLIENT		**10.1hours**	**$10.25**	**$51.85**

[2]Costs only include the variable costs per client, without general adminstrative costs.

[3]The average cost used in example is: loan officers - $4.00/hour and administrative staff - $3.00/hour.

LOAN TRANSACTION COSTS
FOR THE INDIVIDUAL CLIENT [4]

PROCESS	CALCULATION	TIME (in hours)	COST IN CASH (in dollars)	TOTAL VALUE[5] (in dollars)
Pre-credit visits	time: 1 visit to office x 3 hours, with transport in bike and 1 in house costs: travel expenses	5.0	$1.00	4.00
Registry and paper work	costs: commission, registration, etc.		1.50	1.50
Training	time: (is a benefit) costs: $5/materials + $2.50 in travel		7.50	7.50
Find guarantors	time: 5 hours costs: $1 in travel fare	5	1.00	4.00
Signatories of client contract and guarantors	time: 3 hours costs: $3 in fares and guarantors expenses	3	3.00	4.60
Monthly payments	time: 1.5 hours/month costs: $1/travel	15	10.00	19.00
Other expenses	time: 8 hours/loan costs: meetings, etc.	8	5.00	9.80
TOTAL COSTS PER CLIENT		**36 Hours**	**$29.00**	**$50.40**

[4] Costs only include variable cost per client. It neither include fixed costs nor administrative overhead.

[5] The average hourly value is: clients - $0,60/hour; officers - $1.70/hour; administrative staff - $2.00/hour and management - $6.00/hours