

FINANCIAL COMPONENT OF WHOLE-FARM BUSINESS PLAN



- Current Financial Assessment
- Strategic Analysis of Alternatives
- Financial Projections
- Financial Planning
- Planning Farm Size
- Improving Performance
- Incorporating the Financial Plan into the Whole-Farm Business Plan

Module Name: Financial Analysis
Session Number: Session 6

Introduction



- The Financial Component "Puts The Financial Statements and Tools To Work"
 - An outline or summary of the type, volume, and value of production to be carried out on the entire farm, and the resources needed to do it.
 - What the firm might do
 - What the firm can do
 - What the owners and managers want to do
 - What the firm should do
 - Because every business and family situation is unique, a roadmap for planning is needed
 - Provide information regarding past performance, and provide comfort to move forward

Module Name: Financial Analysis
Session Number: Session 6

Current Financial Assessment



- Answer the following questions:
 - Am I profitable, solvent, liquid, and efficient?
 - Do I have adequate resources?
 - Can I repay obligations?
 - Do I need to make changes to avoid or respond to financial stress?
 - Will the current operation achieve the objectives and goals of the owners, managers, and other stakeholders?

Module Name: Financial Analysis
Session Number: Session 6

Current Financial Assessment



- If the current financial assessment suggests that the current operation will achieve the objectives and goals of the owners and managers, then the task becomes one of monitoring financial progress over time to assure the business remains on track
 - Monitor year end financial statements
 - Compare projected cash flows to actual

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Session Number: Session 6

Strategic Analysis of Alternatives



- Most of the time, however, growth or change is seen as necessary
 - Review strengths, weaknesses, opportunities, threats
 - Internal factor analysis
 - External factor analysis
 - Consider alternatives
 - Increase size
 - Change enterprises or current practices
 - Value added
 - Re-organize, downsize, re-structure, liquidate, etc.
- Detailed financial projections are needed

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Session Number: Session 6

Financial Projections



- Short-Run Budgeting
 - Short-run budgets that assume some resources are fixed should generally incorporate assumptions about prices, costs, and other factors that are expected to hold true over the next production period
 - Partial budgets
 - Enterprise budgets
 - Whole-farm cash flow budgets

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Session Number: Session 6

Financial Projections

- Long-Run Budgeting
 - When major changes in the supply of land, labor, or other assets, or in the way they are financed are being considered, a longer-term perspective is needed
 - Very few farms are profitable every year, but a plan that involves a longer-term investment or financing decision should project a positive net income in an average or typical year using long-term projected prices and after accounting for capital acquisition costs

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Session Number: Session 6

Financial Projections

- Long-Run Profitability
 - The following procedures should be used for developing a typical year enterprise budget:
 - use average or long-term planning prices
 - use average or long-term yields and performance
 - assume that sales are equal to production within a typical year
 - ignore borrowing and repayment of operating loans
 - » remember we are examining profitability potential with the enterprise budget, these are cash flow items, not profitability items

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Session Number: Session 6

Financial Projections

- Long-Run Feasibility
 - The following procedures should be used for developing a multi-year year cash flow budget:
 - Use average or long-term planning prices
 - Use average or long-term yields and performance
 - Assume that sales are equal to production within a typical year
 - Remember loan payments, and borrowing capacity
 - Don't forget capital purchases

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Session Number: Session 6

Financial Planning

- Historical financial statements are often the starting point for developing a financial plan
- Financial planning can be used to examine:
 - Impact of different growth strategies
 - Impact of investing in a major asset
 - Impact of adding new enterprise or value added activities
 - Alternative downsizing strategies

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Session Number: Session 6

Financial Planning

- **Step 1:** Review and formulate goals and objectives, make sure they are consistent with mission and vision
- **Step 2:** Identify possible alternatives that are consistent with goals and objectives
- **Step 3:** Project profitability and financing needs for each alternative

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Session Number: Session 6

Financial Planning

- **Step 4:** Choose a combination of alternatives
- **Step 5:** Inventory available resources
 - Labor, machinery, buildings, and land
 - Identify surpluses and shortfalls, and develop a plan for aligning resources with business needs
- **Step 6:** Prepare whole-farm financial projections (balance sheets, income statements, cash flows, and sources and uses of funds)

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Session Number: Session 6

Financial Planning



- Liquidity, Solvency, Profitability, Efficiency, and Debt Repayment
 - Financial projections (statements, projected ratios, etc.) should be generated to evaluate likely important financial outcomes
 - This is especially important when major investments in fixed assets or major changes in non-current debt are being considered

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Session Number: Session 6

Financial Planning



- Use computer tools available
 - Simple spreadsheets
 - Stand-alone templates of individual statements, budgets, etc.
 - Integrated templates that tie the statements together
 - Complete packages
 - FINPACK (CFFM, Univ. of Minn.)
 - IFFS (Okla. State U. Ag. Econ.)


Module Name: Financial Analysis
Session Number: Session 6

Financial Planning




- Sensitivity Analysis
 - Consider how changes in key assumptions affect income, cost, and profitability projections.
 - Construct several financial plans using different values for key prices, interest rates, production rates, etc.
 - Looking at the results based on different assumptions will lessen the "shock" when things don't work out exactly as planned

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Session Number: Session 6

Financial Planning 


- Most Likely Scenario Planning Model
 - Examine impact of most likely scenario on financial statements.
 - Use sensitivity analysis to vary the assumptions made in the financial plan.
 - Revenue assumptions
 - Cost assumptions

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Session Number: Session 6

Financial Planning 

- Example: Most Likely Scenario Planning Model
 - Expansion of Operation
 - Impact on Balance Sheet:
 - Cash
 - Crop and livestock inventories
 - Machinery and equipment
 - Buildings
 - Land
 - Loan inventories
 - Net worth

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Session Number: Session 6

Financial Planning 

- Example: Most Likely Scenario Planning Model
 - Expansion of Operation
 - Impact on Income Statement:
 - Revenue
 - Costs
 - Depreciation

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Session Number: Session 6

Financial Planning

- Example: Most Likely Scenario Planning Model
 - Expansion of Operation
 - Impact on Sources and Uses of Funds Statement:
 - Net income
 - Depreciation
 - Asset purchases
 - Change in loan balances

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Session Number: Session 6

Example Expansion of Operation

Farm Cash Inflow Changes	
Wheat	43,514
Government Payments	2,266
Total	45,780
Farm Cash Outflow Changes	
Seed	2,304
Fertilizer	14,560
Herbicide and Insecticide	4,222
Fuel and Utilities	2,746
Miscellaneous	4,139
Interest	5,981
Land Purchase	164,800
Total	198,752
Ending Inventory Changes	
Land	164,800
Current Portion of Term Debt	2,796
Real Estate Debt	97,204

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Session Number: Session 6

Example Before Adjustments


Sources and Uses of Funds Statement

SOURCES OF FUNDS:

Beginning Cash	42,938
Cash Farm Receipts	359,587
Decrease in Accounts Receivable	0
Decrease in Investment in Cooperatives	0
Capital Asset Sales	0
Increase in Total Liabilities	82,850
Outside Equity Capital	0
Net Non-Farm Cash Income	12,354
Total Sources of Funds	497,729

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Session Number: Session 6

Example Before Adjustments



USES OF FUNDS:


Farm Cash Operating Expenses	214,764
Increase in Accounts Receivable	0
Increase in Investment in Cooperatives	0
Capital Asset Purchases	199,800
Decrease in Total Liabilities	0
Equity Capital Withdrawals	0
Family Living Withdrawals	45,407
Income and Self-Employment Taxes	5,749
Ending Cash	84,983
Total Uses of Funds	550,703

UNLOCATED FUNDS: -52,974

Note: If all cash flows (farm and non-farm) are accounted for, unlocated funds will be zero.

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Session Number: Session 6

Example After Adjustment to Cash and Outside Equity Capital




Sources and Uses of Funds Statement

SOURCES OF FUNDS:

Beginning Cash	42,938
Cash Farm Receipts	359,587
Decrease in Accounts Receivable	0
Decrease in Investment in Cooperatives	0
Capital Asset Sales	0
Increase in Total Liabilities	82,850
Outside Equity Capital	27,974
Net Non-Farm Cash Income	12,354
Total Sources of Funds	525,703

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Session Number: Session 6

Example After Adjustment to Cash and Outside Equity Capital



USES OF FUNDS:


Farm Cash Operating Expenses	214,764
Increase in Accounts Receivable	0
Increase in Investment in Cooperatives	0
Capital Asset Purchases	199,800
Decrease in Total Liabilities	0
Equity Capital Withdrawals	0
Family Living Withdrawals	45,407
Income and Self-Employment Taxes	5,749
Ending Cash	59,983
Total Uses of Funds	525,703

UNLOCATED FUNDS: 0

Note: If all cash flows (farm and non-farm) are accounted for, unlocated funds will be zero.

Module Name: Financial Analysis
Session Number: Session 6


Planning Farm Size



- How Big Should The Business Be?
 - Internal Questions
 - Economies of size
 - Meet family income and growth needs
 - External Questions
 - Access to markets and information
 - Technology adoption

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Session Number: Session 6


Planning Farm Size



- Three General Steps
 - Minimum needed for family living and growth
 - What gross income (or value of farm production) would typically be needed to produce this amount of income
 - How large of an investment (asset base) would typically be needed to produce this much gross income

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Session Number: Session 6

Planning Farm Size (Spreadsheet)



Spendable Income Plus Growth That The Business Is Expected To Generate		
Family Living Expense		\$45,000.00
Non-Farm Savings	+	\$0.00
Other Wants or Needs	+	\$0.00
Capital Needed For Farm Growth	+	\$22,750.00
Less Non-Farm Income	-	\$18,000.00
Income Needed From Business	=	\$49,750.00

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Session Number: Session 6

Planning Farm Size (Spreadsheet)

Growth Worksheet	
Current Farm Equity	\$650,000.00
Real Growth Rate Needed	1.50%
Projected Inflation Rate	2.00%
Projected Capital Needed For Growth	\$22,750.00

Ratios Needed For The Evaluation	
Net Farm Income From Operations	
Net Farm Income	\$55,000.00
Gross Farm Revenues	\$400,000.00
NFIFO Ratio	= 0.1375
Asset Turnover Ratio	
Gross Farm Revenues	\$400,000.00
Average Farm Assets	\$1,200,000.00
Asset Turnover Ratio (ATR)	= 0.33

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Session Number: Session 6

Planning Farm Size (Spreadsheet)

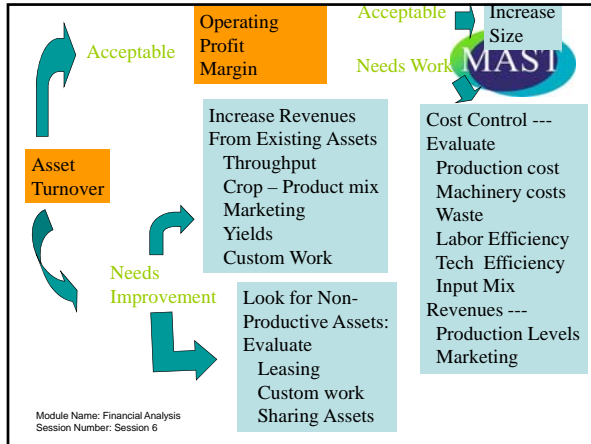
Business Size Evaluator	
Gross Farm Revenue Needed	
Income Needed From Business	\$49,750.00
NFIFO Ratio	+ 0.135
Gross Farm Revenue Target	= \$368,518.52
Assets Required To Generate Desired Revenue	
Gross Farm Revenue Target	\$368,518.52
Asset Turnover Ratio (ATR)	+ 0.33
Asset Base Needed To Achieve Goals	= \$1,116,722.78

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Session Number: Session 6

Improving Performance

- Two ways to improve operating performance (ROA)
 - Increase net per \$ of gross (OPMR)
 - Increase revenue per \$ invested (Asset Turnover)

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Session Number: Session 6



Improving Performance


- Three factors impact financial performance (ROE)
 - Operating profit margin
 - Asset turnover
 - Leverage

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Session Number: Session 6

Improving Performance


- If $ROE > ROA$
 - Average cost of capital is less than ROA
 - Making money on borrowed funds
 - Increase ROE by borrowing more (be careful)
- If $ROE < ROA$
 - ROA less than average cost of capital
 - Losing money on borrowed funds
 - Reduce interest cost
 - Reduce debt
 - Improve operating performance

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Session Number: Session 6

Incorporating the Financial Plan into the Whole-Farm Business Plan 


- Current Financial Assessment
 - Current balance sheet
 - Most recent year income statement
 - Most recent year cash flow statement
 - Most recent year sources and uses of funds
- Becomes the monitoring and control instrument

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Session Number: Session 6

Incorporating the Financial Plan into the Whole-Farm Business Plan 

- Summarize financial projections of proposed alternatives
 - Enterprise budget projections
 - Partial budget calculations
 - Cash flow projections
 - Whole-farm financial statement projections

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Session Number: Session 6

Summary 

- Current Financial Assessment
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