Farm Management Guide MF-2358

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. Noncurrent assets include breeding livestock, machinery and equipment, real estate, and improvements. 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 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.

[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)	$ 23,439	$ 25,649	$ 24,544
Marketable Securities	(2)	0	0	0
Accounts Receivable	(3)	3,887	3,795	3,841
Fertilizer and Supplies	(4)	7,634	8,350	7,992
Investment in Growing Crops	(5)	0	0	0
Crops Held for Sale and Feed	(6)	79,006	81,481	80,244
Market Livestock	(7)	49,318	50,253	49,786
TOTAL CURRENT ASSETS (Add Lines 1 through 7)	(8)	$ 163,284	$ 169,528	$ 166,406
Breeding Livestock	(9)	39,243	39,993	39,618
Machinery and Equipment	(10)	151,233	160,013	155,623
Buildings	(11)	21,896	22,838	22,367
Investments in Cooperatives	(12)	16,087	16,659	16,373
Land	(13)	328,221	337,863	333,042
TOTAL NONCURRENT ASSETS (Add Lines 9 through 13)	(14)	$ 556,680	$ 577,366	$ 567,023
TOTAL ASSETS (Add Lines 8 and 14)	(15)	$ 719,964	$ 746,894	$ 733,429
LIABILITIES AND OWNER EQUITY:				
Accounts Payable	(16)	0	0	0
Taxes Payable	(17)	0	0	0
Accrued Expenses	(18)	1,645	1,654	1,650
Current Portion: Deferred Taxes	(19)	19,842	20,507	20,175
Notes Due Within One Year	(20)	78,248	80,151	79,200
Current Portion of Term Debt	(21)	9,003	9,266	9,135
Accrued Interest	(22)	2,000	2,000	2,000
TOTAL CURRENT LIABILITIES (Add Lines 16 through 22)	(23)	$ 110,738	$ 113,578	$ 112,158
Noncurrent Portion: Deferred Taxes	(24)	42,536	44,273	43,405
Noncurrent Portion: Notes Payable	(25)	37,688	38,787	38,238
Noncurrent Portion: Real Estate Debt	(26)	78,936	81,237	80,087
TOTAL NONCURRENT LIABILITIES (Add Lines 24 through 26)	(27)	$ 159,160	$ 164,297	$ 161,729
TOTAL LIABILITIES (Add Lines 23 and 27)	(28)	$ 269,898	$ 277,875	$ 273,887
OWNER EQUITY (Subtract Line 28 from Line 15)	(29)	$ 450,066	$ 469,019	$ 459,543
TOTAL LIABILITIES AND OWNER EQUITY (Add Lines 28 and 29)	(30)	$ 719,964	$ 746,894	$ 733,429

Table 2. *Current Portion of Deferred Taxes*

January 1

	Market Value	Tax Basis	Difference
Accounts Receivable	3,887	0	$ 3,887
Fertilizer and Supplies	7,634	0	7,634
Crops Held for Sale and Feed	79,006	0	79,006
Market Livestock	49,318	36,989	12,330
EXCESS OF CARRYING VALUE OVER TAX BASIS OF CURRENT ASSETS			$ 102,857
Deferred Income Liability on Crop Insurance, Disaster Payments, and Contracts			0
TOTAL DEFERRED INCOME			$ 102,857
Accounts Payable			0
Income Taxes Payable (State and Local Only)			0
Accrued Expenses			1,645
Accrued Interest			2,000
TOTAL DEFERRED EXPENSES			$ 3,645
NET DEFERRED INCOME SUBJECT TO INCOME TAX			$ 99,212
ESTIMATED DEFERRED TAX LIABILITY RELATED TO CURRENT ASSETS AND CURRENT LIABILITIES			$ 19,842

December 31

	Market Value	Tax Basis	Difference
Accounts Receivable	3,795	0	3,795
Fertilizer and Supplies	8,350	0	8,350
Crops Held for Sale and Feed	81,481	0	81,481
Market Livestock	50,253	37,690	12,563
EXCESS OF CARRYING VALUE OVER TAX BASIS OF CURRENT ASSETS			$ 106,189
Deferred Income Liability on Crop Insurance, Disaster Payments, and Contracts			0
TOTAL DEFERRED INCOME			$ 106,189
Accounts Payable			0
Income Taxes Payable (State and Local Only)			0
Accrued Expenses			1,654
Accrued Interest			2,000
TOTAL DEFERRED EXPENSES			$ 3,654
NET DEFERRED INCOME SUBJECT TO INCOME TAX			$102,535
ESTIMATED DEFERRED TAX LIABILITY RELATED TO CURRENT ASSETS AND CURRENT LIABILITIES			$ 20,507

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	$ 19,500	0	$ 19,500
NET DEFERRED INCOME SUBJECT TO INCOME TAX			$ 19,500
ESTIMATED DEFERRED TAX LIABILITY RELATED TO BASE VALUE TREATMENT OF RAISED BREEDING LIVESTOCK			$ 3,900

December 31

	Market Value	Tax Basis	Difference
Raised Breeding Livestock	$ 20,000	0	$ 20,000
NET DEFERRED INCOME SUBJECT TO INCOME TAX			$ 20,000
ESTIMATED DEFERRED TAX LIABILITY RELATED TO BASE VALUE TREATMENT OF RAISED BREEDING LIVESTOCK			$ 4,000

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

January 1

	Market Value	Tax Basis	Difference
Raised Breeding Livestock	$ 19,500	$ 19,500	0
Purchased Breeding Livestock	19,743	10,000	9,743
Machinery and Equipment	151,233	75,500	75,733
Buildings	21,896	11,000	10,896
Investments in Cooperatives	16,087	8,000	8,087
Land	328,221	220,000	108,221
DEFERRED TAXABLE INCOME RELATED TO EXCESS OF MARKET VALUE OVER BASE VALUE			$ 212,680
ESTIMATED DEFERRED TAX LIABILITY RELATED TO VALUATION EQUITY			$ 42,536

December 31

	Market Value	Tax Basis	Difference
Raised Breeding Livestock	$ 20,000	$ 20,000	0
Purchased Breeding Livestock	19,993	10,000	9,993
Machinery and Equipment	160,013	80,000	80,013
Buildings	22,838	11,500	11,338
Investments in Cooperatives	16,659	8,000	8,659
Land	337,863	226,500	111,363
DEFERRED TAXABLE INCOME RELATED TO EXCESS OF MARKET VALUE OVER BASE VALUE			$ 221,366
ESTIMATED DEFERRED TAX LIABILITY RELATED TO VALUATION EQUITY			$ 44,273

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