Rural and Agriculture Client Loan Risk Analysis

Day 4: Block 1

Loan risk analysis

The 5 Cs of Loan Analysis

Primary Cs

- ***Character*** – the person and family
- ***Capacity*** – the technical, economic and financial feasibility and past history of the activity

Secondary Cs

- ***Capital*** – the funds invested into the business and debt level
- ***Collateral*** – the risk and guarantees
- ***Conditions*** – the loan terms (amount, use, repayment requirements) and market conditions

1. Character

- Honesty and integrity
- Family situation
- Ability to manage a business
- Changes in business/family assets
- Reputation in community
- Openness and compliance with group (in group loans)
- Ability to repay previous loans

Questions about Character

Assessing the moral and financial responsibility of the person/group requesting a loan can be done by consideration of questions such as:

- **Is the person/group requesting trustworthy – demonstration of confidence, honesty, responsibility and work habits?**
- **How have they arrived at their actual economic situation?**
- **How have they resolved difficult situations in the past?**
- **What do persons and leaders around them say about them?**
- **How are their lifestyle and spending habits in relation to their income level?**
- **How are family relations and family considerations that may affect the business and loan?**

Credit History Review

- Have the client/group had loans in the past?
  - How have they been repaid?
  - How have they been managed?
  - If they have been late in payment, what are the reasons?
  - What is the assessment of their previous loan officers?
- Do they have savings?
  - How much savings in relation to the loan?
  - What is the savings history?

2. Capital

- What are the assets invested in the business?
- What is the family contribution to the business?

3. Collateral

Backup sources of repayment to the loan:

– Are the personal guarantees of the group or persons trustworthy?

– Do the assets of the business and personal guarantees adequate to cover the loan if necessary?

4. Capacity

- What does the loan/business plan indicate of the income generation and profitability of the business activity(ies)?
- Can the it/they generate enough cash to make the loan payments with interest, including a margin of security?
- When can the loan be repaid?
- What are the family needs?
- What are the effects of seasonal fluctuations and production and price variations?
- How does the farm/business compare to others with the same sector or activity?

a. Management Capacity

- Management and administrative questions include:
  - **How do they manage their business, farm or group in relation to others?**
  - **How do they manage money and expenses?**
  - **How have their assets grown or decreased over time, and why?**
  - **How is their personal/group conduct?**
  - **How do they manage or relate to people?**

b. Technical Capacity

- Technical capacity is very linked with the feasibility analysis and must be analyzed together with other parameters.

c. Human and Labor Capacity

- What is the age and health of the person(s) involved?
- How does the family (group) collaborate?
- Is sufficient labor available when needed?
- How does the labor capacity influence the economic feasibility of the business or activity? (This is especially important when a specific skill or person is required.)

5. Conditions

- Is there an adequate and stable market to sustain the business?
- Do the loan terms (lengths, interest rate, etc.)allow for adequate repayment capacity of the loans?
- What are the price and production risks?
- What are the general market trends of the sector?

5 Cs = 5 Factors for Analyzing Credit Risk

- The “art” is much more than knowing how to do calculations! It is smelling, intuition and emotional intelligence!
- Good risk management depends on knowing which, when and how to apply analysis indicators and also how to analyze the social and personal factors of the borrower.

- Exercise on analysis of Cs
- Based on Aglend toolkit 3

Risk Analysis of Agriculture and Non-Agricultural Loans

The 3 R s:

- ***Risk*** (of not getting a good return)
- ***Return*** to borrower
- ***Repayment*** (return to lender)

Managing Client Credit Risks

Financial investment outcomes are uncertain – they can be relatively safe, unsure or risky.

- Certainty is when only one outcome is possible
- Uncertainty refers to an expected future outcome which is unknown even though the probability of occurrence and the actual magnitude are known
- Risky is when the outcome and probability are not fully known

Types of Risk

- 1. Risks caused by loss of climatic disasters:
    - floods, drought, hail, pest infestation
- 2. Risks caused by family emergencies:
    - sickness and death
    - robbery and fraud
- 3. Risks caused by management
    - lack of good farming/productions practices
    - lack of market and price risk assessment and mitigation
    - lack of proper financial planning

Risk

Production indicators for understanding the effects of variation in prices and production levels

- **Equilibrium Point** (Fixed Costs)
  Is the minimum level of sales income from price and production levels in order to cover the fixed costs of the business activity

- In order to undertake the calculation it is necessary to know the fixed costs and/or the variable costs

Risk

Equilibrium Price

Is the minimum price needed to cover all of the costs of operation (in order to not lose)

It is recommended to analyze under various production levels

Risk

- **Production Equilibrium Point**

  Is the minimum level of production required to cover all costs of production at the estimated production price

  It is recommended to analyze under various price levels

Risk

- **Fixed Asset to Loan Ratio**

Represents the level of security of the loan in case of failure of the business activity and loss of income to repay the loan

Any fixed assets purchased with the loan should be included

Returns

Returns to the borrowers business indicates:

- Capacity of business
- Business viability of the sector
- Relative efficiency compared to others
- Ability to repay

1. Profitability

- Measures the capacity of the producer/ business to generate profit
- Measures effectiveness
- Measures the operational self-sustainability
- The principal group of indicators regarding Return on Investment (ROI)

Profitability Indicators

General Profit Indicators

$$\text{Profit Margin} = \frac{\text{Net Income}}{\text{Net Sales}}$$

$$\text{Profitability} = \frac{\text{Total Income}}{\text{Total Costs}}$$

2. Liquidity

- Indicates the capacity of a producer or business to cover their short-term debts with their current assets (cash available in short term

Cash Flow = + All income in period (month)

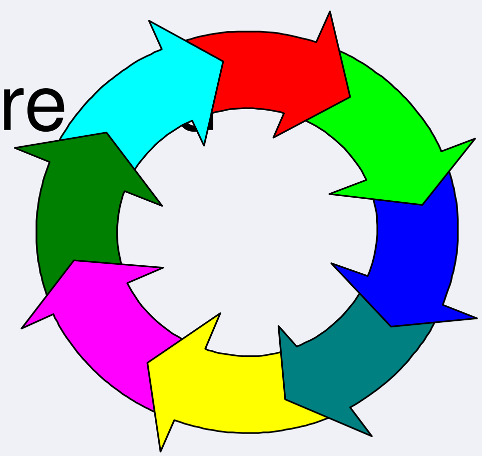
– All expenses in period

$$\textbf{Liquidity Ratio} = \frac{\textbf{Current Assets}}{\textbf{Current Debts}}$$

3. Efficiency

☆**Turnover (Velocity) of inventory or investment**

- ☺Used to analyze the production and marketing efficiency of a business activity
- ☺ It must be used in comparison to that of other similar businesses in order to be meaningful
- ☺Is recommended to analyse before and after a loan



4. Solvency

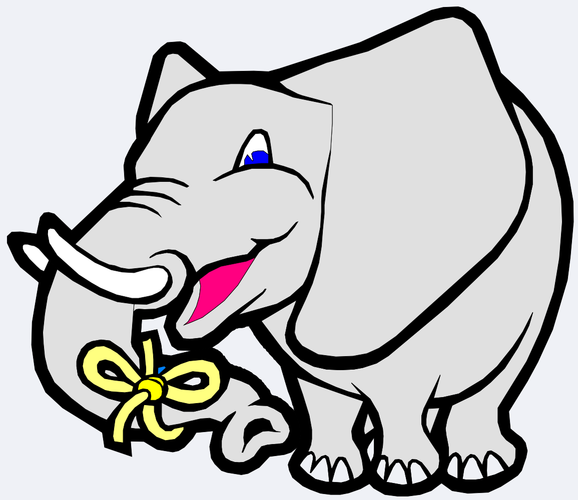
☆ Debt to Equity Ratio:

- ☺Measures the leverage of capital or financial risk
- ☺Indicates the capacity to cover debts with one's own capital
- ☺The higher the ratio the lower the debt
- ☺Debt needs to be relatively more than the net equity

4. Solvency

- Net Equity to Total Asset Ratio

$$\text{Net Equity} = \frac{\text{Total Net Equity}}{\text{Total Assets}}$$



5. Repayment Capacity (debt capacity)

- Measures the capacity to repay a loan
- The indicators give an approximation of the capacity to amortize a loan and interest costs, without major difficulties

$$\text{Total Debt /} = \frac{\text{Total Debt}}{\text{Net Family Income}}$$

Repayment Capacity (debt carrying capacity)

Repayment Capacity:	**+ Total Income (all sources))**
	- Debts and obligations
	- Family Expenses
	= Balance for Payments and reserves

- Compares the repayment capacity with all of the income and expenses (of business and household.
- Is commonly done on a monthly basis
- Is an appropriate repayment capacity indicator for agriculture and businesses with uneven and/or multiple source income flows

Repayment Capacity (Cash flow)

- The Cash Flow Analysis (Flow of Income and Expenses) is a simple and invaluable analysis for businesses with multiple activities
- Is invaluable for businesses which have irregular or seasonal flows of income and expenses, such as in agricultural households
- All cash incomes and expenses of the business and household are included
- The running balance (monthly) must be positive (be able to cover costs.
- Is also an essential loan planning tool for determining amounts and timing of disbursements and payments

Repayment and Debt Capacity (Cash Flow)

Cash Flow Analysis:	+	Initial Balance
	+	All Business Income
	+	Other Income (includes family)
	-	Operating Expenses
	-	Investments
	-	Loan Amortizations
	-	Interest Payments
	-	Family Expenses
	=	Balance (Accum. Balance)

Ways One Lender Responded to Improve Agricultural Loan Repayment

- Repayments are scheduled on days on which farmers usually come to town, for example on market days.
- AGLEND’s offices are located directly across the farmer market at the central bus stop for ease of access.
- Office hours are very flexible and include evening and weekend services.
- There is a mobile unit operating in some regions with low population density to increase accessibility to financial services and customer friendliness.
- AGLEND has established a very good relationship with the major wholesale traders, marketing co-operatives, rice mills etc. in the different regions.
- With the loan contract, borrowers have the possibility to sign an agreement that asks the companies where the farmers are selling their crops to pay AGLEND directly from the harvest proceeds.

Quantifying the Borrower Assessment

- For summary effects of the information and greater ease in analysis by loan committees and others, it is important to establish a system of calification of each aspect of the borrower assessment.
- For example:
  - From 1 to 4 where 4 is the best; or
  - Excellent, Good, Good, Average o Deficient
- A summary that gives a point or overall average of all characteristics is also recommended
- Any important deviations or clarifications must also be noted attached to the assessment

The Golden Rule

If you were lending from your own savings, would you make the loan?