Training Manual:
The Basics of Financing Agriculture

Module 3.3 | Management Techniques I - Cross-checking

Acknowledgement

The Agriculture Finance Training Manual is part of AgriFin's Agriculture Finance Training Tools. The Manual was developed by IPC - Internationale Projekt Consult GmbH as part of AgriFin's technical advisory project for Cameroon Cooperative Credit Union League (CamCCUL).

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Session Overview

LEARNING OBJECTIVE	**To minimize risks emerging from incorrect data reporting, bankers must validate the soundness of the financial information provided to them. Therefore cross-checking the client documents is essential for making sound business decisions. This session provides an overview of key techniques to cross-checking that the banking team may find useful in handling agricultural clients.**
SCOPE	At the end of this session, the trainee will be well versed on the following topics: • Scope and need for cross-checking in the context of lending to agricultural clients, many of which are small holder farmers, MSMEs and small scale traders • Instruments that are typically used for cross-referencing the client information provided • Methods for evaluating equity of the client and the potential for providing collateral for the loans sanctioned
TARGET	Agricultural loan officers, financial analysts, trainers, and other professionals interested in agriculture financing
DURATION	2 hours

Content

1. Introduction to Cross-checking

Definition

Cross-checking is a method of **verifying** information by:

- Comparing information from different sources (consistency)
- Assessing the information obtained (to determine its importance, size, or value)

Scope

- To manage the risks involved in granting a loan, a bank needs to assess the creditworthiness of a potential client/applicant, i.e. **the ability and willingness to repay a loan, based on reliable information.**
- During the financial analysis we depend mainly on oral information. Even if some written documents are available, they **might not always be reliable.**
- Therefore we need an effective method to **verify this information.**

1a. What do we Cross-check? (1/2)

- **Information about the client as a person**
  - Character
  - Background
  - Reliability
  - Loan purpose (character, ambition)
  - Attitude towards the bank

- **Purpose:** Evaluate the willingness to repay

1a. What do we Cross-check? (2/2)

- **Financial data (about member's business)**
  - Business background
  - Balance sheet
  - Profit & loss statement
  - Cash flow statement
  - Loan purpose

- **Purpose:** Evaluate the ability to repay

1b. Sources of Information

- **The client:**
  - Oral information received from the client directly (primary source)

- **Business records**:
  - Receipts
  - Contracts
  - Stock
  - Cash
  - Premises

- **Third parties**:
  - Family
  - Business partners
  - Associations

2. Instruments to Assess Data

Analyze the consistency between the financial forms

- The client claims his/her accounts receivable are paid on a monthly basis, but the amount of AR is five times the monthly turnover

Use third parties (without breaking the principle of confidentiality)

- Ask the market management office if the client pays rent and utility fees on time. What is the market's business situation?

Compare the social situation of the client with the situation of the member's business?:

- The member's child goes to the best school in town but the profit from the business hardly covers the family expenses

3. Cross-checking Cash Transactions (1/4)

The owner of a small boutique told you that his average turnover in the last three days was XFA 100,000 per day. Four days ago was the last time she made purchases. The member had no other expenses in the last days.

Cross-checking this information
At the end of the analysis you asked the member to count his money. He/she had only XFA 130,000 and couldn't give you a reasonable explanation for the missing sum.

It is crucial to investigate a situation to check if the member is lying, if he is not fully aware of his business operations, if he over estimated his profit, or if he has other expenses he didn't mention.

3. Cross-checking Account Receivables (2/4)

A fruit trader claims that his biggest client is a restaurant (30% of total sales). The trader delivers fruits worth XFA 40,000 - 50,000 on average per day. Bills are settled every two weeks. The member always pays on time.

Cross-checking this information
At the time of the analysis there were delivery slips, all within the last two weeks, but the total was XFA 200,000.

What should be the amount on the delivery slips?
The ALO must be thorough with understanding everything about the member's business and relative expenses. This is one of the important way of reducing risks.

3. Cross-checking Performance Based Salary (3/4)

A kitchen trader's total sales last month were XFA 3,000,000. The shop has one salesperson, who has a basic salary of XFA 60,000 per month plus a performance based commission of 1% of the total sales.

Cross-checking this information

You asked the sales person for the amount of the last salary which was 160,000 FCFA.

Is this information true or not? What should be the salary of the salesperson?

3. Cross-checking Performance Based Salary (4/4)

Mr. Kono started his business 3 months ago with XFA 3,000,000 worth of inventory. He claimed his average monthly turnover was XAF 2,000,000. You calculated his current inventories at XFA 3,500,000.

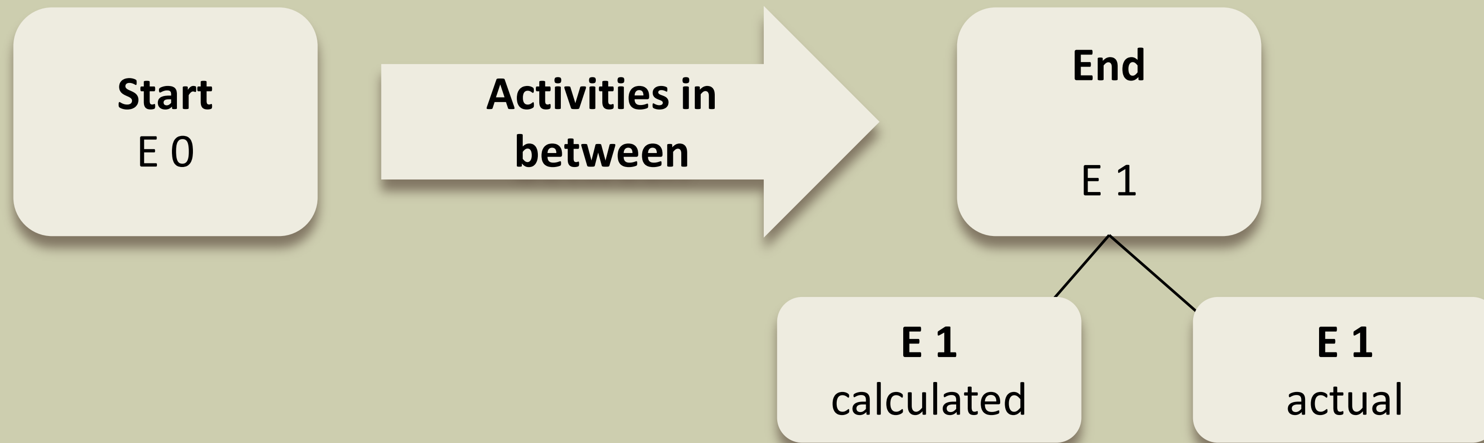
Cross-checking this information

Mr. Kono told you that he made two purchases since starting the business. Each time he paid XFA 1,000,000. According to your calculation his gross profit margin was 40%.

What should be the total sales amount?
(According to these figures the total sales of the member should be XFA 2,500,000 for the three months.)

3. Equity Cross-checking

Determine two time points (E 0 and E 1), then follow up all business activities, investments, financing, and family expense between those two points.



Basic assumption: Other than family expenses, all initial investments and retained earnings stay within the business.

3a. Equity Cross-checking Formula

	(E0)	Start total assets start liabilities
+	Accumulated profit	Total of MDF (after family expense)
+	Equity injection	Further investment into the business
-	Equity withdrawal	Further withdrawal from the business
+	Asset appreciation	Increase in value of fixed assets
-	Asset depreciation	Decrease in value of fixed assets
=	**(E1)**	

MDF: Monthly Disposable Funds

3b. Equity Cross-checking Example

300,000	Starting equity	Starting Total assets - Total liabilities (according to financial analysis on 01 Oct. 2012)
+96,000	Accumulated profit	Total of MDF (For period from 01 Oct. 2012 to 01 Oct. 2013, average MDF is 8000)
+100,000	Equity injection	Further investment in the business (April 2012; sale of land)
-150,000	Equity withdrawal	Further withdrawal from the business (The son's wedding in Aug. 2012)
+ 0	Assets appreciation	Changes in value of fixed assets
- 20,000	Assets depreciation	Changes in value of fixed assets (Depreciation for one year in value of client's car)
=320,000	**Calculated equity**	

MDF: Monthly Disposable Funds

3c. Equity Cross-checking Principles

- The choice of EO should not exceed the period of one year and should be clearly remembered by the client. Ask yourself, how much money did you have 5 years ago? And now tell me, how much money have you earned since that time? An equity cross-check over a long time frame reduces accuracy and makes the check meaningless.

- In addition to the equity cross-check you should consider the overall development of the business. If the client started the business ten years ago and the business is still the same size, you should ask, why has there been no development in scale of size, profit and turnover.

3d. Example

Mr. PALA (45) opened a supermarket 11 months ago. At that time he had 600,000. He spent 300,000 on rent (for one year) and used the remaining amount to purchase inventory. You calculated his current MDF at 30,000 but the client told you, that he did not earn so much in the first months so you calculated 15,000 for the first three months. Mr PALA bought a new washing machine for 30,000 (three months ago) and bought his son a second-hand motorbike for 70,000 (13 months ago). He had no further private costs. Before Christmas (five months ago) he borrowed 200,000 from a couple of friends to make additional purchases for the high season, but he has already repaid the money.

At the end of the analysis you determined Mr. PALA's current equity to be XFA 770,000. Does this figure match? Please cross-check the equity calculation!

Your calculation should be 855,000. What are possible explanations for this difference?

3d. Example - Possible Explanations for Calculated Equity > Actual Equity

Counted too little equity withdrawal (member did not tell you about investments in other businesses or other expenses)
Is it possible that the client spent some money over Christmas? Have you considered the car purchase?

Forgot the off-balance assets in the actual equity
In this case irrelevant but a common failure

Calculated too much asset appreciation / too little depreciation
In this case irrelevant but a common failure

3e. Example

Imagine the same example but this time the determined equity is higher than the equity calculated using the cross checks

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At the end of the analysis you determined Mr. PALA's current equity at
XFA 990,000.

3d. Example - Possible Explanations for Calculated Equity > Actual Equity

Counted too little starting equity (did not find out about some assets at the time of the initial investment)

600,000 = Is it possible that the client had additional assets which he forgot to tell you about?

Calculated too little accumulated profit (underestimated MDF):

- Are there any particularly good months in the member's business year? (The client borrowed 200,000 to make additional purchases. Sales and profit should have increased during the high season
- Was there any change in the member's profit margin?

3d. Example - Possible Explanations for Calculated Equity < Actual Equity

- **Counted too little equity injection (e.g. forgot to include donations)**
- Is it possible that the client injected additional private money at a later point?

- **Member exaggerates his assets at the analysis**
- Are you sure that all stock belongs to the member? Members sometimes try to increase their chances of getting a loan by adding borrowed stock into their inventory.

- The client told you that he borrowed 200,000 from friends. Are you sure that he repaid all of the borrowed money?

4. Typical Mistakes and Tips

- Business related borrowing and repayments (principal) do not influence equity.
- Do not mix private and business assets
- Do not forget to take asset depreciation into account during the equity check.
- Renovation of business premises at the start is normally not included in the balance sheet. In equity cross-check you can treat this as a cost.
- The split of business partners is a good moment to determine the member's equity (E0)

For more resources please visit AgriFin's website

www.AgriFin.org

We welcome your feedback to help us further refine these training materials. Please contact us at agrifin@worldbank.org.