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 three-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 base value treatment of raised breeding livestock. (See Table 3 for example computations.) The difference between the base value and the tax basis for raised breeding livestock is calculated. The tax basis will be zero for raised breeding livestock that have not been capitalized and depreciated for tax purposes. Multiply the difference times the estimated total tax rate. Social security tax should be considered only on that portion of the difference subject to self-employment taxes.

Step 3. Computation of noncurrent portion of deferred taxes related to differences between market values and tax basis or base value of noncurrent assets. (See Table 4 for example computations.) Calculate the difference between the balance sheet market values of all noncurrent assets and their tax basis (base value for raised breeding livestock). For raised breeding livestock, the base value is subtracted from market value to determine the value — subject to capital gains tax. In most cases, noncurrent assets will be limited to breeding livestock, machinery and equipment, real estate, and improvements. The noncurrent portion of deferred taxes is then 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 through 3 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.

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[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)	$ 22,105	$ 23,827	$ 22,966
Marketable Securities	(2)	0	0	0
Accounts Receivable	(3)	6,071	6,142	6,107
Fertilizer and Supplies	(4)	7,574	8,053	7,814
Crops Held for Sale and Feed	(5)	85,122	86,675	85,899
Market Livestock	(6)	60,597	60,604	60,601
TOTAL CURRENT ASSETS (Add Lines 1 through 6)	(7)	$ 181,469	$ 185,301	$ 183,385
Breeding Livestock	(8)	43,702	44,321	44,012
Machinery and Equipment	(9)	155,843	165,827	160,835
Buildings	(10)	24,758	25,922	25,340
Investments in Cooperatives	(11)	16,608	17,546	17,077
Land	(12)	323,513	333,159	328,336
TOTAL NONCURRENT ASSETS (Add Lines 8 through 12)	(13)	$ 564,424	$ 586,775	$ 575,600
TOTAL ASSETS (Add Lines 7 and 13)	(14)	$ 745,893	$ 772,076	$ 758,985
LIABILITIES AND OWNER EQUITY:				
Accounts Payable	(15)	$ 0	$ 0	$ 0
Taxes Payable	(16)	0	0	0
Accrued Expenses	(17)	1,589	1,681	1,635
Current Portion: Deferred Taxes	(18)	31,155	31,539	31,347
Notes Due Within One Year	(19)	85,988	88,292	87,140
Current Portion of Term Debt	(20)	9,497	9,745	9,621
Accrued Interest	(21)	2,000	2,100	2,050
TOTAL CURRENT LIABILITIES (Add Lines 15 through 21)	(22)	$ 130,229	$ 133,357	$ 131,793
Noncurrent Portion: Deferred Taxes	(23)	$ 46,063	$ 48,046	$ 47,055
Noncurrent Portion: Notes Payable	(24)	46,379	47,591	46,985
Noncurrent Portion: Real Estate Debt	(25)	86,132	88,384	87,258
TOTAL NONCURRENT LIABILITIES (Add Lines 23 through 25)	(26)	$ 178,574	$ 184,021	$ 181,298
TOTAL LIABILITIES (Add Lines 22 and 26)	(27)	$ 308,803	$ 317,378	$ 313,091
OWNER EQUITY (Subtract Line 27 from Line 14)	(28)	$ 437,090	$ 454,698	$ 445,894
TOTAL LIABILITIES AND OWNER EQUITY (Add Lines 27 and 28)	(29)	$ 745,893	$ 772,076	$ 758,985

Table 2. *Current Portion of Deferred Taxes*

January 1

	Market Value	Tax Basis	Difference
Accounts Receivable	$ 6,071	0	$ 6,071
Fertilizer and Supplies	7,574	0	7,574
Crops Held for Sale and Feed	85,122	0	85,122
Market Livestock	60,597	0	60,597
EXCESS OF CARRYING VALUE OVER TAX BASIS OF CURRENT ASSETS			$159,364
Deferred Income Liability on Crop Insurance, Disaster Payments, and Contracts			0
TOTAL DEFERRED INCOME			$159,364
Accounts Payable			0
Income Taxes Payable (State and Local Only)			0
Accrued Expenses			1,589
Accrued Interest			2,000
TOTAL DEFERRED EXPENSES			$ 3,589
NET DEFERRED INCOME SUBJECT TO INCOME TAX			$155,775
ESTIMATED DEFERRED TAX LIABILITY RELATED TO CURRENT ASSETS AND CURRENT LIABILITIES			31,155

December 31

	Market Value	Tax Basis	Difference
Accounts Receivable	$ 6,142	0	$ 6,142
Fertilizer and Supplies	8,053	0	8,053
Crops Held for Sale and Feed	86,675	0	86,675
Market Livestock	60,604	0	60,604
EXCESS OF CARRYING VALUE OVER TAX BASIS OF CURRENT ASSETS			$ 161,474
Deferred Income Liability on Crop Insurance, Disaster Payments, and Contracts			0
TOTAL DEFERRED INCOME			$ 161,474
Accounts Payable			0
Income Taxes Payable (State and Local Only)			0
Accrued Expenses			1,681
Accrued Interest			2,100
TOTAL DEFERRED EXPENSES			$ 3,781
NET DEFERRED INCOME SUBJECT TO INCOME TAX			$157,693
ESTIMATED DEFERRED TAX LIABILITY RELATED TO CURRENT ASSETS AND CURRENT LIABILITIES			$ 31,539

Table 3. *Noncurrent Portion of Deferred Taxes Related to Base Value Treatment of Raised Breeding Livestock*

January 1

	Market Value	Tax Basis	Difference
Raised Breeding Livestock	$ 22,000	0	$ 22,000
NET DEFERRED INCOME SUBJECT TO INCOME TAX			$ 22,000
ESTIMATED DEFERRED TAX LIABILITY RELATED TO BASE VALUE TREATMENT OF RAISED BREEDING LIVESTOCK			$ 4,400

December 31

	Market Value	Tax Basis	Difference
Raised Breeding Livestock	$ 22,000	0	$ 22,000
NET DEFERRED INCOME SUBJECT TO INCOME TAX			$ 22,000
ESTIMATED DEFERRED TAX LIABILITY RELATED TO BASE VALUE TREATMENT OF RAISED BREEDING LIVESTOCK			$ 4,400

Table 4. *Noncurrent Portion of Deferred Taxes Related to Valuation Equity*

January 1

	Market Value	Tax Basis	Difference
Raised Breeding Livestock	$ 22,000	$ 22,000	$ 0
Purchased Breeding Livestock	21,702	11,000	10,702
Machinery and Equipment	155,843	78,000	77,843
Buildings	24,758	12,500	12,258
Investments in Cooperatives	16,608	16,608	0
Land	323,513	216,000	107,513
DEFERRED TAXABLE INCOME RELATED TO EXCESS OF MARKET VALUE OVER BASE VALUE			$ 208,316
ESTIMATED DEFERRED TAX LIABILITY RELATED TO VALUATION EQUITY			$ 41,663

December 31

	Market Value	Tax Basis	Difference
Raised Breeding Livestock	$ 22,000	$ 22,000	$ 0
Purchased Breeding Livestock	22,321	11,000	11,321
Machinery and Equipment	165,827	83,000	82,827
Buildings	25,922	13,000	12,922
Investments in Cooperatives	17,546	17,546	0
Land	333,159	222,000	111,159
DEFERRED TAXABLE INCOME RELATED TO EXCESS OF MARKET VALUE OVER BASE VALUE			$ 218,229
ESTIMATED DEFERRED TAX LIABILITY RELATED TO VALUATION EQUITY			$ 43,646

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