

FINANCIAL STATEMENTS



- Balance Sheet
- Income Statement
- Cash Flow Statement
- Sources and Uses of Funds Statement
- Tax Statements

Module Name: Financial Analysis
Session Number: Session 3

Introduction



- One of the responsibilities of a farm business manager is to evaluate financial performance.
- Financial standards and benchmarks can be used to evaluate financial performance.
- Financial statements are typically used to develop financial standards and benchmarks.

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Introduction



- Financial Statements
 - Balance Sheet
 - Income Statement
 - Cash Flow Statement
 - Sources and Uses of Funds Statement

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Introduction



- Example:
 - Financial Analysis Spreadsheet
 - Balance Sheet
 - Income Statement
 - Cash Flow Statement
 - Sources and Uses of Funds Statement

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Introduction



- Example:
 - Financial Analysis Spreadsheet
 - **Instructions**
 - Enter relevant financial information into the "Farm Cash Items", "Inventories", and "Miscellaneous Items" sheets.
 - Do not modify the "Balance Sheet", "Income Statement", "Cash Flow Statement", "Sources and Uses of Funds", and "Financial Ratios" sheets. Information in these sheets will be computed after you have entered information into the "Farm Cash Items", "Inventories", and "Miscellaneous Items" sheets.
 - Questions should be addressed to: Michael Langemeier
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Introduction



Farm Cash Inflow Items

Beef Sales, Market	128,103
Swine Sales, Market	15,854
Dairy Sales, Market (include milk)	17,503
Other Livestock Sales, Market	1,842
Beef Sales, Breeding	6,598
Swine Sales, Breeding	603
Dairy Sales, Breeding	1,238
Other Livestock Sales, Breeding	7
Corn	83,299
Grain Sorghum	22,747
Wheat	66,702
Soybeans	73,247
Hay and Forage	11,424
Other Crops	6,449
Government Payments	22,102
Crop Insurance Proceeds	16,136
Miscellaneous Income	31,117
Machinery and Building Sales	5,469
Land Sales	0

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Introduction



Miscellaneous Items

Economic Depreciation	33,595
Gain/Loss on Sale of Breeding Livestock	0
Gain/Loss on Sale of Capital Assets	0
Interest Charge on Owned Equity	8.00%
Outside Equity Capital	11,409
Net Non-Farm Cash Income	13,642
Equity Capital Withdrawals	0
Family Living Withdrawals	50,945
Income and Self-Employment Taxes	8,978
Unpaid Family and Operator Labor	50,945

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Balance Sheet



- Systematic organization of everything "owned" and "owed" by a business or individual at a given point in time
- Features:
 - Shows financial position and term structure
 - Shows liquidation value
 - Provides a SNAPSHOT in time

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Balance Sheet



- Key Measures:
 - Total Assets: The value of all financial and capital resources owned by the business
 - Total Liabilities: The value of total debt obligations
 - Owner's Equity: The value of the owner's financial claims on total assets as determined by subtracting total liabilities from total assets

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Balance Sheet



- Current Assets:
 - Cash
 - Marketable Securities
 - Accounts Receivable
 - Fertilizer and Supplies
 - Investment in Growing Crops
 - Crops Held for Sale
 - Market Livestock

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Balance Sheet



- Noncurrent Assets:
 - Breeding Livestock
 - Machinery and Equipment
 - Buildings
 - Investments in Cooperatives
 - Land

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Balance Sheet



- Current Liabilities:
 - Accounts Payable
 - Taxes Payable
 - Accrued Expenses
 - Current Portion: Deferred Taxes
 - Notes Due Within One Year
 - Current Portion of Term Debt
 - Accrued Interest

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Balance Sheet



- Noncurrent Liabilities:
 - Noncurrent Portion: Deferred Taxes
 - Noncurrent Portion: Notes Payable
 - Noncurrent Portion: Real Estate Debt

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Balance Sheet



- Deferred Taxes
 - What is the tax liability associated with liquidating all assets for exactly the amount shown on the balance sheet, and satisfying all liabilities by paying exactly the amount shown on the balance sheet?
 - MF-2358: Computation of Deferred Tax Liability

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Balance Sheet



- Valuation Issues
 - Cost vs. Market Value
 - Cost Approach
 - Initial cost plus improvements less depreciation
 - Market Value Approach
 - Estimate asset values using current prices for similar assets

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Balance Sheet



- Valuation Issues
 - Advantages to Cost Approach
 - More accurate measure of actual performance of invested capital
 - Critical to the examination of changes in equity

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Balance Sheet



- Valuation Issues
 - Advantages to Market Value Approach
 - Easy to derive
 - More comparable across farms
 - Includes opportunity cost
 - Often required by lenders

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Balance Sheet



- Valuation Issues
 - Sources of Equity
 - Contributions of equity from owners
 - Retained earnings
 - Net income less owner withdrawals
 - Valuation equity
 - Excess of the market values of noncurrent assets over their cost values (investment less depreciation)
 - Unearned and may never be realized

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Balance Sheet



- Valuation Issues
 - Financial ratios impacted by valuation method:
 - Current Ratio
 - Debt to Asset Ratio
 - Rate of Return on Farm Assets
 - Rate of Return of Farm Equity
 - Asset Turnover Ratio

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Balance Sheet



- Tips for Preparing
 - Prepare at the same time each year
 - Focus on completeness
 - Inventories! Inventories! Inventories!
 - Focus on liquidation value
 - Net worth should reflect what would be left over if the business were liquidated

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Balance Sheet



- Tips for Preparing (continued)
 - Focus on accuracy
 - Inaccurate financial statements lead to a false sense of financial security
 - Remember that long-term debt due in the next 12 months is a current liability
 - Remember deferred taxes when using market valuation method

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Balance Sheet



- Example:
 - Financial Analysis Spreadsheet
 - Contains an input screen for inventories
 - Illustrates balance sheet
 - Illustrates liquidity and solvency ratios

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Income Statement



- Summary of revenue and expenses for a given accounting period.
- The income statement is a “moving picture” that tells the story between the beginning and ending balance sheets.

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Income Statement



- Accrual Financial Reporting
 - Recognize income in the period it is earned and expenses in the period in which they are incurred
 - Accrual income and expenses could be quite different than cash income and expenses

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Income Statement



- Accrual Adjustments
 - Crops
 - Livestock
 - Government Payments
 - Crop Insurance Proceeds
 - Expense Items

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Income Statement



- Accrual Income Example
 - Beef Cash Sales 90,000
 - Ending Inventory 85,000
 - Total #1 175,000

 - Beef Purchases 60,000
 - Beginning Inventory 70,000
 - Total #2 130,000

 - Beef Accrual Income (Total #1 – Total #2) = 45,000

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Income Statement



- Accrual Adjustments:
 - Example: Accrual Fertilizer Expense
 - Cash outlay for fertilizer (1) 25,000
 - Beginning inventory (2) 10,000
 - Ending inventory (3) 12,000

 - Fertilizer expense (1) + (2) – (3) 23,000

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Income Statement



- Value of Farm Production:
 - Cash crop sales
 - Livestock and milk cash sales
 - Changes in crop and livestock inventories
 - Government payments
 - Crop insurance proceeds
 - Livestock purchases
 - Feed and grain purchased

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Income Statement



- Expenses:
 - Cash operating expenses
 - Expense inventory adjustment
 - Depreciation
 - Interest

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Income Statement



- Common Mistakes in Preparation
 - Include asset and liability values
 - Include inventory levels instead of inventory changes
 - Leave out changes in accounts receivable
 - Leave out changes in accounts payable
 - Use tax depreciation rather than economic depreciation

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Income Statement



- Example:
 - Financial Analysis Spreadsheet
 - Contains an input screen for inventories, and cash income and expenses
 - Illustrates income statement
 - Illustrates profitability and financial efficiency ratios

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Cash Flow Statement



- A cash flow statement summarizes cash inflows and cash outflows of a business for a given period of time.
- A cash flow statement could use historical data or projections.

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Cash Flow Statement



- Differences Between Cash Flow Statement and Income Statement
 - Cash flow statement does not include non-cash items
 - Inventory adjustments
 - Depreciation

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Cash Flow Statement



- Differences (continued)
 - Cash flow statement typically contains all cash flows, not just business revenue and expenses
 - Family living withdrawals
 - Asset sales and purchases
 - Principal payments
 - Income and self-employment taxes

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Cash Flow Statement



- Monitoring Actual Cash Flows
 - A cash flow budget can be used as part of a system for monitoring and controlling cash flows during the year
 - Outflows that are exceeding budgeted amounts are quickly identified, and action can be taken to find and correct the causes
 - Actual cash flow information can be used to make adjustments in budgeted values for the next year, which will improve the accuracy of future budgeting efforts

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Cash Flow Statement



- Monitoring Actual Cash Flows
 - Net Cash Flow
 - Net Farm Cash Flow
 - Farm Cash Inflow
 - Farm Cash Outflow
 - Non-Farm Cash Flow

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Cash Flow Statement



- Monitoring Actual Cash Flows
 - Unlocated Funds
 - Net Cash Flow
 - Change in Cash Balance
 - Change in Total Loans
 - If all cash flows (farm and non-farm) are accounted for, unlocated funds will be zero

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Cash Flow Statement



- Uses of a Cash Flow Budget
 - Project the timing and amount of new borrowing that the business will need during the year and timing and amount of loan repayments
 - Identify tax consequences of the timing of purchases, sales, and capital expenditures
 - Spot an imbalance between current and noncurrent debt and suggest ways to improve the situation

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Cash Flow Statement



- Features of a Cash Flow Budget
 - Contains all cash flows, not just revenues and expenses
 - Does not include noncash items such as depreciation
 - Timing of revenue and expenses is important
 - Typically contains estimates of cash flows for a future time period instead of historical information

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Cash Flow Statement



- Investment Analysis Using a Cash Flow Budget
 - Can estimate long-run cash flow consequences of new capital investments
 - Can be used to plan for possible cash shortfalls
 - Many investments may have negative cash flows for several months or even years after the investment has been made

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Cash Flow Statement



- Steps to Constructing Cash Flow Projections
 - Develop a whole-farm plan
 - Estimate crop production and livestock feed requirements
 - Estimate cash receipts from livestock enterprises
 - Estimate cash crop sales
 - Estimate other cash income

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Cash Flow Statement



- Steps (continued)
 - Estimate cash operating expenses
 - Estimate personal and non-farm cash expenses
 - Estimate purchases and sales of capital assets
 - Estimate principal and interest payments
 - Estimate income and self-employment taxes

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Cash Flow Statement



- Examples:
 - Financial Analysis Spreadsheet
 - Contains input screens for cash income and expenses
 - Summarizes annual cash flows
 - Illustrates repayment capacity measure
 - MF-275: Cash Flow Projection for Operating Loan Determination
 - Example containing monthly cash flows

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Sources and Uses of Funds Statement



- Provides a mechanism for reporting more clearly how the farm's performance during the accounting period influenced and was influenced by major funding activities
- Reconcile information in income statement, balance sheet, and cash flow statement
- Sources of funds should equal uses of funds

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Sources and Uses of Funds Statement



- Sources of Funds
 - Beginning Cash
 - Cash Farm Receipts
 - Decrease in Accounts Receivable
 - Decrease in Investment in Cooperatives
 - Capital Asset Sales
 - Increase in Total Liabilities
 - Outside Equity Capital
 - Net Non-Farm Cash Income

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Sources and Uses of Funds Statement



- Uses of Funds
 - Farm Cash Operating Expenses
 - Increase in Accounts Receivable
 - Increase in Investment in Cooperatives
 - Capital Asset Purchases
 - Decrease in Total Liabilities
 - Equity Capital Withdrawals
 - Family Living Withdrawals
 - Income and Self-Employment Taxes
 - Ending Cash

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Sources and Uses of Funds Statement



- Example:
 - Financial Analysis Spreadsheet
 - Sources of Funds
 - Uses of Funds
 - Unlocated Funds
 - If all cash flows (farm and non-farm) are accounted for, unlocated funds will be zero

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Sources and Uses of Funds Statement



Sources and Uses of Funds Statement

SOURCES OF FUNDS:	
Beginning Cash	48,293
Cash From Receipts	510,971
Decrease in Accounts Receivable	0
Decrease in Investment in Cooperatives	0
Capital Asset Sales	5,469
Increase in Total Liabilities	15,562
Outside Equity Capital	11,409
Net Non-Farm Cash Income	13,642
Total Sources of Funds	605,706
USES OF FUNDS:	
Farm Cash Operating Expenses	405,937
Increase in Accounts Receivable	152
Increase in Investment in Cooperatives	2,145
Capital Asset Purchases	62,862
Decrease in Total Liabilities	0
Equity Capital Withdrawals	0
Family Living Withdrawals	59,945
Income and Self-Employment Taxes	4,935
Ending Cash	54,717
Total Uses of Funds	605,706
UNLOCATED FUNDS:	0

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

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Tax Statements



- Form 1040: U.S. Individual Income Tax Return
 - Schedule D: Capital Gains and Losses
 - Schedule F: Profit or Loss from Farming
 - Schedule SE: Self-Employment Tax
- Form 4562: Depreciation and Amortization
- Form 4797: Sales of Business Property

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Summary



- Balance Sheet
- Income Statement
- Cash Flow Statement
- Sources and Uses of Funds Statement
- Tax Statements

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