Computation of Deferred Tax Liability — An Example

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An income tax liability arises from differences between balance sheet values of certain assets and liabilities and the tax basis of those same assets and liabilities. Farm financial statements, especially the balance sheet, should be prepared with recognition given to this income tax liability, or deferred taxes.

Deferred taxes reconcile the tax basis of a balance sheet with the basis currently being used for valuing assets and recording liabilities. That is, if all assets could be liquidated for exactly the amount shown on the balance sheet, and if all liabilities could be satisfied by payment of exactly the amount shown on the balance sheet, then what taxable income would result and what would be the tax liability?

The asset and liability values outlined in the example balance sheet (Table 1) are used to show the derivation of deferred taxes, or income tax liability, using the following two-step procedure.[1]

Step 1. Computation of current portion of deferred taxes. (See Table 2 for example computations.) The total amount by which the balance sheet value of current assets exceeds their taxable basis is calculated. Deferred income, such as crop insurance proceeds — reported for financial statements, but not recorded for tax purposes and for which no asset value exists on the balance sheet — must be included. Subtract the amount of current liabilities that result in deductions for tax purposes, such as accounts payable and accrued interest, from total deferred income calculated. The current portion of deferred taxes is then computed by multiplying an estimated total tax rate — which reflects federal, state, local, and social security taxing authorities — times the net deferred income.

Step 2. Computation of noncurrent portion of deferred taxes related to differences between market values and tax basis or base value of noncurrent assets. (See Table 3 for example computations.) Calculate the difference between the balance sheet market values of all noncurrent assets and their tax basis. Noncurrent assets include breeding livestock, machinery and equipment, real estate, and improvements. The tax basis will be zero for raised breeding livestock that have not been capitalized and depreciated for tax purposes. The noncurrent portion of deferred taxes is computed by multiplying the calculated deferred taxable income times the estimated total tax rate for capital asset sales.

The current and noncurrent portion of deferred taxes are recorded on the balance sheet as liabilities. If the total deferred income value, or taxable income, computed in steps 1 and 2 was negative, then a deferred tax refund would result, with the refund recorded as an asset on the balance sheet.

For more information on the computation of deferred taxes, see the publication *Financial Guidelines for Agricultural Producers II*, revised December 1997.

[1] *The federal and state income tax rates outlined in the following tables were used as an example to demonstrate the methodology of computing deferred taxes. These income tax rates will vary for different farm businesses.*

Table 1. *Balance Sheet Statement; Example Farm*

Balance Sheet (Farm Business Only)

ASSETS	**Jan. 1**	**Dec. 31**	**Average**
Cash (1)	$ 32,312	$ 35,378	$ 33,845
Marketable Securities (2)	0	0	0
Accounts Receivable (3)	1,904	1,702	1,803
Fertilizer and Supplies (4)	10,840	12,213	11,527
Investment in Growing Crops (5)	0	0	0
Crops Held for Sale and Feed (6)	84,347	90,145	87,246
Market Livestock (7)	$ 76,508	$ 78,645	$ 77,577
TOTAL CURRENT ASSETS (8) (Add Lines 1 through 7)	$ 205,911	$ 218,083	$ 211,997
Breeding Livestock (9)	43,513	45,708	44,611
Machinery and Equipment (10)	170,081	179,592	174,837
Buildings (11)	24,134	25,328	24,731
Investments in Cooperatives (12)	17,250	17,140	17,195
Land (13)	394,303	405,256	399,780
TOTAL NONCURRENT ASSETS (14) (Add Lines 9 through 13)	$ 649,281	$ 673,024	$ 661,153
TOTAL ASSETS (15) (Add Lines 8 and 14)	$ 855,192	$ 891,107	$ 873,150
LIABILITIES AND OWNER EQUITY:			
Accounts Payable (16)	0	0	0
Taxes Payable (17)	0	0	0
Accrued Expenses (18)	2,453	2,543	2,498
Current Portion: Deferred Taxes (19)	33,530	35,753	34,642
Notes Due Within One Year (20)	102,170	104,829	103,500
Current Portion of Term Debt (21)	11,263	11,682	11,473
Accrued Interest (22)	2,000	2,000	2,000
TOTAL CURRENT LIABILITIES (23) (Add Lines 16 through 22)	$ 151,416	$ 156,807	$ 154,112
Noncurrent Portion: Deferred Taxes (24)	39,192	41,008	40,100
Noncurrent Portion: Notes Payable (25)	47,149	48,902	48,026
Noncurrent Portion: Real Estate Debt (26)	98,751	102,422	100,587
TOTAL NONCURRENT LIABILITIES (27) (Add Lines 24 through 26)	$ 185,092	$ 192,332	$ 188,712
TOTAL LIABILITIES (28) (Add Lines 23 and 27)	$ 336,508	$ 349,139	$ 342,824
OWNER EQUITY (29) (Subtract Line 28 from Line 15)	$ 518,684	$ 541,968	$ 530,326
TOTAL LIABILITIES AND OWNER EQUITY (30) (Add Lines 28 and 29)	$ 855,192	$ 891,107	$ 873,150

Table 2. *Current Portion of Deferred Taxes*

January 1

	Market Value	Tax Basis	Difference
Accounts Receivable	$ 1,904	$ 0	$ 1,904
Fertilizer and Supplies	10,840	0	10,840
Crops Held for Sale and Feed	84,347	0	84,347
Market Livestock	76,508	57,381	19,127
EXCESS OF CARRYING VALUE OVER TAX BASIS OF CURRENT ASSETS			$ 116,218
Deferred Income Liability on Crop Insurance, Disaster Payments, and Contracts			0
TOTAL DEFERRED INCOME			$ 116,218
Accounts Payable			0
Income Taxes Payable (State and Local Only)			0
Accrued Expenses			2,453
Accrued Interest			2,000
TOTAL DEFERRED EXPENSES			$ 4,453
NET DEFERRED INCOME SUBJECT TO INCOME TAX			$ 111,765
ESTIMATED DEFERRED TAX LIABILITY RELATED TO CURRENT ASSETS AND CURRENT LIABILITIES			$ 33,530

December 31

	Market Value	Tax Basis	Difference
Accounts Receivable	1,702	0	1,702
Fertilizer and Supplies	12,213	0	12,213
Crops Held for Sale and Feed	90,145	0	90,145
Market Livestock	78,645	58,984	19,661
EXCESS OF CARRYING VALUE OVER TAX BASIS OF CURRENT ASSETS			$ 123,721
Deferred Income Liability on Crop Insurance, Disaster Payments, and Contracts			0
TOTAL DEFERRED INCOME			$ 123,721
Accounts Payable			0
Income Taxes Payable (State and Local Only)			0
Accrued Expenses			2,543
Accrued Interest			2,000
TOTAL DEFERRED EXPENSES			$ 4,543
NET DEFERRED INCOME SUBJECT TO INCOME TAX			$ 119,178
ESTIMATED DEFERRED TAX LIABILITY RELATED TO CURRENT ASSETS AND CURRENT LIABILITIES			$ 35,753

Table 3. *Noncurrent Portion of Deferred Taxes*

January 1

	Market Value	Tax Basis	Difference
Raised Breeding Livestock	$ 21,750	0	$ 21,750
Purchased Breeding Livestock	21,763	10,750	11,013
Machinery and Equipment	170,081	85,000	85,081
Buildings	24,134	12,000	12,134
Investments in Cooperatives	17,250	17,250	0
Land	394,303	263,000	131,303
DEFERRED TAXABLE INCOME RELATED TO EXCESS OF MARKET VALUE OVER BASE VALUE			$ 261,281
ESTIMATED DEFERRED TAX LIABILITY RELATED TO VALUATION EQUITY			$ 39,192

December 31

	Market Value	Tax Basis	Difference
Raised Breeding Livestock	$ 22,750	0	$ 22,750
Purchased Breeding Livestock	22,958	10,000	12,958
Machinery and Equipment	179,592	89,750	89,842
Buildings	25,328	12,500	12,828
Investments in Cooperatives	17,140	17,140	0
Land	405,256	270,250	135,006
DEFERRED TAXABLE INCOME RELATED TO EXCESS OF MARKET VALUE OVER BASE VALUE			$ 273,384
ESTIMATED DEFERRED TAX LIABILITY RELATED TO VALUATION EQUITY			$ 41,008

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

MF-2358 October 2007

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