

Business Planning and Financial Projections with Microfin

Case Study

November 2008

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FEDA Case Study

Case 1	FEDA History
Case 2	Mission and Goals
Case 3	Clients and Markets
Case 4	Assignment: Clients and Markets
Case 5	Environmental Analysis
Case 6	Institutional Assessment
Case 7	Assignment: Environmental Analysis and Institutional Assessment
Case 8	Summary of FEDA Strategic Analysis
Case 9	Assignment: Strategy
Case 10	FEDA Strategy and Operational Plan
Case 11	Model Setup Information
Case 12	Products and Services
Case 13	Marketing Channels – Term Loan Products
Case 14	Marketing Channels – Voluntary Savings
Case 15	Institutional Resources and Capacity (Part I)
Case 16	Institutional Resources and Capacity (Part II)
Case 17	Institutional Resources and Capacity (Part III)
Case 18	Institutional Resources and Capacity (Part IV)
Case 19	Financing

FEDA Case Study: History

The Freedonia Enterprise Development Association (FEDA), a microfinance institution, was established in 2000. Founder Judith Mbira had visited several large, world-renowned microfinance institutions the year before and was so inspired by what she saw that she created a Freedonian institution to serve the financial needs of poor entrepreneurs in her own country.

Freedonia is a land-locked country which is known for its mineral deposits and enjoys a modest agricultural output. Freedonia has had a stable political system since gaining independence from Britain in 1965, and the currency – the shilling – has also enjoyed good stability domestically and internationally. But poverty levels are high, and the increasing trend of migration from rural to urban areas – especially to the capital city of Agora – has led to increased levels of poverty for the majority of the population. It is estimated that the informal sector accounts for more than half of the economic activity of the country's three million people.

FEDA currently works with the low-income, self-employed, urban poor in the capital city of Agora. Over its six years of operations, FEDA has offered a single loan product: clients form solidarity groups of five individuals, and after a period of compulsory savings, each client gets a loan of the same size and term, with each group member co-signing for the others. Because FEDA is not authorized to collect savings deposits, the compulsory savings are held by Freedonia National Bank.

Among MFIs in the country, FEDA sees itself as unique in combining a deep commitment to reaching a substantial number of poor entrepreneurs with the goal of becoming fully independent of donor funding. FEDA feels it is particularly close to its clients and is striving to make strong customer loyalty its mark of distinction, though it has some problems at present. FEDA has a close relationship with an international non-profit development agency, Freedom International, that provides regular technical assistance, training, and networking opportunities.

It is October, and the institution is undertaking a formal strategic planning process. Judith Mbira has recently stepped down as chair, but still remains active on the board. FEDA's fiscal year runs from January to December; FEDA's intention is to put its new business plan into effect in January of the coming year. FEDA's primary motivation for undertaking the planning process is to determine how to reach its expansion and sustainability goals.

FEDA Case Study: Mission and Goals

- Mission statement:

“Our purpose is to significantly strengthen the economic base of the low-income, self-employed of Freedonia through increased access to lending and savings services in urban areas. We intend to combine cost-efficient methodologies with exemplary customer service, and become a financially self-sustaining institution.”

- Goals: (for the next five years)

1. Provide appropriate lending and savings products in urban areas.
2. Expand to provide lending and savings services to a significant proportion of the households in our market areas.
3. Become a fully financially sustainable, independent microfinance institution accessing a broad variety of financing sources.

FEDA Case Study: Clients and Markets

FEDA used a combination of document research, a review of their own files, and on-site investigation to complete the necessary client and market research. Significant findings include:

- Existing and former clients tend to be somewhat dissatisfied with FEDA, primarily because they feel that loan terms and sizes are inflexible and not meeting their needs, especially in later loan cycles. Clients express dissatisfaction with the time it takes them to move to higher loan amounts, as well as with the current loan ceiling of S. 400. Loan sizes start at S.100 per individual for first loans and increase by S.100 in each cycle until the loan ceiling of S.400 is reached. Loan sizes are reviewed each fiscal year and updated for inflation. All loans are 12 months in duration, and clients make monthly payments, with no grace periods.
- A study of client drop-out rates has shown fairly low client retention: 75% of clients completing each of the first three loan cycles have gone on to the next loan cycle. After completion of the fourth loan cycle, retention drops to 60%.
- Many clients indicate that they would place a premium on more responsive customer service, with more flexibility in the loan amounts and terms (especially larger amounts in later loan cycles), and more timely disbursements.
- Sectoral breakdown of enterprises is: 40% small-scale commerce of fresh produce, 20% small-scale retailers of dry goods, 25% shoemakers, 15% other production-based businesses.

For the existing clientele in **Brownstown Market**:

- FEDA currently works with a total of 6,000 clients in Brownstown. Of the total number of about 35,000 microenterprises in the area, FEDA projects demand for financial services at 25,000, of which it projects it could reach up to 75%, or a total potential clients of 18,750 here.
- Sectoral analysis reveals the following:

	<u>Current Clients</u>	<u>Additional Potential Clients</u>
Commerce	3,600	7,750
Production	2,400	5,000
- The number of microbusinesses is growing by 5% to 10% per year.

Initial analysis has indicated that **East End**, a district on the opposite side of town, has strong potential for FEDA's expansion. More in-depth research has revealed the following:

- There is a thriving wholesale market in the center of this district. The estimated number of businesses, demand for credit, and likely market penetration (at 75%) in the area are as follows:

<u>Clients</u>	<u>Sector</u>	<u>Number of MEs</u>	<u>Credit Demand</u>	<u>Potential</u>
	Commerce	10,000	6,000	4,500
	Production	6,000	4,000	3,000

Early analysis on considering expansion into rural areas had shown that **Loganville** is a nearby area with a strong potential market. Additional investigation revealed that:

- The area lies 40 miles from Agora, on the main highway to the north, and transportation services are very reliable and regular.
- Town population is 1,500 households. Within a 10-mile radius there are approximately 10,000 households.
- Most households are involved in a wide variety of activities, including grain production, small-scale livestock husbandry, transformation of agricultural commodities, trading activities, and some artisanal production.
- There is a large-scale market twice a week in Loganville where most households in the community come.
- In addition to a local dialect, virtually everyone speaks Freedomian, the national language.

A European donor is interested in providing funding of up to S.300,000 to an MFI that would agree to work in **Mt. Andrew's Valley**, an isolated rural area known for its destitute population. No other microfinance institution is currently working in this area.

- The area lies 100 miles north of Agora. Transportation into the valley is only by dirt road. Heavy rains make travel on this road unreliable, with the road sometimes closed for days at a time.
- There are 3,000 households in the valley, with about 60% of these involved in small-scale, seasonal activities, mostly related to crop production and animal husbandry. There is some pottery production and woven mat production.

Assignment:
Clients and Markets

Current Market:

1. Do FEDA's current clients reflect the market identified in FEDA's mission and goals?

2. What is the size of the Brownstown market? What is the potential for growth?

Potential New Markets:

1. Of the potential new markets being researched by FEDA, which of the areas seem most promising?

2. What is attractive about the most promising potential market(s)?

FEDA Case Study: Environmental Analysis

FEDA's Board and Executive Director undertook an environmental analysis which resulted in the following findings:

Competition:

- FEDA is one of the most established MFIs in the country.
- There are half a dozen other microfinance institutions operating in Freedonia with more than 4,000 clients. All have entered the market in the last three years. Two of these are in the Eastern part of the country. Of the four in the Western region, two operate in rural areas (one near Agora) and two work in other parts of Agora.
- The two MFIs working in Agora are FEDA's most direct competitors. Each has about 5,000 clients and their effective interest rates are lower than FEDA's. Their strategy is to standardize and automate the lending process to reach substantial scale as rapidly as possible, although FEDA is uncertain about where they plan to expand. Their average loan size is S.500 with a nine month term, with an interest rate of 30% on a declining balance, and a 1.5% up-front commission (for an effective interest rate about 2 percentage points lower than FEDA's).
- Many of the NGOs which are currently involved in other development activities such as training and health care are considering entering into microenterprise development.

Collaborators:

- FEDA refers its more advanced clients to a local training institute for business development services.
- Freedonia National Bank provides repayment and savings services to clients, although clients have not been satisfied with FNB's performance. FNB is not responsive to clients' requests and is very slow in getting information to FEDA.
- FEDA has an ongoing relationship with Freedom International, a North American NGO, which provides periodic technical assistance and training.
- FEDA has good relations with its key donors, having received substantial amounts of portfolio financing in recent years, while needing relatively little grant money for operations. Discussions are under way with several new potential donors.

Regulatory Factors:

- Legislation is currently being considered that would authorize a new type of legal structure: a “non-bank financial institution” (NBFI). The legislation would allow an NBFI to collect savings from its clients and from the general public. The minimum capital requirement would be S.500,000 and NBFIs would need to keep 25% of deposits in reserve. FEDA is considering applying for NBFI status.

Macroeconomic Context:

- The inflation rate was approximately 8% this year. In the past three years it has not exceeded 10%. Expectations are that inflation will be around 8% for the next three to five years.
- The Gross Domestic Product (GDP) -- currently S.500 per capita -- has been slowly growing, but is still substantially below the levels required under a 2002 World Bank “restructuring” program. Economic growth has averaged 4% annually over the last five years.

FEDA Case Study: Institutional Assessment

FEDA's Board and Executive Director initiated an institutional assessment process which resulted in the following findings:

- As identified in the client research, FEDA's current loan product is not adequately responding to client needs.
- Portfolio quality should be much stronger, with portfolio at risk (greater than 30 days) currently at 13.1%.
- FEDA reached operational sustainability this year, with operational self-sufficiency growing from 95% to 119%, and financial sustainability from 81% to 99%.
- In the last year, the operating cost ratio has increased slightly from 17.6% to 18.4, while the number of borrowers per promoter has increased from 250 to 273.
- FEDA's staff is generally competent and dedicated. 22 of 27 staff members are loan officers. However, 9 of the loan officers have been with FEDA less than one year. All staff are well-informed about organizational policies thanks to a strong emphasis on staff training.
- The Executive Director has been in place for 18 months and is very highly regarded by both board and staff. Trained as a sociologist, his particular strengths are leadership, development of staff skills, and fundraising. He is a persuasive spokesperson for the institution, but his financial skills are limited.
- FEDA's finance manager is very competent at overseeing accounting operations and managing information, although reports are about one month late. She could be stronger at analyzing financial data, drawing conclusions, and making sound recommendations, especially as FEDA considers converting to an NBFII.
- FEDA is audited annually by a reputable firm in compliance with donor requirements. Recent "management letters," while generally praising FEDA's fiscal stewardship, have mentioned the lack of thorough internal control procedures.
- All staff have relatively low salaries, compared to what they could make in the private sector, but loan officers are particularly vocal about their limited pay and increasing workload. They are also frustrated by a lack of internal promotion opportunities.
- Loans are currently tracked on a simple loan tracking program installed three years ago, but the system is getting increasingly difficult to maintain with the increasing client base. Staff have researched computerized systems: a local consulting firm has developed a solid system for another MFI that could be adapted to FEDA's needs. The cost is likely to be S.75,000 for purchase, customization and setup.

- FEDA's board is generally quite involved and committed to the organization. Many of the board members bring solid professional expertise to the institution. However, some of the members do not perform effectively, and there has been little rotation of board members in recent years.
- Several of FEDA's funders have expressed strong interest in funding its portfolio growth over the next two years. It has managed its current bank borrowing very professionally. Its reputation as a strong lender and reliable borrower positions the institution to be able to access substantial financing from the local banking sector.

Assignment: Environmental Analysis and Institutional Assessment

After you have discussed the environmental and institutional issues which were identified through FEDA's research, complete the following table, listing three environmental issues and three institutional issues which you think are key priorities for FEDA.

ENVIRONMENTAL ANALYSIS
•
•
•
INSTITUTIONAL ASSESSMENT
•
•
•

FEDA Case Study: Model Setup Information

NOTE: During each group session on the computer, assign a different person to enter data from the keyboard. Rotate in each session so that everyone has an opportunity to practice.

FEDA management prepares to create their operational plan using Microfin. Begin by filling in the requested information on the **Model Setup** page. The following information will be helpful in this process, as is the information provided previously in the case study.

1. FEDA decides to use Microfin in STANDARD mode.
2. They decide that they will develop their first draft on the information using Microfin's "consolidated" option. (Later they may switch to the branch option to refine the projections.)
3. Leave the following box **unchecked**, so that Microfin uses Branch/Head Office terminology.
4. They input the name of the institution ("FEDA") and the name of the currency ("Shillings").
5. They decide to start their projections as of January of the coming year. Their fiscal year runs from January to December, so their fiscal year begins in month "1". (Hit F9, the "Recalculation" key, after entering information in this section so that these changes will take effect and you can review any possible error messages on the screen.)
6. FEDA chooses to generate projections for five years.
7. Fill in the **Inflation Information** based on the information provided in the strategic plan (conservatively projected to be 8%).
8. FEDA has no indexed financial products, but has a loan from a donor indexed to the Euro. The devaluation rate is projected at 5% and the current exchange rate is S2.00 = E1.00.
9. Make sure the box is checked to enable the Historical Financial Statement Analysis section.
10. Fill in the **HISTORICAL FINANCIAL STATEMENTS** for the current fiscal year and last year, using the financial information provided below. Fill in **ALL the data for the current year** before entering information for last year. Leave the "NFS" (non-financial services) column empty since FEDA offered no services other than credit and compulsory savings. Note that as you fill in the data, some cells – such as **ACCUMULATED DONATED EQUITY** in the previous year column – calculate automatically based on information entered elsewhere.

FEDA
Historical Financial Statements

	<u>Prior year</u>	<u>Current year</u>
INCOME STATEMENT		
Income on financial services	170,750	332,640
Income on Investments	5,000	7,500
Interest and fees on borrowed funds	21,000	30,000
Provision for loan losses	20,000	28,000
Direct (Branch-level) Operating Costs	92,120	160,200
Indirect (Head Office-level) Operating Costs	52,200	68,040
Amount of taxes paid	0	0
Income from grants	425,700	167,600

BALANCE SHEET

Assets:

Cash in Bank and Near Cash	76,380	281,100
Gross Portfolio Outstanding	840,000	1,100,000
Loan Loss Reserve	(36,000)	(58,000)
Loan Loss Reserve for two years ago: (23,500)	(Needed to calculate write-offs)	
Short-term Investments	48,000	130,500
Other Current Assets	9,400	0
Furniture and Equipment (gross)	45,000	54,000
Accumulated Depreciation	(15,000)	(22,000)

Liabilities:

Short-term Loans	20,000	242,651
Other Current Liabilities	6,000	12,320
Long-term Loans	290,000	357,349

Equity: (Note: the two prior-year figures below are *formulas* calculated based on other entries)

Accum. Donated equity, previous periods	291,700	717,400
Accum. Net Surplus (Deficit), previous periods	(56,050)	(65,620)

6. Complete the **Portfolio Information** and **Financial Ratio Analysis** information with the following data:

PORTFOLIO INFORMATION	<u>Prior year</u>	<u>Current year</u>
Number of active loans (end of period)	3,500	6,000
Number of days for at risk calculations	-	30
Payments in arrears > 30 days (end of period)	30,000	72,000
Outstanding Bal, loans in arrears > 30 days (end period)	100,000	144,000
(Note: The write-off figures below are derived from a formula using other entries you have made)		
Value of loans written off during period	7,500	6,000
Average initial loan size	220	250

FINANCIAL RATIO ANALYSIS

- FEDA wants to analyze Sustainability ratios **BASED ON PRE-TAX NET INCOME**. Management at FEDA is accustomed to **CALCULATE RATIOS BASED ON AVERAGE TOTAL ASSETS**.

	<u>Prior year</u>	
Average Total Assets	825,000	
Average Gross Portfolio Outstanding	675,000	
Average Loans Payable	230,000	
Average Equity	475,000	
Average Net Fixed Assets	21,000	

	<u>Prior year</u>	<u>Current year</u>
Inflation Rate	10%	8%
Market Rate for borrowing	20%	18%
In-kind subsidies	6,000	6,000
Total number of Loan Officers end of period	14	22
Total number of total staff, end of period	19	27

- **What is your assessment of FEDA's financial position? What figures and trends do you find encouraging? Are there any areas of concern?**

FEDA CASE STUDY
SUMMARY OF STRATEGIC ANALYSIS

FINDINGS**IMPLICATIONS****Markets and Clients:**Brownstown Market:

- 6,000 clients as of December of the current year (40% small-scale commerce of fresh produce, 20% small-scale retailers of dry goods, 25% shoemakers, 15% other production-based businesses.)
 - Estimated demand for financial services: 25,000.
 - Estimated maximum market penetration: 75% (or a maximum of 12,750 potential new clients).
 - Client retention rate: 2nd, 3rd and 4th loans: 75%; subsequent cycles: 60%.
 - Major findings of client surveys: (1) want greater amounts and more flexible terms for loans, especially in later loan cycles; (2) interested in expanded savings services.
 - Client feedback confirms that group methodology continues to be a sound way of delivering financial services.
- New market(s) will be needed in order to reach more than 18,750 clients.
 - Current product should be redesigned to respond to better meet client needs and increase retention rates.
 - Possibility of offering savings services should be explored.

East End:

- 60-65% of the entrepreneurs interviewed expressed an interest in market-priced sources of financial services.
 - Estimated number of businesses / demand for credit:
Commerce: 10,000 / 6,000
Production: 6,000 / 4,000.
 - Estimated maximum market penetration: 75% (or a maximum of 7,500 potential new clients).
- East End is a promising market for expansion.

FINDINGS

Environmental Analysis:

Competition:

- 6 other MFIs in country with more than 4,000 clients, of which 2 also operate in Agora.
- Both MFIs operating in Agora offer similar products and services, though in different areas of the city, with effective interest rates lower than FEDA's; each has about 5,000 clients.

Collaborators:

- Freedomia National Bank provides savings services -- clients not satisfied with level of service.
- North American NGO (Freedom International) provide periodic technical assistance and training.

Regulatory Factors:

- Legislation currently under development would authorize new legal structure, "non-bank financial institution" (NBFI), allowing collection of savings by MFIs.

Other External Factors:

- Economic and political stability projected to continue.
- Inflation rate: 10% last year, 8% this year; projected to be 8% for next 3-5 years.

IMPLICATIONS

- Though competition not currently a significant factor, MFIs operating in Agora should be monitored, especially their choice of markets – if they enter FEDA's markets, competition could be significant.

- As noted above, the possibility of offering savings services directly should be explored.

- Current TA needs are being met.

- NBFI structure may offer opportunity for FEDA to respond to clients' interest in savings, and provide a low-cost source of lending funds.

- Inflation is stable, but its effect should be factored into projected loan amounts, salaries, etc.

FINDINGS

Institutional Assessment:

Credit & Savings Program:

- Current data: Portfolio at Risk > 30 days 13.1%; portfolio growth 31%.
- Operating cost ratio has increased from 17.6% to 18.4%; number of borrowers per promoter has increased from 250 to 273.
- Portfolio risk is minimized by lending to diverse subsectors (produce, dry goods, shoemakers, other production-based businesses).
- FEDA's current loan product not responding to client needs, as evidenced by low retention and client feedback
- Strong interest expressed by clients in expanded savings services

Board/Management Issues:

- Strong, involved board brings useful skills and perspectives, though some members not actively contributing.
- Executive director has strong management & funds mobilization skills, could improve financial skills, as could finance manager.

Human Resources:

- Staff has required skills, though significant proportion is new to FEDA (e.g., 9 of 22 promoters have been with FEDA for less than one year.)
- Salaries are relatively low; loan officers especially vocal about increasing workload and limited pay.

Administration:

- Loans tracked on old software – system increasingly strained.

Financing:

- Good relationships with commercial & concessional sources.

Institutional Assessment: (continued)

- Commitments for substantial funding for next 2 years in place.

IMPLICATIONS

- With continued rapid growth, delinquency needs to be strictly controlled.
- Continue to closely monitor efficiency.
- Underlying co-variant risk still exists if overall macroeconomic situation deteriorates.
- As noted above, need to redesign loan product.
- As noted above, possibility of offering savings services should be explored.
- Board should explore feasibility of becoming an NBF and providing savings services directly.
- Need to provide financial management training to ED and FM.
- Importance of ongoing staff training.
- Review of compensation structure is needed.
- Need to research and implement a new MIS.
- Need to further develop relationships with donors, development banks, and commercial sources of funding.

Financial Management:

- Operational sustainability has grown from 95% to 119%, financial sustainability from 81% to 99%.
- Financial reports generally not available until one month later than desired.
- Executive director & finance manager interested in strengthening analytic skills.
- Continue to monitor profitability
- As noted above, need to provide financial management training to senior management.

ASSIGNMENT: STRATEGY

Use the summarized analysis in Case 8, as well as your own work on the case study, to develop an overall strategy for FEDA. (Remember that a strategy is an articulation of sustainability, impact and outreach objectives – including what products to offer, where to offer them, and how to address critical institutional issues during the period of the plan.)

Also develop objectives and activities for each area of FEDA's operational plan; an example follows below:

- **Products and Services**

Objective: Have lending products that attract a growing number of clients who remain in the program.

- Activities:
 - Redesign current group lending product.
 -
 -

Objective: Develop voluntary savings products that responds to clients' needs and which can serve over time as a source of portfolio financing.

- Activities:
 - Follow development of regulation on non-bank financial institutions, applying for NBFI status to be effective by end of Year 2 of their plan.
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 -
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- **Marketing Channels**

Objective: Expand market penetration in current Brownstown Market area.

- Activities:
 - Promote the revised credit product to current and potential clients.
 -
 -

Objective:

- Activities:
 -
 -
 -

- **Institutional Resources and Capacity**

Objective:

- Activities:

Board/Management Issues:

Human Resource Management:

Administration:

Financing:

Financial Management:

FEDA CASE STUDY

Strategy and Operational Plan

Based on the strategic analysis summarized above, FEDA adopted the following strategy statement:

“Over the next three to five years, FEDA will pursue both product re-design and market diversification, while strengthening staff capacity and other key institutional resources.

“Our credit product will be redesigned to meet the needs of repeat clients, with the aim of increasing client retention. We will become a non-bank financial institution (NBFI) within two years and will begin mobilizing savings from our clients. Ongoing staff training, a review of staff compensation levels, and development of MIS will also be pursued.

“By the end of our five-year plan, we aim to have 20,000 active clients and to be financially sustainable.”

OBJECTIVES AND ACTIVITIES

FEDA outlined how its overall strategy would be reflected in each area of the institution as specific objectives and activities.

- **Products and Services**

Objective: Have lending products that attract a growing number of clients who remain in the program.

- Activities:
 - Redesign current group lending product.
 - Train staff in revised loan terms and conditions (see Institutional Resources section below).

Objective: Develop voluntary savings products that respond to clients’ needs and which can serve over time as a source of portfolio financing.

- Activities:
 - Follow development of regulation on non-bank financial institutions, applying for NBFI status to be effective by end of Year 2 of the plan.
 - Develop savings product parameters.
 - Train staff to implement new savings program (see Institutional Resources section below).

- **Marketing Channels**

Objective: Expand market penetration in current Brownstown Market area.

- Activities:
 - Promote re-designed group lending product to current and potential clients in Brownstown Market area.

Objective: Expand lending activity to new market in East End.

- Activities:
 - Open new branch in East End August of Year 1 of the plan and begin lending in September.

Objective: Introduce new savings product, based on appropriate legislation and institutional capacity.

- Activities:
 - Educate clients about pending savings services.
 - Introduce new savings services in Brownstown and East End.

- **Institutional Resources and Capacity**

Objective: Develop staff and systems in order to achieve growth in portfolio and introduction of savings services.

- Activities:

Board/Management:

- Create committee to explore filing for NBFIL license for introduction of new savings by the end of Year 2.

Human Resource Management:

- Conduct salary review and implement any appropriate increases effective January of Year 1.
- Develop plan for significant program staff expansion.
- Train staff in revised loan terms and conditions and in savings mobilization.
- Strengthen financial management skills of executive director and finance manager.

Administration:

- Research new MIS: develop detailed user specifications; select loan tracking system; install new system in 1st quarter of Year 2 of the plan.

Financing:

- Obtain capital grants and debt (concessional and commercial) to fund portfolio growth (based on financial projections).

Financial Management:

- Strengthen financial management skills of executive director and finance manager (as noted above).
- Develop detailed financial projections (to follow).

FEDA Case Study: Products and Services

NOTE: Change so that a different person has an opportunity to enter data from the keyboard. Rotate in each session so that everyone has an opportunity to practice.

Page: Products

- **Number of Products:** Based on its strategic plan (Case 10), FEDA has decided to offer a single lending product and two voluntary savings products (a passbook account and a term deposit). Give a name to Term Loan Product 1.
 - Click on the gray “Prod 1” button that appears to the right of “Term Loan Product Design” Section. This will take you to the Loan Product Design Sheet (“PDS”) for Product 1.

Page: Loan Product Design Worksheet, Product 1 (“PDS1”)

- **Current loan product design:** Input the product definition information for FEDA’s existing single group lending product. **Enter the product as *currently* designed** using the **INITIAL BALANCES** column. First input all current information, and then later you will *redesign the product* using the Month 1 column.

Step 1: Average loan amount

- All members receive the same loan amount at the same time:
 - first loans are always: S.100
 - second loans are always: S.200
 - third loans are always: S.300
 - fourth loans are always: S.400
 - additional loans are allowed, but are fixed at S.400
- Index the loan amounts to increase by inflation at the beginning of each year

Step 2: Repayment Conditions

- All loans are made with **monthly payments** and a contractual loan term of 12 months. As FEDA’s clients, on average, pay off their loans within the loan term, the “effective loan term” is also 12 months.
- No grace period is offered on loans

Step 3: Compulsory Savings

- Clients are required to establish a savings account equal to 10% of their requested loan amount (the same figure for all loan cycles). There are no “ongoing” compulsory savings requirements.
- FEDA plans to eliminate all compulsory savings in Month 25, as voluntary savings products are introduced.

Step 4: Pricing Structure

- Interest charged on loans is currently 32% annually calculated on a declining balance, with amortized principal repayments.
- Loans are charged a 2% commission at the time of disbursement.
- (Loans are not indexed to an external value, nor are there additional upfront or ongoing fees.)

Step 5: (Insurance: FEDA does not plan to offer any insurance products.)

Step 6: Analysis

- Review the Analysis table presented here. It is a summary of the main features of the loan product as currently designed.
- ❖ Now return to Step 1 and use the gray input cells (in Month 1) to redesign this product according to the findings of the market research in Case 3, repeated below for your convenience:
- “Existing and former clients tend to be somewhat dissatisfied with FEDA, primarily because they feel that loan terms and sizes are inflexible and not meeting their needs, especially in later loan cycles. Clients express dissatisfaction with the current loan ceiling as well as the length of time it takes them to move up to higher loan amounts. Loan sizes start at S.100 per individual for first loans and increase by S.100 for each loan until the loan ceiling of S.400 is reached.”*
- ❖ **This is a crucial step in the planning process.** Be sure to give consideration to criticisms clients have of the existing loan product and to concerns over potential competition.

After redesigning the product, use the analysis table in Step 5 to study the new product:

- On Line A of the “Step 6: Analysis” section, input the Month number that you want to analyze (likely “1,” if that is when you redesigned the loan product).
- Note that the “cost to client including savings” column will not be complete until the interest rate paid on compulsory savings is entered.
- If the effective interest rate changes between loan cycles, try to determine why.
- Click on the “Close Window” button (on the left of the lower tool bar), which returns you to the Products page.

- You can review here the overall design of your term loan product.

❖ **Savings Products:**

- ❖ Complete the requested information for compulsory and voluntary savings products, considering the following points:
 - Compulsory savings are held by Freedomia National Bank (FNB), so they never appear on FEDA's balance sheet. FNB pays 8% interest on deposits.
 - Enable two voluntary savings (passbook and term deposit) products by giving them names.
 - The interest rates paid by commercial banks for savings products are 8% for passbook accounts and 12% for term deposits.
 - FEDA has been told that the non-bank financial institution (NBFI) legislation will require that 25% of the amount held on deposit would need to be placed in short-term reserve deposits, and the remainder is available for on-lending at the institution's discretion. FEDA's board has indicated that it would insist on a higher reserve level of 40% for the passbook accounts.
 - FEDA does not intend to index its voluntary savings products.

Advanced Option: Adding a Second Loan Product

If you have time and your group wishes to work with some advanced features of Microfin, you can add a second loan product – Individual Loans.

On the **Products** page, in “Enable Term Loan Products,” enable Product 2 and then give it a name.

In the “Automated Term Loan Product Graduation” section indicate that you wish to graduate clients from Product 1 to Product 2.

Then use the “Ln Products” menu on the Pagebar to take you to the **Loan Product Design Worksheet, Product 2 page**.

Step 1: Average Loan Amount

Select amounts that are logical for the context of the market and that allow a smooth transition for your best clients in the group lending product. (Remember to begin the new product in Month 1, as there are no individuals loans in the initial balances.)

Step 2: Repayment Conditions

Select loan terms that reflect market conditions.

Step 3: Compulsory Savings

This product does not require any compulsory savings.

Step 4: Pricing

Select an interest rate and commission for this product.

Step 5: Analysis

Review the information. You may also want to review the PRODUCT SUMMARY section at the top of the PRODUCTS sheet.

FEDA Case Study: Marketing Channels / Projecting Term Loan Product Activity Levels

NOTE: Change so that a different person has an opportunity to enter data from the keyboard. Rotate in each session so that everyone has an opportunity to practice.

FEDA now moves on to the **Branch** page to generate projections for their various financial products.

Page: **Branch**
Section: **Loan Product Projections**

1. To develop projections for the group lending product, click on the “Prod 1” gray button, which brings you to the **Loan Product Activity Sheet (“PAS”)**.

Page: **Loan Product Activity Sheet**
Section: **Loan Projection Input Section**

2. The following information has been provided by the Credit Manager.

Step 1: Initial Balances

- As of December 31 of the current year, FEDA projects 6,000 outstanding loans with the following composition:

<u>Number Of Active Clients:</u>	
First loans	25%
Second	25%
Third	20%
Fourth	15%
Fifth	10%
Sixth and greater	<u>5%</u>
Total	100%

- The total outstanding portfolio as of December 31 will be S.1,100,000. FEDA decided to use Microfin’s projections of loan repayments.

Step 2: Number of Clients

- ❖ **NOTE: In the following projections, your decisions on projected numbers of clients should be based on the projected demand in FEDA’s markets, as well as on FEDA’s mission, current strengths and weaknesses, growth strategy, and potential resources. FEDA’s goal is reach a total of 20,000 active borrowers by the end of the five year plan.** As you make your estimates, use the graphs of active clients and loan portfolio, as

well as the information on summary lines showing the number of clients at the end of Step 3 to determine what level of activity you are comfortable with.

For its **Loan Projections Approach**, FEDA chooses to:

- project activity by **total** number of clients at the end of each period
- input annual targets and then refine by month.
- Initial projections are that growth in the number of active clients participating in group loans in Brownstown could grow from the current 6,000 to between 14,000 and 18,500 by the end of Year 5.
- The East End branch is scheduled to begin lending in September of Year 1. Thus, the Year 1 target will likely be very low. The Year 5 target is expected to between 5,000 and 7,500 active loans.

Step 3: Retention rates

- FEDA's current annualized client retention rate is about 68%. The strategic plan has addressed a number of ways in which this retention rate can be improved significantly. FEDA hopes to reach an overall annualized retention rate of 80%. Phase in FEDA's projected improvement from 68% to 80% over the course of the first year. Study the numbers generated at the end of this section, comparing them to market demand estimates to make sure that you are not overestimating the total number of potential clients.

Advanced Option, with second loan product

If you are working with two products, you should enter the following graduation rates starting in whatever future month you plan to start offering the new individual loan product:

Second cycle	0%
Third cycle	0%
Fourth cycle	10%
Fifth cycle	20%
Sixth cycle	20%

Note how the product retention rates automatically lower to compensate for the graduation rates entered.

Step 4: Resting and Delayed Disbursements

- FEDA decides not make use of these features for now.

Step 5: Review Graphs

- Review the Loan Projection Output Section and study the graphs, paying particular attention to growth in the loan portfolio.
- What determines the top line in the graph of "Number of Clients by Cycle"?
- What determines the area in the colored interior bands in the graph "Number of Clients by Cycle"?

Advanced Option

If you are working with two loan products, you now need to enter the data for the second product.

- All initial balances are “0”.
- Review the number of clients that graduate to the second product. You can add figures for “new clients” that receive individual loans without having to first pass through group loans.
- Select retention rates for the individual loan product.

When you have finished reviewing the graphs, click on the “Return from Graph” button (at the far left of the lower toolbar) to return to the **Branch** page. You can review here a summary of your loan product(s).

FEDA Case Study: Marketing Channels / Projecting Voluntary Savings Activity Levels

NOTE: Change so that a different person has an opportunity to enter data from the keyboard. Rotate in each session so that everyone has an opportunity to practice.

Page: **Branch**
Section: **Savings Projections**

1. There is a projected total of S.140,000 in **Compulsory Savings** on deposit at FNB as of December 31 (though entered in Microfin, this amount does not appear on FEDA's financial statements). Review the projected balance of compulsory savings. What happens to the savings balance in Month 25?

2. Complete the projections for the new **Passbook Savings** product, using the following information:
 - Step 1: Initial Balances: There are no initial balances for depositors or amounts. You should identify between 1 and 4 market segments for "Non-Borrower Market Segments" (Source 2).

 - Step 2: Number of Depositors: FEDA plans to begin offering voluntary savings in January of Year 3, estimating that 25% of borrowers will be willing to open voluntary savings accounts right away. As client confidence and awareness increase, the percentage of borrowers voluntarily saving is projected to increase to 60% by the end of Year 3, at which point it levels off. (Advanced option: If you have a second loan product, you should estimate the percentage of these clients likely to open savings accounts.)

 - In addition to its borrowers, FEDA expects substantial demand from non-borrowers, or "Savers Only," to open passbook savings accounts, starting in Month 25. FEDA estimates 100 new accounts per month through Year 5 (you may spread these 100 clients among your identified market segments).

 - Step 3: Average Savings per Depositor: FEDA plans to link savings balances to inflation. Average savings account balances for borrowers are estimated to begin at S.30 in Month 25, and then to increase by 2% per month (over inflation). (Be mindful that the input here is the *growth* rate for the average balance. You will need to enter an absolute figure rather than a percentage figure to initiate growth from 0.)
 - Input average balance figures for the "Savers Only," estimating them based on the figures you have just entered for borrowers' savings accounts.

3. Complete the projections for the new **Term Deposit** product using the following information:

- Step 1: Initial Balances: There are no initial balances for depositors or amounts.
 - Step 2: Number of Depositors: FEDA plans to begin offering term deposits in Month 25, estimating that 3% of borrowers will open accounts, with that percentage growing to 5% of borrowers by the end of Year 3
 - In addition to its borrowers, FEDA expects “Savers Only,” to open 10 new accounts per month starting in January of Year 3 (you may spread these 10 clients among your identified market segments).
 - Step 3: Average Savings per Depositor: FEDA plans to link savings balances to inflation. Average savings account balances for all term depositors are expected to start at S.150 and grow by 4% per month in real terms throughout Year 3. The monthly growth rate is projected to drop to 2% starting in Year 4.
4. Review the aggregate savings activity and study the graphs carefully.

FEDA Case Study: Institutional Resources and Capacity (Part I): Loan Loss Provisions, Write-offs, and Credit Officers

NOTE: Change so that a different person has an opportunity to enter data from the keyboard. Rotate in each session so that everyone has an opportunity to practice.

With credit and savings activity projections complete, FEDA now turns to a detailed analysis of the institutional resources and capacity necessary to achieve these levels.

Page: **Branch**
Section: **Income Projections; Financial Costs**

1. Note that the next section in the flow of the **Branch** page is the **Income Section**. Income projections for Credit and Savings (“C&S”) activity are complete, based on the portfolio projections and the pricing structure established on the Products page. Review these projections and the graphs if you haven’t already done so.
2. Because the Branch page follows the flow of the Income Statement, the next section is **Financial Costs**. This information will *not* be complete until after the financing section has been filled in later in the process of completing the model.

Page: **Inst.Cap.**
Section: **Loan Loss Provision and Write-off Policies**

3. Next comes the Loan Loss Provision and Write-off section. Before continuing on the **Branch** page, go to the **Inst.Cap.** page and complete the Loan Provisioning and Write-off Policies section, based on the following information:
 - FEDA chooses to block negative loan loss provisions, so that its projections do not reflect decreases in the amount of the loan loss reserve.

Page: **Branch**
Section: **Loan Loss Provision**

4. Return to the **Branch** page and complete the Loan Loss Provision and Write-off section based on the following information:
 - FEDA wrote off only 0.6% of its portfolio this year. Management views this level as too little, and expects write-offs to be 1.0% of the portfolio in the future.
 - FEDA’s current Loan Loss Reserve Ratio is 5.3% of the Outstanding Gross Portfolio. FEDA targets a Reserve Ratio of 5%, which they think this figure is appropriate for FEDA’s future projections.
 - The loan loss reserve as of December 31 (“initial balance”) is \$ 58,000.
 - Advanced Option: If you are working with a second product, enter figures for this product.

Page:	Inst.Cap.
Section:	Loan Officer Analysis

5. Go back to the **Inst.Cap.** page. Microfin allows you to use whatever name you choose for “loan officer” (such as promoter, field agent, credit officer, etc.) At the beginning of the “Staffing Information” section, give the full and abbreviated titles (singular and plural) that you would like to use for loan officer.

Page:	Branch
Section:	Loan Officer Analysis

7. Returning to the **Branch** page, continue with the Loan Officer Analysis section, using the following information:
 - Experienced field staff currently work with caseloads of 325 group lending clients.
 - Entry-level loan officers generally work with 25% of a full caseload, secondary level staff with 50%, and intermediate-level staff with 75% of a full caseload. They generally take 6 months to move from entry to secondary level and then four months to move up to each subsequent level. FEDA tries to hire new loan officers in groups of four or more, in order to coordinate staff orientation and training.
 - Of the 22 officers currently working, none are at entry level, 3 are at secondary level, 9 are at intermediate level, and 10 are at senior level.
 - Review the projecting hiring patterns and the related graphs. Be sure you understand the logic and flow of the loan officer projections. (Don’t worry about slight overcapacities of one or two loan officers for a few months. These do not affect long-term projections.)

FEDA Case Study: Institutional Resources and Capacity (Part II): Staffing Projections

Page:	Branch
Section:	Number of Branches

- On the **Branch** page, FEDA plans to open its second branch in East End in August of Year 1. Fill in “2” at this point in time for the **NUMBER OF BRANCHES SECTION**. (This information will be used later for automated calculation of staffing and expenses.)

Page:	Inst.Cap
Section:	Branch-Level Staffing

Note: You will find that information has already been filled in on the Inst.Cap. page for Head Office-level staffing, other operating expenses, and fixed assets. Do not erase this information. You will need it later.

1. The next section projects branch-level staffing. Use the following information to fill in the appropriate sections on the **Inst.Cap** and **Branch** pages:
 - On the **Inst.Cap** page, in addition to the loan officers, the positions of Credit Supervisor, Branch Manager, and Bookkeeper are considered as part of the **BRANCH-LEVEL STAFFING**. With savings activity in Year 3, tellers and security guards will be added to the branch-level staffing. (All other staff are currently considered as Head Office-level costs.)

FEDA plans to have 2 security guards for each branch, once savings are offered in Month 25. Decide on appropriate staffing levels for all other staff positions by linking each of the staff positions to one or more of the various options listed in the linkage boxes to the right of the job titles. For example, the number of credit supervisors might be linked to the number of loan officers at a ratio of 1:8 (one credit supervisor for each 8 loan officers). To indicate this relationship, on the “Credit Supervisor” line you would input “8” in the linkage box under “loan officers.”

- Review the automated projections on the **Branch** page and manually correct any staffing projections by entering new information in the blue and gray cells. Be sure to only hire tellers and security guards starting in Year 3 when the savings program begins (you can do this by entering 25 in the “Start Month” column on INST CAP). Note that the maximum number of security guards will be 2 for each branch, or a total of four.
- Review the staffing graphs and the staffing ratios.
- As branch activity levels increase, do you anticipate the need to hire any additional staff at the branch level? If so, input as needed.

2. Salaries must be projected next:

- It is estimated that salaries would need to immediately rise by 25% to be competitive. *Current* monthly compensation levels (including salaries, benefits, taxes, etc.) are listed below, along with the salary range showing a 25% increase. (Note that Microfin does not need to know the current salaries, only the new.)

	<u>Current</u>	<u>25% increase</u>
• Loan officers, Entry Level	S. 270	S. 338
• Loan officers, Secondary Level	S. 300	S. 375
• Loan officers, Interm. Level	S. 325	S. 406
• Loan officers, Senior Level	S. 360	S. 450
• Credit Supervisor	S. 450	S. 562
• Branch Manager	S. 630	S. 788
• Bookkeeper	S. 325	S. 406

- *Projected* monthly compensation levels for the new positions (already adjusted by 25%) are:
 - Tellers **S. 338**
 - Security Guards **S. 220**

- Compensation levels are increased at the beginning of each fiscal year, with the board generally voting for an increase equal to the inflation rate. Indicate this on the **Inst.Cap.** page.
- Review the automated projections on the Branch page and, as you deem appropriate, manually correct any salary projections by entering new information in the blue and gray cells.

Note: Information for most of the HEAD OFFICE-level staffing and expenses has already been entered in the model to save time. Review this information (1) to see how it has been entered, and (2) to make any adjustments you think necessary. **You will need to input the items related to the legal transformation of FEDA, and the sections on MIS, In-kind Subsidies, and Taxes (all noted below in larger case bold).**

3. Review (or complete) the information for Head Office-level staffing using the following information:

Page: Inst.Cap.
Section: Head Office-Level Staffing

- For **HEAD OFFICE-LEVEL STAFFING**, FEDA has the following positions, with one person in each position: Executive Director, Finance Manager, Bookkeeper, Secretary, and Runner. The positions of MIS Supervisor, MIS Support Staff, Human Resources Director, and Savings Director are included. **An Internal Auditor and Internal Sub-Auditors (one sub-auditor for every 5,000 borrowers, starting Month 21) should be added when FEDA becomes an NBF.** *(Note that you should NOT link all Head Office-level staff using the optional links on the Inst.Cap. sheet, as most Head Office positions are generally fixed, e.g., there is always one Executive Director, there is no need to establish automated linkages.)*

Page: Head Office
Section: Head Office-Level Staffing

- Current monthly compensation levels (including salaries, benefits, taxes, etc.) are listed below. These salaries would need to be increased 25% to remain competitive.

	<u>Current</u>	<u>Increased 25%</u>
Executive Director	S. 960	S. 1,200
Finance Manager	S. 640	S. 800
Bookkeeper	S. 375	S. 469
Secretary	S. 285	S. 356
Runner	S. 200	S. 250

- *Projected* monthly compensation levels for the new positions are given below. (Note: you can enter these figures in the Month 1 column; as there are no staff in early months, total payroll will not be affected):

- MIS Supervisor S. 750
- MIS Support staff S. 500
- Human Resource Director S. 750
- Savings Director S. 750
- **Internal Auditor S. 750**
- **Internal Sub-auditor S. 500**

- Increase staffing levels for these positions as needed as lending and savings activity increases. Also, note increases in salary levels for senior management, once FEDA converts to being a non-bank financial institution.

FEDA Case Study: Institutional Resources and Capacity (Part III)

NOTE: Change so that a different person has an opportunity to enter data from the keyboard. Rotate in each session so that everyone has an opportunity to practice.

Now use the following information to complete projections for Other Operational Expenses on both the **Inst.Cap.** and the **Branch** pages, using the automation of expenses feature.

Page:	Inst.Cap.
Section:	Branch-Level Other Operating Expenses

Category	Inflation	Linkages
Rent	Adjusted annually for inflation	S. 1000 per branch office
Utilities	Adjusted monthly for inflation	S. 150 per branch office
Transportation (daily courier service, plus buses and taxis for loan officers)	Adjusted monthly at 80% of inflation	S. 300 per branch office + S. 80 per loan officer
General office expenses	Adjusted monthly for inflation	S. 80 per branch staff person
Repairs, maintenance, insurance	Adjusted monthly for inflation	S. 50 per branch office

Page:	Branch
Section:	Other Operating Expenses

- Miscellaneous expenses: **8%** of total non-personnel costs. (Note that miscellaneous expenses are input on the **Branch** page.)
- Review the expense projections on the **Branch** page carefully for accuracy. Use the graphs to analyze the data.

1. Review (or complete) the projections for Other Operational Expenses at the Head Office level using the following information:

Page:	Inst.Cap. AND Head Office pages
Section:	Head Office-Level Other Operating Expenses

(Note: When not using automated linkages, some of this information is entered directly on the **Head Office** page.)

Category	Linkages	Inflation
Rent	(None)	Adjusted annually for inflation
Utilities	(None)	Adjusted monthly for inflation
Transportation (vehicle costs)	(None)	Adjusted monthly for inflation
General office expenses	S. 100 per staff Head Office staff person	Adjusted monthly for inflation
Repairs, maintenance, and insurance	(None)	Adjusted monthly for inflation
Professional fees and consultants	(None)	Adjusted annually for inflation
Staff training	(None)	Adjusted annually for inflation
Board expenses	(None)	Adjusted annually for inflation
MIS Maintenance	(None)	Adjusted annually for inflation
External Audit		Adjusted annually for inflation
Deposit insurance	(None)	Not adjusted

- Rent FEDA S. 750 (through Month 21 only, when plans to buy a building)
- Utilities S. 250
- Transportation S. 800
- General office expenses (Linked)
- Repairs, maintenance, insurance S. 100
- Professional fees and consultants S. 600
- Staff training S. 350 monthly for years 1-2, S. 800 per month starting Year 3
- Board expenses S. 200 per month, for years 1-2, S. 400 starting Year 3
- MIS Maintenance S. 417 (beginning in Year 3)
- **External audit: S. 4,200 per year, or S. 350 per month**
- **Deposit insurance 0.042% per month (0.5% annual) of savings balance starting Month 25**
- Miscellaneous expenses: 8% of total non-personnel costs

FEDA Case Study: Institutional Resources and Capacity (Part IV): Fixed Assets and Other Major Assets

Page:	Inst.Cap.
Section:	Branch-Level Fixed Assets

1. Project Fixed Assets for the credit and savings program using the following information, entering on the **Inst.Cap.** page:

Category	Base price	Infl	Life	Linkage
Computers	S. 2,000	80%	5 years	One per 3 branch staff
Assorted office furniture	S. 2,000	100%	7 years	One per branch
Employee office furnishings	S. 300	100%	7 years	One per branch staff

Page:	Branch
Section:	Branch-Level Fixed Assets

2. Add the following information on initial fixed assets on the **Branch** page:

Category	Total purchase value	Number and remaining life
Computers	Total cost of S. 8,000	2 with 2 years remaining; 2 with 1 year remaining
Assorted office furniture	Total cost of S. 2,000	1 set with 3 years remaining;
Employee furniture groupings	Total cost of S. 9,000	12 sets have 2 years remaining; 8 sets have 4 years remaining; 7 sets have 5.5 years remaining

- All the branch-level fixed assets have a combined total accumulated depreciation of (S.8,000).
- Review the new fixed asset purchases as the branch expands. Remember that this section only includes branch-level fixed assets.

Page:	Inst.Cap.
Section:	Head Office-Level Fixed Assets

3. Review (or complete) projections for Fixed Assets related to the head office on the **Inst.Cap.** page.

Category	Base price	Infl	Life	Linkage
Computers	S. 2,000	80%	3 years	1 per HO staff person
Assorted office furniture	S. 12,000	100%	7 years	(None)
Vehicle	S. 20,000	100%	6 years	(None)

Page: Head Office
Section: Head Office-Level Fixed Assets

4. Review (or complete) the following information on fixed assets on the **Head Office** page:

Category	Initial purchase value	Number and remaining life
Computers	Total cost of S. 6,000	3 with 1.5 years remaining
Assorted office furniture	Total cost of S. 12,000	1 unit with 3 years remaining
Vehicles	Total cost of S. 17,000	1 with remaining life of 1.5 years

- Total accumulated depreciation is (S.14,000).
- Project additional fixed assets as the program expands, including new computers to support the new MIS, and any additional office furniture. Also review the projected replacement purchases.

Complete the final input sections on the Head Office and Inst. Cap pages:
--

Page: Inst. Cap & Head Office
Section: Land and Building; Other Assets Analysis

5. Complete projections for Land, Buildings, and Other Assets.
- FEDA owns no land or buildings initially; FEDA plans to buy land and a building in Year 2 to serve as the headquarters of their NBF. They anticipate paying S.200,000 in Month 21 (\$50,000 of which is estimated to be the value of the land). They will depreciate the building over 25 years.
 - They project purchasing a new MIS at the beginning of year 2 for S.75,000, which would be treated as an asset and amortized over 5 years (all assets in this section are automatically amortized over 5 years by default).

Page:	Head Office
Section:	Taxes

- FEDA will be required to pay taxes of 10% on “net income before taxes” once they convert to an NBFI, effective beginning in Year 3. (Hint: Create a formula drawing from the net income calculations on the Income Statement from the **Fin. Statements** page. Be careful to not create a circular reference. Hit F9 and look at the output on the Taxes line of the Income Statement to make sure the worksheet is calculating correctly.)

Page:	Inst. Cap & Head Office
Section:	In-kind subsidies

- FEDA is an affiliate of the Freedom International network and receives free technical assistance support. The estimated value of this support is S.12,000 per year for Year 1. In Year 2, this is projected to increase to S.36,000 per year for the coming four years as additional support would be provided given the transformation to a regulated financial institution. Enter these figures as their monthly equivalents.

FEDA Case Study: Financing

Page:	Fin. Sources
Section:	Sources of Financing

1. Complete the **Fin. Sources** page using the following information:

- FEDA has a commitment for an **unrestricted grant** from the Greenland Development Agency (GDA). To date, FEDA has received S.500,000 of the S.1,200,000 grant from GDA.
- FEDA is actively discussing a **loan fund capitalization grant** of S.1,000,000 from the Head Start Foundation.
- FEDA had the following **loans outstanding for portfolio** financing:
 - Freedonia National Bank (FNB): S. 320,000 at an interest rate of 18% annually.
 - International Development Corporation (IDC): S. 280,000 at 5%, with the balance indexed to the Euro (giving an initial balance of Euro. 140,000).
- FEDA was also exploring another **potential loan source for portfolio** financing:
 - The managing director of FUNDALL (an “apex” funding institution) had contacted FEDA and discussed a possible loan of up to S.500,000. This loan would be at an annual interest rate of 14%.
- Savings reserve levels were established earlier in the savings product definitions. FEDA’s Board had indicated that they would restrict the **TREATMENT OF SAVINGS** solely to loan portfolio financing.

Page:	Fin. Sources
Section:	Initial Allocation of Available Assets

2. For **ALLOCATION OF AVAILABLE ASSETS**, FEDA’s initial balance sheet showed available cash and investments of S.411,600. Of this amount, S.250,000 was a balance from a fund restricted by the original donor for portfolio financing. The remaining balance was unrestricted in use.

Page:	Fin. Sources
Section:	Liquidity Requirements

3. Management had set a minimum **PORTFOLIO LIQUIDITY MARGIN** of 25% of monthly loan disbursements, and a minimum **OPERATIONAL LIQUIDITY MARGIN** of 33% of cash expenses.

Page:	Fin. Sources
Section:	Market Rate Cost of Funds

4. The market rate cost of funds was currently 18% and was expected to remain at this level for the foreseeable future. FEDA considered any interest rate that is at least 90% of this value to be “market rate.”

Page:	Fin. Flows
Section:	Financing by Source

5. On the **Fin. Flows** page, enter the following information:
- The GDA grant will be disbursed S.350,000 in July of Year 1 and S.350,000 in January of Year 2.
 - The Head Start portfolio grant of S.1,000,000 would likely be available in two equal disbursements in March and October of Year 1.
 - The FNB loan is scheduled to be repaid 50% in June of Year 1 and the remainder in June of Year 2. Because FEDA intends to eliminate the compulsory savings held by FNB and enter into direct competition for savings services, management does not expect this loan to be renewed.
 - Principal repayment on the IDC loan is to start in June of Year 1, with semi-annual payments of 20,000 Euros over the next 3.5 years. FEDA anticipates a new loan of 250,000 Euros from IDC when it pays off the current loan in June of Year 4.
 - Discussions with FUNDALL indicate mutual interest in a loan of up to S.500,000. Funds would be available beginning in late in Year 1. (HINT: After inputting the other financing information, input the proposed disbursements for FUNDALL at the times when there are projected liquidity shortfalls.)

Page:	Fin. Flows
Section:	Income on Investments

- FEDA does not earn interest on cash deposits.
- They earn 8% on short-term investments, 8% on savings reserves, and 12% on long-term investments.

Page:	Fin. Flows
Section:	Automated Default Sources

6. Determine funding shortfalls by the following process:

- Having projected its known and potential sources of financing, FEDA found that it would be able to cover most of its funding requirements through Year 2. However, FEDA saw that it would need substantial amounts of financing beginning in Year 3.
- Use the “Automated default sources” option at the top of the **Fin. Flows** page to project the level of funding required to cover any shortfalls. Use a mix of grants and loans, but assume that any default financing will be 100% from loans at the market rate of 18%.
- The FEDA Board has expressed a reluctance to exceed an Equity Multiplier ratio of 2.5 to 1.
- Review the graphs, especially the following that appear near the end: Operational and Financial Sustainability, Operating Cost Ratio, Asset Composition, Liability and Equity Composition, Equity Multiplier Ratio. Do the graphs reflect FEDA’s strategy? Do they appear realistic and achievable?
- Make any further revisions to your projections that are needed in order for the various aspects of FEDA’s strategy to be implemented.