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Introduction to Financial Statement

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THE OHIO STATE UNIVERSITY COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES NORTH CENTRAL EXTENSION EDUCATION USDA United States Department of Agriculture National Institute of Agriculture

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Session Objectives

Learn the 5 essential financial statements necessary for planning and monitoring farm profitability.

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How Good Is Your Accounting Information?

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Basic Financial Framework

Business Abilities & Financial Statements

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The Balance Sheet

- Also called the Statement of Net Worth
- Consists of
 - Assets = Liabilities + Owner Equity
 - Owner Equity = Assets - Liabilities
- Must be timed consistently – Typically 12/31/XX
- Should contain both cost and market values
- Deferred tax liabilities
- Equity changes from profit and inflation

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OSU Extension Sample Balance Sheet					
ASSETS		Cost	Market	LIABILITIES	
Current Assets				Current Liabilities	
Check/Checking/Savings Accounts				Credit Card Accounts	
Card/Line of Credit				Personal or Student Loans	
Marketable Securities (mutual funds)				Business Process/Overhead	
Personal Loans				Legal Mortgage & Utilities	
Inventory				Interest payable	
Temporary investments				Taxes payable	
Prepaid expenses				Unpaid Professional Services	
Other				Unpaid Attorney/Child Support	
Other				Other	
Total Current Assets	\$0		\$0	Total Current Liabilities	\$0
Non-Current Assets				Non-Current Liabilities	
Autos/Boats				Autos/Boat Loans	
Marketable Securities (stocks)				Loans for other non-current assets	
Machinery & Equipment				Personal/Student Government Loans	
Personal Property				Loans against 401K or IRA	
IRA Accounts & Annuities				Personal Residence Mortgage	
Stocks/Retired Pensions Funds				Unpaid Land/Personal Mortgage	
Cash Value of Life Insurance				Unsettled Mortgage	
Personal Residence				Other	
Unpaid Farm Land				Other	
Unsettled Properties (rentals)				Other	
Other				Other	

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Farm Balance Sheets SHOULD Have TWO Columns for Assets

Asset	Cost	Market
Current	100,000	100,000
Intermediate	50,000	175,000
Long term	<u>20,000</u>	<u>325,000</u>
TOTAL ASSETS	170,000	600,000

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Market Value: Lenders Choice

Today's market values (less selling costs)

Reflects "luck" of investing (inflation/deflation)

What about the deferred income taxes due upon sale?

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Cost Value: Accountant's Choice

Remaining value of the investment, the net book value (cost less accumulated depreciation)

Better reflection of business success

Based upon business decisions rather than inflation or deflation of investments

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Assets

Items that are owned and have value.

Divided into three categories

1. Current Assets – assets that will likely be converted to cash within a year.
2. Intermediate Assets – assets with a longer life than one year but less than 10 years
3. Long Term Assets – assets with a long useful life, typically longer than 10 years

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Assets

1. Tractor	Current
2. Land	Intermediate
3. Crops	Long Term
4. Seed	
5. Cash in the bank	
6. Barn	
7. Irrigation equipment	
8. Pick-up truck	

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Liabilities

Liabilities are **financial obligations** of the business

Also Divided into three categories

1. Current – due within the current year (next 12 months)
2. Intermediate – length of loan is typically 1-10 years
3. Long-term – length of loan is greater than 10 years


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Liabilities

Pick-up Truck Loan	Current
Farm Mortgage	Intermediate
Tractor Loan	Long Term
Credit Card	
Operating Loan	
New Building Loan	
Lease Payments	


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Why is EQUITY important ?

- Equity...
 - The portion of the business assets contributed by the owners
 - Growth in equity is part of the annual business profit
 - Trends over time help measure the overall health and profitability of the business


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Keys to Balance Sheets

1. Complete Balance Sheet the same date each year
2. Inventory (count) assets, include weights
 - Use market prices – selling costs for crops and feeder livestock
 - Growing crops valued at production cost
3. Accounts receivable includes government payments to be received for past crops
4. Value breeding livestock at conservative value, avoid large year to year changes in value
5. Do not include leased machinery unless shown on a tax depreciation schedule
6. Land values should remain consistent from year to year
 - Avoids large net worth gains due to market volatility/inflation. If markets are stable at higher prices slowly increase land values over time.

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The Income Statement

A necessary financial form to clearly measure profit or net income


Cash verses accrual basis accounting

Accrual adjusted income statement combines the cash basis farm records with the inventory changes from the balance sheet

Problems with cash accounting

- Selling down inventory
- Living off depreciation
- Selling capital assets
- Increasing accounts payable
- Refinancing operating losses


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Income Statement

$$\begin{array}{r}
 \text{Farm Revenue (income)} \\
 - \text{Farm Expenses (costs)} \\
 = \text{Farm Net Income} \\
 + \text{Non-farm Income} \\
 = \text{Total Net Income (before taxes)} \\
 - \text{Taxes Paid and Accrued} \\
 = \text{Net Income}
 \end{array}$$

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Adjustments to Farm Income

Not all income is accounted for by cash sales

- Changes in current inventories
- Changes in valuation of current inventories
- Accounts receivable

Changes in market valuation of land, building, machinery and equipment are not included in the income statement unless they are actually sold.

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Adjustments to Farm Expenses

Items paid in the current year that will be used in the subsequent year.

- Feed and supply inventories
- Prepaid expenses
- Investments in growing crops
- Accrued interest
- Taxes due
- Accounts payable
- Depreciation (can use tax figure or more realistic number if using rapid depreciation practices for tax management)

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FINPACK

ABC Farms
2013 Analysis

2013 Financial Analysis Executive Summary

Income Statement		Financial Statement Measures	
		Reg	End
Crop sales	922,297	100%	100%
Crop inventory change	-174,585	100%	100%
Gross crop income	747,712	81%	81%
Less: Crop expenses	34,485	4%	4%
Less: Crop inventory change	-	-	-
Gross business income	713,227	77%	77%
Less: Non-crop expenses	6,400	1%	1%
Other cash farm income	97,799	11%	11%
Change in accounts receivable	-	-	-
Change in other assets	3,660	0%	0%
Gain or loss on trading assets	-	-	-
Gain or loss on trading liabilities	-	-	-
Gross farm income	811,879	87%	87%
Cash operating expense	722,344	89%	89%
Change in receivable and payable	-21,427	-3%	-3%
Change in growing crops	-	-	-
Change in non-crop assets	-	-	-
Depreciation	80,489	10%	10%
Non-operating expense	151,435	19%	19%
Interest paid	20,442	3%	3%
Change in accrued interest	1,520	0%	0%
Total interest expense	19,322	2%	2%
Personal expense	99,404	12%	12%
Net farm income	33,432	4%	4%
Other Measures			
Total crop acres	1,574		
Non-CAF Acres	47		
Change in earned net worth	-57,453	-4%	-4%
Change in market value net worth	-11,362	-1%	-1%

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Statement of Cash Flows

Different than a cash flow budget

Should be same period of operation as summarized in the balance sheet and income statement

Summarizes how the cash flows into and out of the farm business .

Reconciles cash position of beginning and ending balance sheets

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Statement of Cash Flows

Divided into three groups

- Operating
- Investing
- Financing

Helps separate cash flow from profitability

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Beginning of Year	STATEMENT OF CASH FLOWS		End of Year
BALANCE SHEET			BALANCE SHEET
Assets			Assets
Liabilities			Liabilities
Equity			Equity
	BEGINNING CASH	\$157,689	
	Operating activities		
	Net cash income	\$52,421	
	- Cash withdrawals	-\$150,000	
		-\$97,579	
	Investing activities		
	Capital sales	\$63,800	
	- Capital purchases	-\$97,895	
		-\$34,095	
	Financing activities		
	New borrowing	\$150,000	
	- Principal payments	-\$170,999	
		-\$20,999	
	ENDING CASH	\$5,016	

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Statement of Owner Equity

Reconciles beginning and ending owner equity

Links the Balance Sheets with the Income Statement

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Change in Total Owner Equity

Is calculated on a market value basis

Comes from three sources

- Contributed capital and retained earnings
- Change in personal net worth (when personal assets and net worth is included in the statements – not recommended)
- Change in owner equity due to market valuation of assets (adds certain degree of bias)

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Contributed Capital and Retained Earnings

1. Net income or loss after taxes
2. Withdrawals for family living or personal investment
3. Additions of capital from gifts, inheritance, personal assets, etc.
4. Distribution of capital, dividends or gifts

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Personal Net Worth

Affects only market value measure

Change may result from:

- Change in market valuation of personal assets
- Consumption of personal assets
- Investments into personal assets
- Transfer of wealth to/from outside sources

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Valuation of Equity

Effect only market value (not cost value) measure of owner equity

Change in owner equity is due to market valuation changes (appreciation/ depreciation) as reported on the balance sheet


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Why is Statement of Owner Equity Important?

- Change in owner equity is a key indicator of financial progress (or regress)
- Statement identifies how and why change in owner equity occurs
- Reconciles statements to verify accuracy
- Shows impact of family living withdrawals and market value changes (inflation, deflation, etc.)

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Unreconciled Differences in Owner Equity

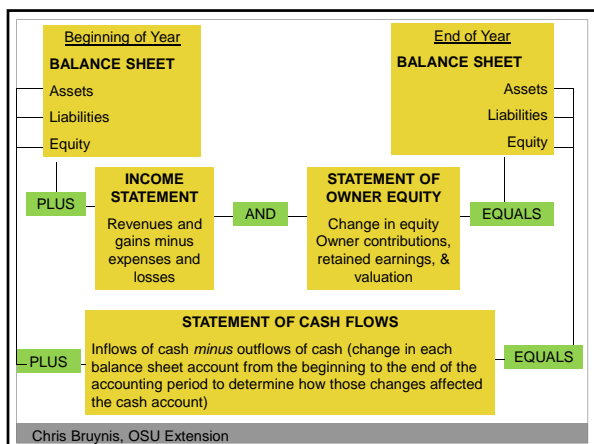
Does calculated = reported?

Yes – no problem!

No – small problem or BIG problem; Use rule of materiality

If material – try to find problem – family living is often suspect
Forget about a \$200.00 error

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Cash Flow Budget

- An estimate of all cash receipts and expenditures for a defined period in time.
- Estimates can be made monthly, bimonthly, or quarterly
- Can include nonfarm income and expenditures as well as farm items.
- Cash flow budgeting looks only at money movement, though, not at net income or profitability.

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Cash Flow Budget

- Forces one to think through the farming plans.
- Tests if farming plans will produce enough income to meet all cash needs
- Estimates size of operating line needed and projects when loans can be repaid
- Provides a guide against which to compare actual cash flows
- Can be a tool to communicate business plan and credit needs to lender

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Questions?

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