TEPAP Financial Mgmt I– Pre-Class Concepts Review

Sunday 10:00 – 12:00
Location: Forum

Both Year I and Year II Students Welcome!

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Special Topics – Financial Analysis

- How transactions flow to build Financial Statements
- Cash, Accrual Adjusted, vs. True Accrual
- Cost vs. Market Value Balance Sheet
- Cashflow Budgeting & Pro Forma Income Projections
- Trend analysis – Key Ratios, Dupont Model
- Analyzing multiple entities
- Sustainable Growth Rate
- Deferred taxes
- Tax vs. economic depreciation
- Net Present Value (NPV)–Time Value Money
- ABC – *Activity Based Costing*

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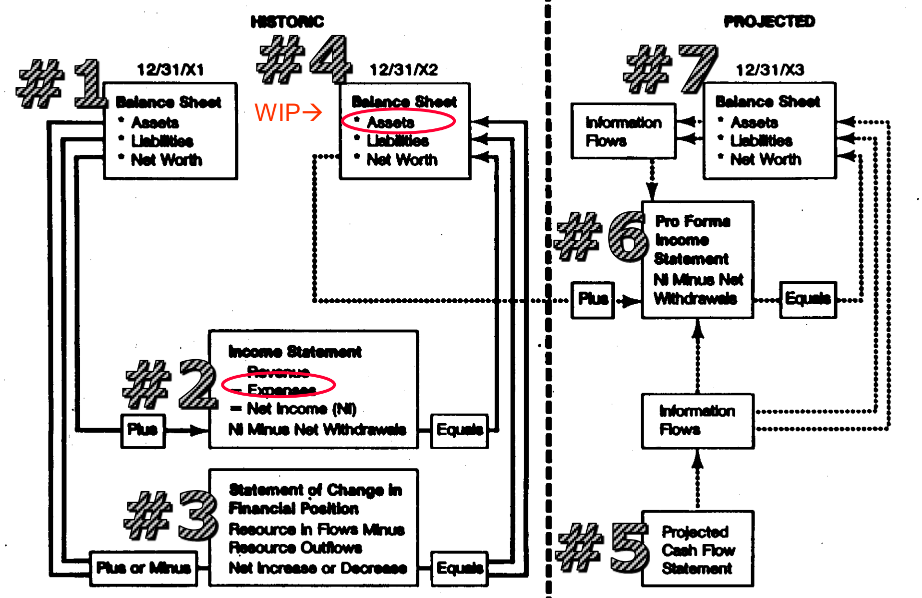
Every financial transaction* affects one or more of these statements…



…affects Asset, Liability, Income, Expense, or Equity Account.

Relationship of Financial Statements

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QUIZ–Calculate Cash (Taxable) & Accrual Net Income

- Cash income (corn sales) $1,250,000
- Cash expenses $1,000,000
- Tax depreciation $ 225,000
- Inventory-Corn
  - End Yr = $650,000; Beg Yr = $450,000
- Accounts Payable
  - End Yr =$300,000; Beg Yr=$150,000
- Cash Investment in Growing Crop
  - End Yr =$275,000; Beg Yr = $200,000
- Book (Economic) depreciation $ 75,000

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What's the goal of accrual accounting?

Match value of income created in a fiscal year with cost to produce that income…regardless of when it is sold, or when expenses are actually paid.

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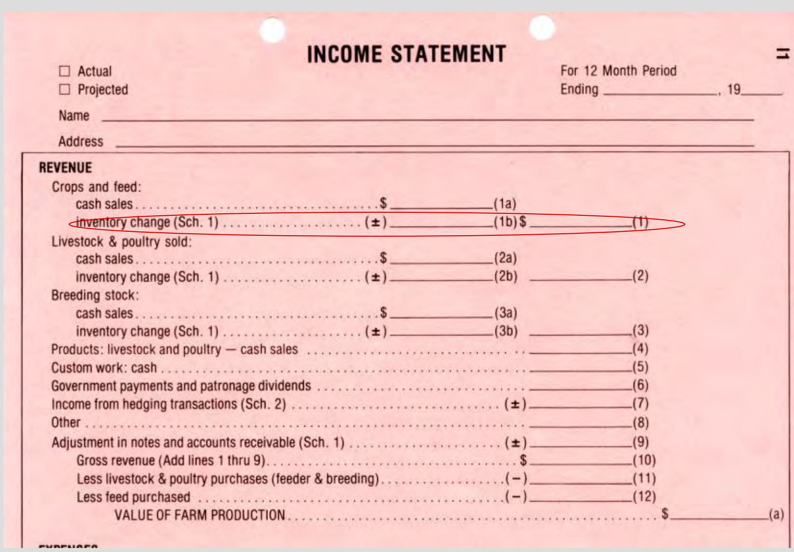

INCOME STATEMENT

☐ Actual
☐ Projected

For 12 Month Period
Ending ____________, 19____

Name ____________

Address ____________

REVENUE

Crops and feed:
cash sales . . . . $ ________ (1a)
inventory change (Sch. 1) . . . . (±) ________ (1b) $ ________ (1)
Livestock & poultry sold:
cash sales . . . . $ ________ (2a)
inventory change (Sch. 1) . . . . (±) ________ (2b) ________ (2)
Breeding stock:
cash sales . . . . $ ________ (3a)
inventory change (Sch. 1) . . . . (±) ________ (3b) ________ (3)
Products: livestock and poultry — cash sales . . . . ________ (4)
Custom work: cash . . . . ________ (5)
Government payments and patronage dividends . . . . ________ (6)
Income from hedging transactions (Sch. 2) . . . . (±) ________ (7)
Other . . . . ________ (8)
Adjustment in notes and accounts receivable (Sch. 1) . . . . (±) ________ (9)
Gross revenue (Add lines 1 thru 9) . . . . $ ________ (10)
Less livestock & poultry purchases (feeder & breeding) . . . . (−) ________ (11)
Less feed purchased . . . . (−) ________ (12)
VALUE OF FARM PRODUCTION . . . . $ ________ (a)

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Mini-Case: Cash to Accrual

Simple farm with one commodity:

- Cash Income $1,250,000
- Cash Exp (excl deprec.) $1,000,000
- Tax Deprec. Expense $ 225,000
- Tot Exp–Cash Basis $1,225,000
- Cash Basis (Tax) Net Inc $25,000

→ Is this indication of profitability?

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Cash to Accrual Net Income

- Cash Sales corn $1,250,000
  - End Inventory =$650,000
  - Begin Inventory = $450,000
- What is:
  - Accrual Adjustment Value
  - Sales on Accrual Basis*
    - → Accrual Adjustment = +$200,000
    - → Sales-Accrual Basis = $1,450,000
- Accts Receiv. changes–same concept

*Aka *Gross Farm Revenue* or *Value of Farm Production*

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Cash to Accrual Expenses

Cash Basis Expenses $1,225,000

- Begin A/C Payable* =$150,000
- Ending A/C Payable = <u>$300,000</u>

* Fertilizer, seed, feed bills, labor, etc.

Calculate Accrual Basis Expenses?

→ Accrual Adjustment <u>+$150,000</u>

→ Accrual Basis Expenses $1,375,000

- "Revised Thinking" re: YTD Profit?
- Inc $1,450,000–Exp $1,375,000=$75,000

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More Curves…

- Cash Investment in Growing Crop
  - End of Year (Ent Yr X2) = $275,000
  - Begin of Year (Ent Yr X1) = <u>$200,000</u>

Is this expense or income adjmt?

→ <u>Expense</u> adjustment

→ Current Yr Accrual Adjmt = <u>-$75,000</u>

→ Accr Expenses = $1,375,000 - $75,000

- "Revised YTD Profit?
- Inc $1,450,000–Exp 1,300,000=$150,000

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More Curves…FINAL ANSWER

Depreciation Expense

- Tax Depreciation $225,000
- Book (Economic) Deprec <u>$ 75,000</u>

Expense or income adjmt? → <u>Expense</u>

→ Curr Yr Accrual Adjustment <u>-$150,000</u>

→ Accr. Expense = $1,300,000 - $150,000

- "Revised YTD Profit?
- Inc $1,450,000–Exp $1,150,000 = $300,000

FINAL: Cash NI=$25,000; Accrual=$300,000→ 8.3%

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Tax vs. Economic Depreciation

- <u>FFSC Prior Position</u>:

  Tax depreciation for most operations does not present a material distortion of depreciation cost and can be used as proxy for cost based income analysis
- <u>Current Problem:</u> Accelerated write-offs can distort real depreciation expense
  - Section 179 – added write off $25,000
  - Special Depreciation Allowance – new equipment
- <u>Proposal:</u>

  If tax depreciation differs significantly, cost based analysis should use <u>"book"</u> instead of <u>"tax" depreciation</u>

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Impact on Accrual Net Income – Using Tax vs Book (Economic) Depreciation

- Survey of annual TEPAP participants
  - Approximately 5% of class is doing both tax and book
  - Few thought about impact on accrual net income – most who completed trend sheet used tax depreciation
- % Error in Accrual Net Income

Year	20X1	20X2	20X3	20X4	20X5
Operating Expenses (000's)	$1,988	$2,098	$2,292	$2,657	$3,069
Tax less Book Depr adjmt	$244	$148	($9)	$62	$339
Depr Adjmt as % Oper Exp	12.2%	7.1%	(0.4%)	2.3%	11.0%
Depr Adjmt as % Net Inc	32.7%	17.6%	(0.7%)	7.3%	85.6%

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Calculating Net Farm Income on an Accrual Basis

Income (Sales)	**Cash (Tax) Basis**	**Book (Accrual)**	**Net Accrual Adjmt**
Cash Sales - Corn (X1 Yr)	$ 1,250,000	$ 1,250,000	
+ Ending Inventory (X1)		$ 650,000	$ 200,000
- Beginning Inventory (X0)		$ (450,000)	
Accounts Receivable			
+ Ending		$ -	$ -
- Beginning	$ -	$ -	$ -
Gross Inc-Accrual Adjusted	$ 1,250,000	$ 1,450,000	$ 200,000
Expenses			
Cash Expenses	$ 1,000,000	$ 1,000,000	
Accounts Payable			
+ Ending (X1)		$ 300,000	$ 150,000
- Beginning (X0)		$ (150,000)	
Cash Investmt Growing Crop			
+ Beginning (X1)		$ 200,000	$ (75,000)
- Ending (X2)		$ (275,000)	
Depreciation Expense			
+ Tax Basis (accelerated)	$ 225,000	$ -	
- Book (Economic) Basis	$ -	$ 75,000	$ (150,000)
Total Expenses	$ 1,225,000	$ 1,150,000	$ (75,000)
Net Income	$ 25,000	$ 300,000	$ 275,000

See www.wittmanconsulting.com for Accrual Worksheet

See www.ffsc.org for Accrual Net Farm Income Worksheet

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Impact of "expensing" vs "WIP"– Investment in Growing Crop

Month	Monthly Net Income	Year to Date Net Income	YTD NI as % of Tot Yr NI	Month End Net Worth	% Change from Beg NW
Beg of Yr				$ 376,334	
January	$ 22,419	$ 22,419	23.6%	$ 398,753	6.0%
February	$ 25,205	$ 47,624	50.1%	$ 421,959	12.1%
March	$ (28,781)	$ 18,843	19.8%	$ 393,177	4.5%
April	$ (132,953)	$ (114,111)	-120.1%	$ 211,298	-43.9%
May	$ (14,732)	$ (128,842)	-135.6%	$ 196,566	-47.8%
June	$ (81,326)	$ (210,168)	-221.2%	$ 115,240	-69.4%
July	$ (27,570	$ (237,738)	-250.2%	$ 87,670	-76.7%
August	$ 112,079	$ (125,659)	-132.3%	$ 199,749	-46.9%
September	$ 151,387	$ 25,727	27.1%	$ 351,136	-6.7%
October	$ 6,135	$ 31,862	33.5%	$ 357,271	-5.1%
November	$ (230,138)	$ (198,276)	-208.7%	$ 122,133	-67.5%
December	$ 293,283	$ 95,007	100.0%	$ 474,453	26.1%

(Also covered in Managerial Accounting Discussion…)

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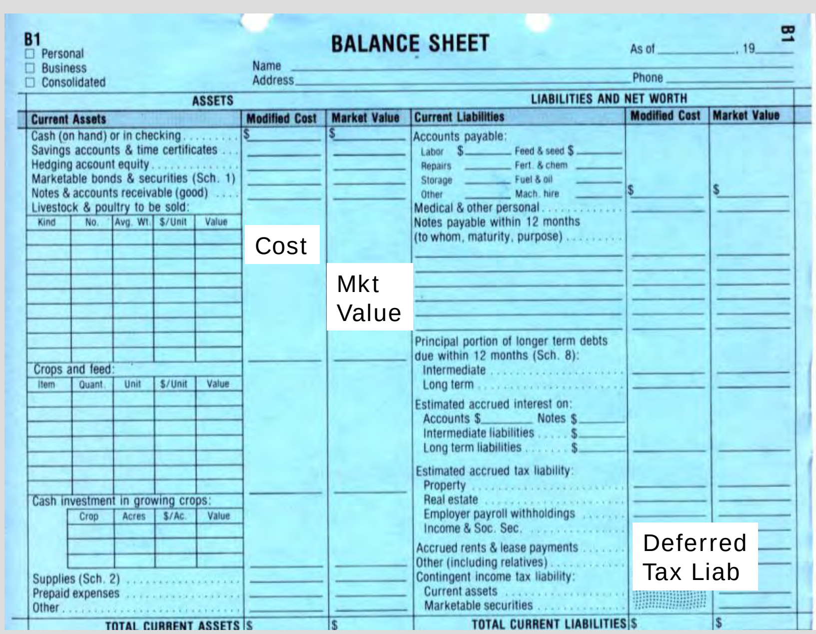
B1 BALANCE SHEET B1
☐ Personal
☐ Business
☐ Consolidated
Name ______ As of ______, 19__
Address ______ Phone ______

ASSETS

Current Assets | Modified Cost | Market Value
Cash (on hand) or in checking .... $ $
Savings accounts & time certificates ...
Hedging account equity ....
Marketable bonds & securities (Sch. 1)
Notes & accounts receivable (good) ....
Livestock & poultry to be sold:
Kind | No. | Avg. Wt. | $/Unit | Value
Crops and feed:
Item | Quant. | Unit | $/Unit | Value
Cash investment in growing crops:
Crop | Acres | $/Ac. | Value
Supplies (Sch. 2) ....
Prepaid expenses ....
Other ....
TOTAL CURRENT ASSETS $ $

LIABILITIES AND NET WORTH

Current Liabilities | Modified Cost | Market Value
Accounts payable:
Labor $____ Feed & seed $____
Repairs ____ Fert. & chem ____
Storage ____ Fuel & oil ____
Other ____ Mach. hire ____ $ $
Medical & other personal ....
Notes payable within 12 months
(to whom, maturity, purpose) ....
Principal portion of longer term debts
due within 12 months (Sch. 8):
Intermediate ....
Long term ....
Estimated accrued interest on:
Accounts $____ Notes $____
Intermediate liabilities ..... $____
Long term liabilities .... $____
Estimated accrued tax liability:
Property ....
Real estate ....
Employer payroll withholdings ....
Income & Soc. Sec. ....
Accrued rents & lease payments ......
Other (including relatives) ....
Contingent income tax liability:
Current assets ....
Marketable securities ....
TOTAL CURRENT LIABILITIES $ $

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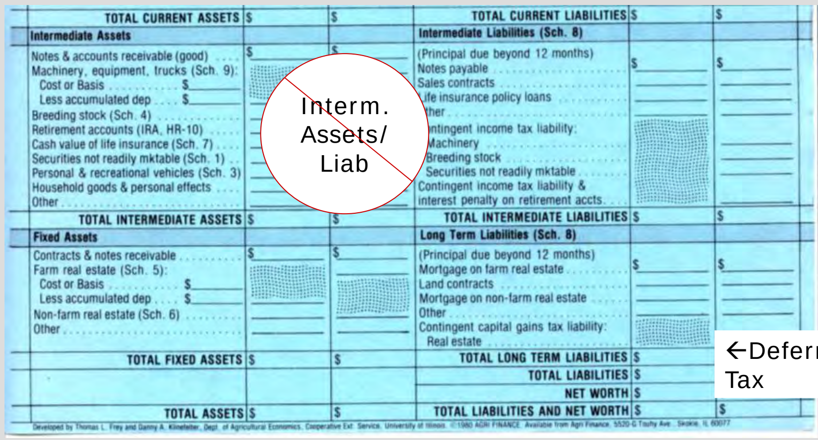
Curr & Fixed … Deferred Tax



TOTAL CURRENT ASSETS	$	$	TOTAL CURRENT LIABILITIES	$	$
Intermediate Assets			**Intermediate Liabilities (Sch. 8)**		
Notes & accounts receivable (good)	$	$	(Principal due beyond 12 months)		
Machinery, equipment, trucks (Sch. 9):			Notes payable	$	$
Cost or Basis $			Sales contracts		
Less accumulated dep $			Life insurance policy loans		
Breeding stock (Sch. 4)			Other		
Retirement accounts (IRA, HR-10)			Contingent income tax liability:		
Cash value of life insurance (Sch. 7)			Machinery		
Securities not readily mktable (Sch. 1)			Breeding stock		
Personal & recreational vehicles (Sch. 3)			Securities not readily mktable		
Household goods & personal effects			Contingent income tax liability &		
Other			interest penalty on retirement accts		
TOTAL INTERMEDIATE ASSETS	$	$	TOTAL INTERMEDIATE LIABILITIES	$	$
Fixed Assets			**Long Term Liabilities (Sch. 8)**		
Contracts & notes receivable	$	$	(Principal due beyond 12 months)		
Farm real estate (Sch. 5):			Mortgage on farm real estate	$	$
Cost or Basis $			Land contracts		
Less accumulated dep $			Mortgage on non-farm real estate		
Non-farm real estate (Sch. 6)			Other		
Other			Contingent capital gains tax liability:		
			Real estate		
TOTAL FIXED ASSETS	$	$	TOTAL LONG TERM LIABILITIES	$	
			TOTAL LIABILITIES	$	
			NET WORTH	$	
TOTAL ASSETS	$	$	TOTAL LIABILITIES AND NET WORTH	$	$

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Interm. Assets/ Liab

←Deferred Tax

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Deferred Tax Liability - *MiniCase*

Assumptions: Family Farm Corporation – 900 shares of stock. Considerable ownership held by off-farm relatives.

	Market Value ($/sh)		Cost (Tax Basis) ($/sh)	
Net Worth	= $1,540,000	($1711)	$175,000	($194)

Deferred Gain= $1,365,000 @ 42% Tax Rate = $573,300 Def'rd Tx => $637/share

NW Adj for Def Tax = (1,540,000-573,300) = $966,700
/900 shares = $1,074/share

What price would you want if you were:

- **Farm operator wanting to buy off-farm stock**
- **Off-farm cousin (with new boat & house payments)**
- **IRS appraiser in an estate appraisal**

…How do earnings vs market appreciation influence what you are willing to pay?

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Deferred Tax Mini Case (cont'd)

Assumptions:
Net Earnings (Cost Basis)
= $5.36/sh (ROE= 2.8%)
Market Value Net Worth increase
= $43.23/sh
or...$41.07/sh adj for Def Tax (ROE = 3.0%)

What price would you pay with 7% ROE Goal?

Earnings @ Cost: $5.36 ÷ .07 = $77

Using earnings + mkt gains: $41.07 ÷ .07 = $587

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Deferred Tax Elements

- Current Assets that are taxable if sold (Commodities, Accts Receivable, Prepaid expenses) **LESS...**
- Current Liabilities that are deductible if paid (accts payable, accrued interest, property taxes, etc.)
- Unearned government payments
- Unrealized gain-long term assets: R.E., equipment, securities/investments, CVLI

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Where is Deferred Tax Recorded?

Options:

1. **Record on the balance sheet as Deferred Liability**

   Pros – more realistic presentation of net worth
   Cons – bankers don't like this…distorts serviceable debt and financial ratios (*WF case in point!)*

2. **Record as footnote to financial statements**

   Pros – recognizes the liability exists; acknowledges that $ amount is <u>not an exact science</u> (tax laws subject to change)
   Cons – tends to overstatement recognizable equity

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Year End Financial Summary – With Book Capital & Unreal. Gain

	Year End Book Capital with Cur Yr P/L added	(from MV Bal Sheet) Unreal. Income	Personal B/S Amt MV Net Worth
Partner A	$ 711,751	$722,120	$ 1,433,872
Partner B	$ 355,252	$361,060	716,312
Partner C	$ 411,141	$601,766	1,012,908
Partner D	$ 480,625	$722,120	1,202,745
Total	$ 1,958,771	$2,407,067	$ 4,365,839

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Trend Sheets – Key Ratios

- What records are you using?
  - Cash basis
  - Accrual Adjusted information
- How does computation vary if use:
  - Cost
  - Market Value

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Joe P Sample
Cust # Example

Income Statement

Description		Projected Cash Flow	FYE 2008	FYE 2007	FYE 2006	FYE 2005	FYE 2004
Statement Date	" 5 Yr. Average	01/01/2009 - 12/31/2009	01/01/2008 - 12/31/2008 "	01/01/2007 - 12/31/2007 "	01/01/2006 - 12/31/2006 "	01/01/2005 - 12/31/2005 "	01/01/2004 - 12/31/2004 "
VFP Ag - Pers.		Adjusted	Adjusted	Adjusted	Adjusted	No Adj.	Adjusted
Crop Cash Sales	208,382	193,982	237,154	212,010	210,230	190,835	191,680
+or- Change in Inventories	12,531	10,648	41,535	14,919	4,001		2,200
Gross Revenues from Crops	220,913	204,630	278,689	226,929	214,231	190,835	193,880
Market Lvstk/Poultry Cash Sales	186,488	192,548	207,490	174,820	177,540	183,500	189,090
+or- Change in Inventories	675	38,100	12,900	-17,051	-5,174		12,700
Gross Revenues from Livestock	187,163	230,648	220,390	157,769	172,366	183,500	201,790
Lvstk Prod. Sales	87,661	90,750	101,250	95,230	82,400	80,300	79,125
+or- Change in Inventories							
Gross Revenues from Lvstk Prod	87,661	90,750	101,250	95,230	82,400	80,300	79,125
Government Program Payments	11,066	12,500	9,400	10,600	12,500	11,870	10,960
Raised Breeding Stk Value Change	150		-5,000	-2,350	4,600		3,500
Gain/Loss from Breeding Stock							
Change in Acct. Rec. (< 12 mo.)	560	-3,500	1,000	-500	1,800		500
Other Farm Income	9,657	10,000	8,640	7,675	11,290	9,800	10,880
+or- Accrual Adjustments							
Gross Revenues Other Farm Inc	9,657	10,000	8,640	7,675	11,290	9,800	10,880
Gross Revenues	**517,170**	**545,028**	**614,369**	**495,353**	**499,187**	**476,305**	**500,635**
Less - Purchases for Resale	35,817	44,500	38,000	34,600	36,405	35,480	34,600
- Cost of Purch. Feed/Grain	43,404	43,500	46,170	44,250	43,500	42,800	40,300
Value of Farm Production	**437,949**	**457,028**	**530,199**	**416,503**	**419,282**	**398,025**	**425,735**
Cash Farm Oper. Expenses	252,230	258,087	287,792	241,833	245,428	252,928	233,169
+or- Accrual Adjustments							
Growing Crops, Prepaids, Supplies,	-1,290	11,400	-7,000	-1,400	1,800		150
Oth. Cur. Assets							
Accts Pay, RE Tax, Oth. Cur. Liab.	200		600	500	200		-300
Depreciation Expense	31,948	30,700	28,450	31,600	32,600	35,640	31,450
Total Operating Expenses	283,088	300,187	309,842	272,533	280,028	288,568	264,469
Cash Interest Paid	53,034	47,041	47,335	50,100	52,360	55,580	59,795
+or- Change in Accrued Interest	4,841	-6,693	-1,854	26,057			
Total Interest Expense	57,875	40,348	45,481	76,157	52,360	55,580	59,795
Total Expenses	**340,963**	**340,535**	**355,323**	**348,690**	**332,388**	**344,148**	**324,264**
Net Farm Income From Oper.	**96,986**	**116,493**	**174,876**	**67,813**	**86,894**	**53,877**	**101,471**
Gain/Loss on Farm Assets							
Net Farm Income	**96,986**	**116,493**	**174,876**	**67,813**	**86,894**	**53,877**	**101,471**
Wages & Other Non-Farm Income	19,846	25,000	25,400	19,500	18,230	17,602	18,500
+or- Accrual Adjustments							
Wages & Other Non-Farm Inc.	19,846	25,000	25,400	19,500	18,230	17,602	18,500
Cash Income Tax Expense	6,400	8,500	8,500	6,000	5,500	7,500	4,500
+or- Change in Tax Accruals	1,000	-7,500	2,500	-1,000	500		3,000
Total Tax Expense	7,400	1,000	11,000	5,000	6,000	7,500	7,500
Net Income	**109,433**	**140,493**	**189,276**	**82,313**	**99,124**	**63,979**	**112,471**
Less - Owner Withdrawals	34,028	40,000	41,250	34,600	31,900	29,640	32,750
+or- Accrual Adjustments							
Total Owner Withdrawals	34,028	40,000	41,250	34,600	31,900	29,640	32,750
Net Inc. After Owner Withdrawals	**75,405**	**100,493**	**148,026**	**47,713**	**67,224**	**34,339**	**79,721**
Plus - Depreciation and Term Int.	83,742	71,081	72,845	79,175	84,700	90,940	91,050
Cap Rplc & Term Debt Repay Cap	**159,147**	**171,574**	**220,871**	**126,888**	**151,924**	**125,279**	**170,771**
Less - Term Debt Payments	96,758	81,138	85,320	88,835	97,354	102,880	109,400
Margin After Debt Servicing	62,389	90,436	135,551	38,053	54,570	22,399	61,371
CDRC%	164 %	211 %	259 %	143 %	156%	122 %	156 %

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Repayment Capacity

Measures ability to service debt and lease obligations and replace capital

Multiple measures – Two important ones… '17 = 1.6:1; '18 = 1.5:1
'19 = 2.25; '20 = 1.74

1) Debt Coverage Ratio –
Repayment and Replacement Capacity*/Scheduled Principal and Interest

2) Replacement Margin & Ratio -

Margin = Capacity* – Commitments**
Ratio = Capacity/Commitments

*Capacity = Inc from Oprns + Non-Farm/Misc Inc + Depr – Inc Tax– Owner WD
**Commitments = Total Debt Repayment + Unfunded Capital Replacement

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Leases – Operating vs. Financial

- Operating vs. Financial Lease?
- How put transaction on Balance Sheet?

→ check out www.ffsc.org for guidelines

- Beware of tax dodges

Example: specialty structure or mach purch

- build structure; depreciate over 20 yrs
- lease structure – 7 yrs w/ residual buyout
  - if total pmts = purch price + int; IRS interprets as sales contract

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Wittman Marketing Lesson
Don’t be afraid to pay taxes!

“Opportunity costs” of deferring tax

- Lost marketing opportunities
- Storage risk and interest costs
- Potential for increased tax rates
- “Frozen capital” – paralyzed for pursuing opportunities
- Building “bigger & bigger” deferred tax

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Sell high vs. sell low?
What do you have to spend?

Case Farm: 3,000 ac wheat @80 bu.

240,000 bus to market; $4.20 cost prodn

Price	$7.20
Cost	4.20
Margin	$3.00
Net Income	$720,000
Taxes @35%	-252,000
After Tax Profit	$468,000

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Sustainable Growth Rate (SGR)

Definition

Maximum rate of growth that sales (or gross revenue) can increase without depleting financial resources.

Robert Higgins, *Analysis for Financial Management*, 1998

$$\textbf{SGR} = \frac{\text{Change in Equity*}}{\text{Beginning-of-Period Equity}}$$

***Change in Equity = Earnings + Capital Infusion – W/D**
… if no added capital → = Earnings x Retention %

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SGR Mini Case – *HiTech Co*

History: 20-yr old whiz kid founds company…by 1993, company losing money and liquidity *FAST!* ($20mm cash = 0.1% annual sales) …called out the financial experts to keep from crashing

Solution:

- **Changed focus to earnings & liquidity vs. sales growth**
- **Instituted formalized planning and budgeting**

Result: $18 Billion Sales by 1998…and still thriving!

Guess who?

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Digging Deeper

SGR = $\triangle$ Equity / Beginning Equity

SGR = OPM x ATR x %R* x Assets/Equity

= ROA x %R x Assets/Equity

Key Concepts:

→ ***Excessive growth*** **deteriorates debt/asset ratio, liquidity**

→ ***Inadequate growth*** **results in unit cost creep, takeover threats, business stagnation**

→ **Factors that must be changed to allow faster growth:**

→**Profit Margin ratio, earnings retention rate, turnover ratio, assets to equity ratio (more financing)**

→ **Growth affected by stage in business life cycle**

→ **Start-up →Growth →Maturity → Decline**

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Uses of Cashflow Budget

- Manage liquidity
  - See where creating & consuming CASH
- Determine borrowing requirements
  - Seasonal operating lines
  - Term debt financing needs
- Plan marketing to maintain working capital
- Foundation for projecting pro forma income & ending financial position

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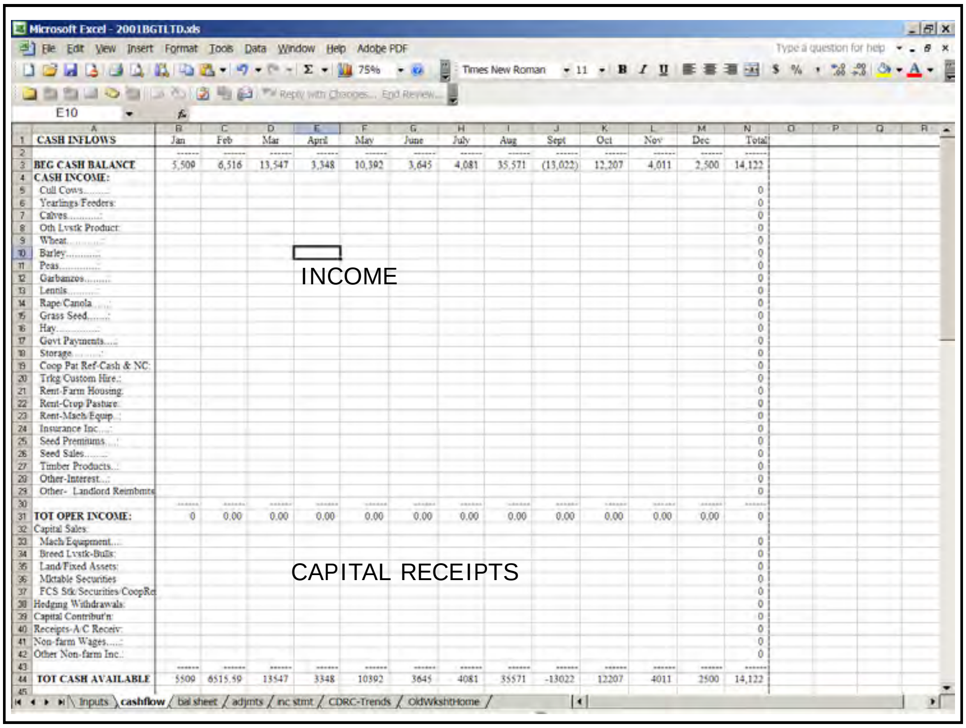
Microsoft Excel - 2001BGTLTD.xls
CASH INFLOWS
BEG CASH BALANCE
CASH INCOME:
INCOME
TOT OPER INCOME:
CAPITAL RECEIPTS
TOT CASH AVAILABLE

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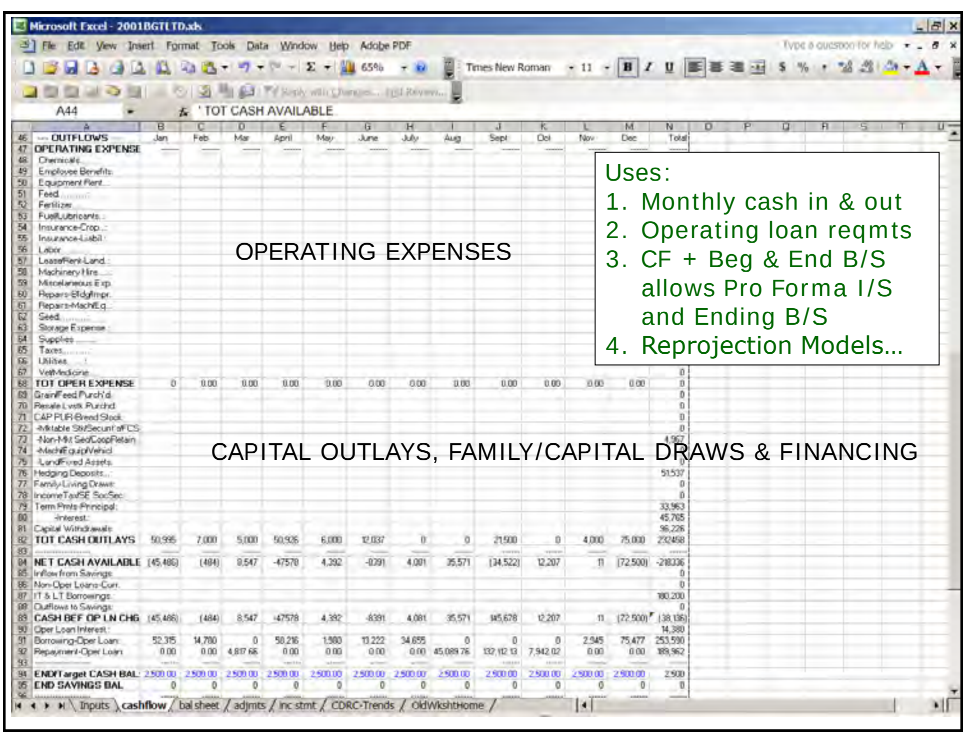
Microsoft Excel - 2001BGTLTD.xls
OUTFLOWS
OPERATING EXPENSE
OPERATING EXPENSES
Uses:
1. Monthly cash in & out
2. Operating loan reqmts
3. CF + Beg & End B/S allows Pro Forma I/S and Ending B/S
4. Reprojection Models...
TOT OPER EXPENSE
CAPITAL OUTLAYS, FAMILY/CAPITAL DRAWS & FINANCING
TOT CASH OUTLAYS
NET CASH AVAILABLE
CASH BEF OP LN CHG
END/Target CASH BAL
END SAVINGS BAL

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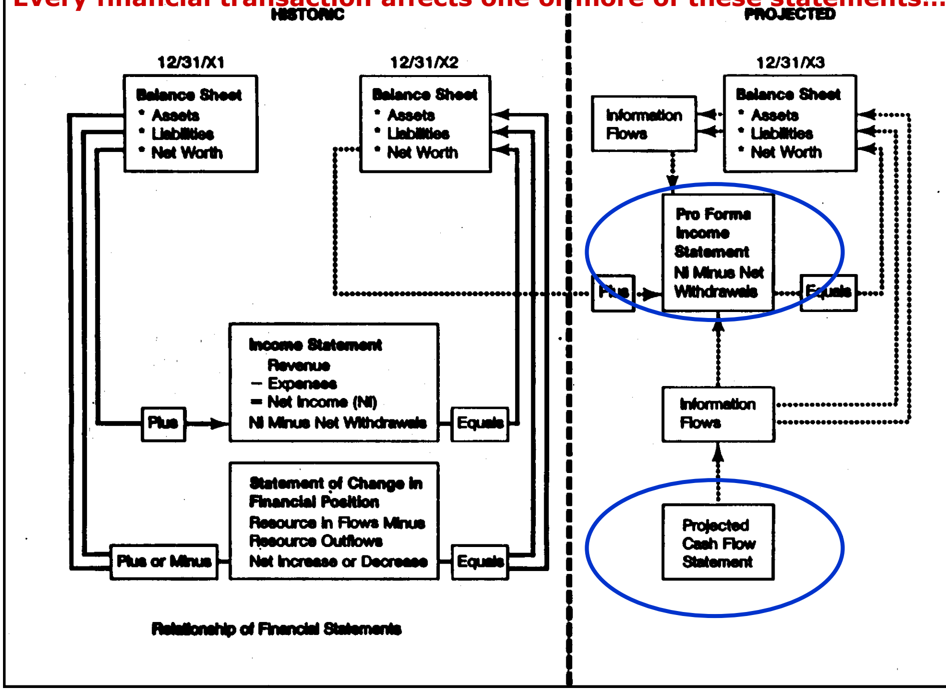
Every financial transaction affects one or more of these statements…



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Building a Pro Forma B/S & I/S

- Start with beginning balance sheet
- Project monthly (or quarterly) cash in & out
- Project ending balance sheet items – needed for accrual adjustments
  - Inventories, receivables/payables; investment in growing crop; prepaid expenses
- End Result:
  - accrual-based pro forma income statement
  - ending balance sheet
  - key financial indicators, ratios

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Analyze the Projection

- Is it profitable? (NI, ROA, ROE)
- Is it financially feasible? Can I fund:
  - Debt service payments
  - Net capital replacement
  - Living expense and taxes
- Operating line required & Max Outst Balance?
- Financial gauges & targets – End of Yr:
  - Working capital
  - Debt asset ratios
  - Financial Efficiency targets – turnover, operating profit margin

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Liquidity-WC

Solvency-D/A

Profitability

ATR, OPM

ROE, ROA

Debt Serv Cap.

Ratios & Indicators

Joe P Sample
Cust # Example

Balance Sheet	FYE 2008 12/31/2008	FYE 2007 12/31/2007	FYE 2006 12/31/2006	FYE 2005 12/31/2005	FYE 2004 12/31/2004	FYE 2003 12/31/2003
Total Current Assets	288,955	215,020	217,052	217,725	231,100	212,900
Total Current Liabilities	144,045	97,697	118,525	128,510	125,175	107,100
Working Capital	144,910	117,323	98,527	89,215	105,925	105,800
Liquidity Ratio	2.01	2.20	1.83	1.69	1.85	1.99
Total Assets	1,208,705	1,171,370	1,202,152	1,191,725	1,184,600	1,166,450
Total Liabilities	547,127	545,807	590,050	641,080	661,475	673,650
Total Equity	661,578	625,563	612,102	550,645	523,125	492,800
Debt to Asset Ratio	45.27%	46.60%	49.08%	53.79%	55.84%	57.75%
Equity to Asset Ratio	54.73%	53.40%	50.92%	46.21%	44.16%	42.25%
Debt to Equity	0.83	0.87	0.96	1.16	1.26	1.37

Income Statement (VFP) *Ag - Pers.*	Avg 5 Yr. Avg.	Projected Cash Flow 01/01/2009 12/31/2009	FYE 2008 01/01/2008 12/31/2008*	FYE 2007 01/01/2007 12/31/2007*	FYE 2006 01/01/2006 12/31/2006*	FYE 2005 01/01/2005 12/31/2005*	FYE 2004 01/01/2004 12/31/2004*
Gross Revenue	517,170	545,028	614,369	495,353	499,187	476,305	500,635
VFP / Gross Profit	437,949	457,028	530,199	416,503	419,282	398,025	425,735
Operating Expense	251,140	269,487	281,392	240,933	247,428	252,928	233,019
(excl. depr. & int.)							
Oper. Exp. Ratio	57.34%	58.97%	53.07%	57.85%	59.01%	63.55%	54.73%
Depreciation Expense	31,948	30,700	28,450	31,600	32,600	35,640	31,450
Depr. Exp. Ratio	7.29%	6.72%	5.37%	7.59%	7.78%	8.95%	7.39%
Interest Expense	57,875	40,348	45,481	76,157	52,360	55,580	59,795
Int. Exp. Ratio	13.21%	8.83%	8.58%	18.28%	12.49%	13.96%	14.05%
Asset Turnover Ratio	0.37	0.38	0.45	0.35	0.35	0.33	0.36
Net Income From Oper.	**96,986**	**116,493**	**174,876**	**67,813**	**86,894**	**53,877**	**101,471**
NIO Ratio	22.15%	25.49%	32.98%	16.28%	20.72%	13.54%	23.83%
Rate of Return on Assets	10.18%	9.67%	15.05%	9.22%	8.97%	6.72%	10.93%
Rate of Return on Equity	10.73%	11.56%	20.76%	5.37%	9.46%	4.51%	13.53%
Oper. Profit Margin Ratio	27.59%	25.57%	33.78%	26.26%	25.60%	20.05%	30.19%
Income After Owner Withdrawal	**75,405**	**100,493**	**148,026**	**47,713**	**67,224**	**34,339**	**79,721**
Term Debt & Cap. Lease Cov. Ratio	1.64	2.11	2.59	1.43	1.56	1.22	1.56
WC/AGI	22.58%	30.06%	25.63%	21.52%	19.49%	23.14%	23.11%

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INCOME STATEMENT	Cost/Cash	Mkt/Accrual
For Year Ended	12/31/18	12/31/18
REVENUES		
Crops and Feed		
Cash Sales	$2,438,927	$2,438,927
Inventory Change	0	341,836
Gov't Payments	307,374	307,374
Hedging Transactions Income	68,586	68,586
Hedging Adjmt-Unreal Gains(Losses)		12,000
Other Cash Farm Income	327,501	327,501
Change in Accts Receivable	0	(30)
Unearned Income Adjustment		0
TOTAL REVENUE	$3,142,389	$3,496,195
Less: Lvstk/Other Resale Purchases	$0	$0
Operating Margin	$3,142,389	$3,496,195
Gain(Loss) on Disposal Cap Assets	226,987	226,987
Total Income	3,369,375	3,723,181
EXPENSES		
Cash Operating Expenses	$2,646,176	$2,646,176
Exp Adjmt-Unused Assets		3,003
Exp Adjmt-Unpaid Items		(17,575)
Depreciation		
Machinery & Equipment	277,931	237,605
Buildings & Improvements	75,235	40,955
Cash Interest Expense	88,476	88,476
Accrued Interest Change		(124)
TOTAL EXPENSES	$3,087,819	$2,998,516
NET FARM OPERATING INCOME	281,557	724,665

Project +443k

In Unreal Gain!

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Financial Literacy Resources

- Farm Futures Magazine/FFSC – Financial Boot Camp
  → https://www.farmfuturessummit.com/en/ag-finance-boot-camp/boot-camp
- King Ranch Institute – Managerial Acctg Lectureship
  → http://krirm.tamuk.edu/accounting/
- NW Farm Credit System – Learning Center
  → www.northwestfcs.com/eLearning
- Centrec Consulting
  → www.centrec.com/self-study
- Farm Financial Standards Council – Financial Guidelines
  → www.FFSC.org
- Wittman Consulting-Financial models, templates, trend sheets
  → www.wittmanconsulting.com
- FINPACK – ratio definitions, templates
  → www.cffm.umn.edu/finpack/
- Wisconsin-PDPW: Financial Literacy Program
  → pwww.pdpw.org/programs/PDPWFinancialLiteracyForDairy20192020/details
- Kansas (*Approved for FSA Borrowers Financial Training Credit)*
  → Kansas:www.agmanager.info/events/farm-financial-skills-kansas-women-agriculture

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Summary *"If don't know where you want to go, any road will take you there!"*

- **½ "think" they know** what's ahead…and the rest???
- Build a cashflow management process that fits your business & projects financial outcome
- Execute plan giving balanced attention to people, strategy and operations
- Monitor & Adjust Performance regularly
- Think strategically about ways to "beat budget"
  - Know baseline (proforma), risk (variability) & set targets for improvement
  - Optimize "effective rates" when managing cash
  - Take advantage of "liquidity savers" , "cost reducers," "revenue enhancers"

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