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Some Thoughts for the Farm Financial Standards Task Force

Eddy L. LaDue

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Department of Agricultural Economics
Cornell University, Agricultural Experiment Station
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York, 14853

The author is Professor of Agricultural Finance in the Department of Agricultural Economics at Cornell University, Ithaca, New York.
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The discussion below is designed to identify a few ratios that could be applied nationwide and which also measure something useful for purposes of loan analysis. It is not a laundry list of all the ratios that could be used. Some of the implications of these ratios for balance sheet and income statement design are discussed. At the end of the discussion I also raise a few other issues on financial statement design.

A Liquidity Ratio

Many people have blamed part of the severity of the farm financial crisis of the 1980's on excessive use of asset based lending. To reduce the focus on the security provided by assets and increase the focus on cash flow or liquidity, a good measure of liquidity must be used.

One possibility is the current ratio, but the current ratio has severe limitations. First, unless the current portion (principal due within 12 months) of intermediate and long term debts is included in the current liabilities, the current ratio is a poor indicator of liquidity. Most balance sheets currently used by lenders for farm borrowers do not separate out that portion of intermediate and long term debt which is due within 12 months. Second, the current ratio is unstable throughout the year for livestock farms that grow some of their own feed. When feed inventories are high, the current ratio looks good. When most of the homegrown feed has been fed, the ratio looks much poorer. The assumption that current assets could be sold to pay off current liabilities or that current assets represents the amount of cash that could be generated to pay debts is a tenuous one at best. In many cases continued business performance would be impossible with the sale of a large proportion of current assets.

A ratio that does provide the kind of liquidity measure that we need is the cash flow coverage ratio (cash available for debt service divided by planned debt payments). This ratio directly deals with the basic question of whether there will be cash available to make debt payments. The denominator of the ratio should be relatively easy for lenders to obtain. The real problem is estimating the numerator: cash available for debt service.

The cash available for debt service should be projected from an accrual adjusted (or strictly accrual) income statement. Last year's cash flow has a high probability of being an incorrect estimate of next year's cash flow. The cash spent last year will depend upon the change in accounts payable, accounts receivable and inventories that occurred during the year. For example, last year's cash flow for a farmer who used $70,000 worth of fertilizer by paying $40,000 in cash, allowing his accounts payable to increase $20,000 and using $10,000 of fertilizer from inventory, does not provide a useful basis for estimating future cash flows. This is particularly important since deteriorating or marginal borrowers for whom the estimate of future cash flow is most important, are most likely to operate in this manner.

For this reason, estimating the cash flows for a future year should be accomplished by first adjusting last year's expenses and receipts for changes in feed, crop, supply and livestock inventory, accounts payable (A/P) and accounts receivable (A/R). Then the adjusted data can be used in estimating future cash income and expense for the coming year or an average future year. For our example farmer, if he expects to operate the same business next year, his total fertilizer bill is likely to be about $70,000 (before adjusting for inflation). If he has no more fertilizer inventory and does not increase his A/P further, his cash fertilizer expense will be $70,000 (not the $40,000 from last year's cash flow). If he still has $5,000 in inventory, his cash expense next year would be $65,000, but it must average $70,000 (before inflation) for an average future year.

In order to make these accrual adjustments, the balance sheet must include the items used to make the adjustments. If a business is not changed from year to year, the accrual adjustments can be made by including only total amounts for feed, crop and livestock inventory, A/P and A/R on the balance sheet. However, when changes are being made in the business, the individual expense and receipt items should be adjusted if they are to be used in estimating future cash flows[1]. Thus, an appropriate balance sheet must have sufficient breakdown of the most important inventory, A/P and A/R items to allow adjustment of individual income and expense items. One approach is to include an A/P or A/R and an inventory change for each expense/receipt item. A somewhat less complex approach would be to include only the most important categories in each area. An example breakdown that could be used for A/P and A/R is shown below:

Accounts Payable	Accounts Receivable
Purchased Feed	Livestock Products
Machinery Repair	Livestock Sales
Fuel and Oil	Crops: _____
Breeding and Vet. Med.	_____
Other Livestock	Other
Fertilizer	
Seeds and Sprays	
Other Crop	
Taxes	
Other	

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[1] Throughout this discussion, it is assumed that future cash flows will be estimated from past cash flows. If future cash flows are estimated by detailed estimates of individual items (i.e., fertilizer is estimated by using expected acres of each crop, fertilizer to be applied to each crop and expected fertilizer prices), the accrual adjustments to a past year would be unnecessary for projecting cash flow. But, an accrual adjusted statement might be useful in checking the accuracy of such estimates.

Although the usual categories used for livestock inventories would likely be sufficient, a breakdown of some inventory items that are often thrown together under feed, crops and supplies would also be needed. An example breakdown might be:

Crops for Sale	Fertilizer
Crops to Feed	Seeds
Purchased Feed	Sprays
Fuel and Oil	Other Crop
Semen and Vet. Supplies	Fencing Supplies
Other Livestock	Other

The particular breakdown of items for each of these lists would, of course, depend on the breakdown of receipts and expense items used on the income statement. The balance sheet can be simplified by reducing the number of categories but such simplification reduces the accuracy of the cash flows generated.

With an appropriate balance sheet design, an accrual adjusted income statement (or accrual adjusted receipts and expenses only) can be easily developed. Such a statement can then be used to make an appropriate estimate of cash flows. If crop acreage is to be increased by 20 percent (with the same crop mix) in future years, the increase in fertilizer expense for our example farm is $14,000, not the $8,000 that would be estimated from last year's cash flow.

Once the cash receipts and expenses for a business have been estimated, the cash available for debt payment can be calculated using the procedure outlined on the following page (*Sustainable Debt Repayment Ability*). These calculations should be made for next year (the year being financed) for lenders with only operating loan exposure and for an average future year (and possibly next year as well) for lenders with intermediate or long term exposure. The average future year projections should represent the performance that can be expected for the business if the requested loan is made. Exclude additional investments or changes in the business that may occur in the future (even if they are currently planned). Such changes will often involve additional loans that should be evaluated on their own merits at the time of investment. It is recommended that inflation be excluded from average future year calculations. Future inflation is difficult to forecast and may or may not influence the future cash flow. If future inflation is required to make a loan cash flow, it likely should not be made!

A couple of items on the *Sustainable Debt Payment Ability* form deserve some discussion. The interest paid item (line 4) should exclude interest on operating debt that is repaid within the accounting cycle (year). The principal on operating debt is included in the expenses as fertilizer expense, feed expense, etc. and, thus, is not included in scheduled debt payments. By leaving the operating interest as part of cash expenses (and not adding it back in on line 4), the complete repayment of operating debt (interest and principal) is included in the expenses and the "debt payment ability" that is calculated is the amount available for servicing intermediate and long term debt. Since intermediate and long term debt payments are frequently given highest

Sustainable Debt Payment Ability

John X. Ample (Farm) — for 1989 (Date)

Total Cash Receipts		$300,000	(1)
Total Cash Expenses	(-)	$250,000	(2)
Net Cash Income		$ 50,000	(3)
Interest Paid (if included in expenses)	(+)	$ 25,000	(4)
Available for Debt Service, Family Living, Cash Investment or Retained Earnings		$ 75,000	(5)
Family Living Expense	(-)	$ 25,000	(6)
Cash Machinery Expenditures	(-)	$ 10,000	(7)
Debt Payment Ability		$ 40,000	(8)

priority any shortage or excess in debt repayment ability transfers directly to shortages or excesses for the operating credit lender.

The cash machinery expenditure line is included to insure that the estimated cash flow provides for the maintenance of existing assets (reflects a cash flow that could be maintained through time). If we think about the assets of the farm businesses it is clear that: (1) the land is maintained at its current productivity through fertilizer, lime and other cash crop expenses, (2) building maintenance is a cash expense and the current set of buildings could likely be maintained for several years through normal repairs (additional investment in buildings is usually not necessary to maintain the current operation for several years, even though some operators may prefer new buildings. Construction of new buildings occur infrequently and a new analysis should be performed whenever such investment is being considered), and (3) the livestock inventory can be maintained through the cash expenses for raised replacements (feed, vet, breeding, etc.) or through cash expenditures for purchased replacements. However, machinery repairs are not sufficient to maintain the current equipment line without purchases of replacement machines. Most farms will be buying machinery and that should be allowed for in the repayment ability calculations.

The amount to include in the cash machinery entry depends on how far into the future you are looking. In calculating debt repayment ability for next year, the cash machinery expenditure entry can be the amount of machinery expected to be paid for with cash (not financed). In this case, the debt payments (debt service) that the debt payment ability is compared to should **include** any payments to be made on new debt expected to be incurred to purchase machinery.

However, if a longer term perspective is taken (or the specific repayment on new loans is unknown), the cash machinery expenditure entry should be the amount expected to be spent for machinery (average machinery purchases) minus: (1) principal repaid on intermediate term debt that can be reloaned annually by rollover of intermediate term debt (where rollover is allowed - often where one intermediate term note is maintained for all purchases), or (2) annual reduction in required intermediate debt payments as loans are paid off (where rollover is not allowed - often where individual notes are used for each purchase).

The cash flow coverage ratio is the "debt payment ability" calculated by using the above described procedure divided by "scheduled annual intermediate and long term debt payments". If John X. Ample, for whom we calculated a debt payment ability of $40,000 (page 4), had an annual mortgage payment of $10,000 and annual intermediate loan payments of $20,000, the cash flow coverage ratio would be:

$$\frac{\text{Debt Payment Ability}}{\text{Total Debt Payments}} = \frac{\$40,000}{\$30,000} = 1.33$$

The disadvantage of this ratio is that it takes reasonably good balance sheet and income statement data to calculate. Its advantages are that it accurately reflects liquidity or repayment ability and that critical values could be standard nationwide.

Another liquidity ratio that has received some use is debt payments as a percent of the major farm product receipts (such as debt payments as a percent of milk sales) or debt payments as a percent of total receipts. This measure is easier to obtain but ignores the difference in profitability between farms. Also, critical values would vary by type of farm and possibly by region.

Solvency Ratios

We have had more experience with solvency ratios. Either the

$$(1)\ \text{Leverage Ratio} = \frac{\text{Total Liabilities}}{\text{Net Worth}}$$

OR

$$(2)\ \text{Percent Equity} = \frac{\text{Net Worth}}{\text{Total Assets}}$$

OR

$$(3)\ \text{Debt/Asset Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

could be used. They each provide basically the same information. I prefer percent equity or debt/asset ratio because they are conceptually easier to understand and are more stable when net worth is near zero.

Two other ratios that provide some additional information are:

(1) Current and Intermediate Debt/Asset Ratio =

$$\frac{\text{Current Liability + Intermediate Liability}}{\text{Current Assets + Intermediate Assets}}$$

$$(2)\ \text{Long Term Debt/Asset Ratio} = \frac{\text{Long Term Liabilities}}{\text{Long Term Assets}}$$

These latter two ratios are primarily useful in assessing the distribution of debt. Both relate debt to most likely security. The long term debt/asset ratio may be particularly useful in establishing standards for Farmer Mac. All of these solvency ratios could be evaluated against national critical values.

Profitability Ratios

Profitability ratios abound. For evaluating financial performance, it would seem that rates of return on total investment or equity capital would be easiest to standardize and easiest for senior management of many financial institutions to understand. However, two major problems exist. First, is the change in the value of assets due to price change (appreciation or decline in property value) included? Income statements vary considerably on this point and frequently the

answer is yes *and* no. For example, the income statement in Coordinated Financial Statements by Frey and Klinefelter include change in the value of crops and livestock, but omit change in the value of machinery and real estate. The easiest consistent answer to whether change in asset values due to price should be included is yes. By using market value balance sheet, all changes in the value of assets can be included through use of the total change in value for all assets.

However, excluding all change due to price and including that due to physical inventory change gives a much better picture of the performance of the operator running the farm business. Whether a loan will be repaid from cash flow is usually a function of how good the manager is at producing and selling farm products, not how lucky he or she is in owning assets. Changes in the prices of assets can cover up poor management, or they can offset the returns of good management. An accurate measurement of management performance requires calculation of the managers contribution **aside** from price changes. Even for crop inventories where good marketing management may influence prices, management usually affects the **level** of prices received, rather than year to year (balance sheet to balance sheet) changes in prices.

To separate physical inventory change from inventory price change requires splitting the change in inventory values into two parts: (1) that due to physical inventory change, and (2) that solely due to changes in prices. To accomplish this, the balance sheet must include an accurate accounting of the physical quantities of crops, supplies and livestock as well as purchases and sales of machinery and real estate. For example, a farmer with grain on hand on 12/31/87 of $50,000 and 12/31/88 of $79,500 would have to provide added detail such as:

	12/31/87		12/31/88	
Item	Quantity	Value	Quantity	Value
Wheat (bu.)	10,000	$30,000	12,000	$42,000
Corn (bu.)	10,000	20,000	15,000	37,500
		$50,000		$79,500

The value of the end of year inventory at beginning of year prices ($66,000 in our example) can then be used to separate out that part of the inventory change that is due to physical inventory ($16,000) and that due to price ($13,500). The *Source of Change in Value* statement shown in Appendix A illustrates how calculations could be made for other assets.

The second problem in calculating rates of return is selection of the values to subtract from net income to get to the return to capital (in dollars). Net income as normally calculated (total income minus total expenses including interest and depreciation) represents the return to operator labor, family labor, management and equity capital. To get the return to total capital we must add interest back in, which is easy, and subtract values for operator labor, family labor and management. Since the family and operator labor and management are not purchased on the market, there is no predetermined value for them. To some degree, any value that is chosen is arbitrary. The values used can

significantly influence the rates of return received. One alternative is to use the wage rate for good employees for operator and family labor and five percent of gross receipts (adjusted, i.e., after subtracting feed and animal purchases[2]) for management.

Once these two problems are solved, calculating rates of return to total capital and to equity capital are quite simple. In both cases, the amount of capital used in the calculation should be the average of the values for the beginning and end of year. Calculating the rate of return to average total capital with and without "appreciation" and return to equity capital including appreciation would be a valuable indication of profitability.

An alternate indicator of profitability is the gross ratio:

$$\text{Gross Ratio} = \frac{\text{Total Expenses}}{\text{Gross Receipts (unadjusted)}}$$

Although this is easy to define and calculate, it tends to be type of farm specific. High input farms, such as livestock farms, tend to have higher values then more extensive (crop) farms. It is also sensitive to the relative amount of labor supplied by the operator(s). That is, partnerships have lower values, as do small businesses with little hired labor.

Capital Efficiency Ratios

Capital efficiency measures are designed to reflect the efficiency with which capital is used in the business. The capital turnover ratio where

$$\text{Capital Turnover Ratio (\$)} = \frac{\text{Gross Income (unadjusted)}}{\text{Average Capital Investment}}$$

OR

$$\text{Capital Turnover (Years)} = \frac{\text{Average Capital Investment}}{\text{Gross Income (unadjusted)}}$$

is a commonly used and useful measure of the overall performance of the business. Another measure that we have found useful is machinery investment per unit of primary enterprise (machinery investment per cow, for example). This provides a measure of how efficiently the machinery investment is used. Overinvestment is a common problem. For nationwide application, this could be modified to:

$$\text{Mach. Invest./\$ Gross Receipts.} = \frac{\text{Machinery Investment}}{\text{Gross Receipts (adjusted)}}$$

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2 Throughout this discussion "gross receipts (adjusted)" refers to gross receipts minus feed and animal purchases.

Some Issues on Financial Statement Design

1. I would urge development of standardized coordinated balance sheet and income statements. Reducing the focus on asset based lending requires more information on the income side of the business. Further, as indicated above, calculation of ratios that could provide a basis for loan evaluation requires income data.

2. Should contingent tax liability be included on the market value balance sheet? For many farm businesses this can be a large item. Most people find the concept easy to understand and accept as an appropriate part of a balance sheet. **However**, reasonably accurate estimations of the contingent tax liability are complex. Most people have to make calculations for federal, state and, possibly, local taxes. A procedure for calculating the liability for a farm subject to federal and New York State taxes (New York tax is based on federal calculations) is shown in Appendix B. Basically this procedure: (1) calculates the added income that would be generated by sale of the business, (2) calculates the added tax on that income, and then (3) distributes the tax by asset category. The basic question is whether the improved accuracy of the market value balance sheet is worth the added complexity and calculations required to obtain contingent tax liabilities.

3. Should accrued interest be included on the balance sheet? Many balance sheets currently in use do not. For farms with monthly payments, the magnitude of accrued interest is small. For farms with annual payments, the amounts can be quite large and new loans taken out during the year can significantly increase the accrued interest balance.

4. Should the portion of intermediate and long term loan principal due within the next 12 months be advanced to current liabilities? This is required if the current ratio is to have any real meaning. It is quite easy to calculate for annual payment loans and loans with even principal payments. It is much more difficult for even payment (principal and interest) loans for which payments are made monthly or quarterly.

5. Should a value of farm production be calculated from gross income by subtracting feed and livestock purchases? This is an extra calculation but it does provide a measure that is more comparable between types of farms (crop vs. livestock farms). It is true that the selection of the particular items to subtract is, by definition, arbitrary. Only those items that are basically purchased for resale and do not represent value added by the business should be subtracted.

6. Should a cost or modified cost column be included on the balance sheet? I find the modified cost as calculated for Coordinated Financial Statements to be of little value. A true cost (tax basis) column does indicate the tax status of assets and is useful in calculating contingent tax liability. An estimated cost of goods equivalent for crops and raised breeding livestock can not be calculated with any real accuracy for an individual farm and is not really useful for evaluating the performance of a business.

APPENDIX A
Source of Change in Value

	(a) Yr End Market Value	(b) Inventory at Beg Yr Prices	(c) Beg Yr Market Value	Change Due to: (b-c) Inventory	(a-b) Prices
Lvstk & Poultry	$79,056	$101,017	$90,302	$10,715	$-21,961
Crops & Feed	19,000	18,330	16,475	1855	670
Growing Crops	735	735	0	735	0
Supplies	1609	1602	3260	-1658	7
Breeding Stock	22,555	27,150	26,640	510	-4595
Subtotal				$12,157	$-25,879
		Net Investment			
Farm RE (sch 1)	$210,000	$223,017	$230,000	$-6983	$-13,017
Machinery (sch 2)	131,900	141,464	143,000	-1536	-9564
Nonfarm RE (sch 3)	45,000	45,000	35,000	10,000	0
Securities:					
Marketable (sch 4)	4275	3505	4845	-1340	770
Nonmktable (sch 5)	3500	3500	3500	0	0
Subtotal				$ 141	$-21,811
Total				$12,298	$-47,690
Total Farm				$13,638	$-48,460

Schedule 1 - Farm Real Estate

End of Year Market Value (balance sheet)			$210,000
Beginning of Year Market Value (balance sheet)		230,000	
(+) Cost of Purchases	0		
(-) Lost Capital			
Value Added		0	
(-) Building and Improvements Depreciation (income statement)	6983		
(-) Items Sold	0		
Value Deducted		6983	
Net Investment			223,017
Real Estate Value Change Due to Price			$-13,017

Schedule 2 - Machinery

End of Year Market Value (balance sheet)			$131,900
Beginning of Year Market Value (balance sheet)		143,000	
(+) Cost of Purchases		23,000	
(-) Sales		9500	
(-) Depreciation Taken (income statement)		15,036	
Net Investment			141,464
Machinery Value Change Due to Price			$ -9564

Schedule 3 - Nonfarm Real Estate

End of Year Market Value (balance sheet)			$45,000
Beginning of Year Market Value (balance sheet)		35,000	
(+) Cost of Purchases	10,000		
(-) Lost Capital	0		
Value Added		10,000	
(-) Building & Improvement Depreciation (income statement)	0		
(-) Items Sold	0		
Value Deducted		0	
Net Investment			45,000
Nonfarm Real Estate Value Change Due to Price			$ 0

Schedule 4 - Marketable Securities

End of Year Market Value (balance sheet)		$4275
Beginning of Year Market Value (balance sheet)	4845	
(-) Beginning Value of Securities Sold	1940	
(+) Cost of Purchases (held end of year)	600	
Net Investment		3505
Marketable Securities Value Change Due to Price		$ 770

Schedule 5 - Nonmarketable Securities

End of Year Market Value (balance sheet)		$3500
Beginning of Year Market Value (balance sheet)	3500	
(-) Beginning Value of Securities Sold	0	
(+) Value of Purchases (held end of year)	0	
Net Investment		0
Nonmarketable Securities Value Change Due to Price		$ 3500

APPENDIX B
Contingent Tax Liability

Name Wilbur & Charlotte Webb As of 12/31/87

I. ESTIMATED TAXABLE INCOME FROM THE SALE OF FARM ASSETS

A. Current Assets and Liabilities

1.	Hedging account (market minus cost)		$ 2000
2.	Notes and accounts receivable (good) (market minus cost)		4840
3.	Livestock and poultry to be sold		
	a. market value	79,056	
	b. less selling costs (4%)	- 3162	
	c. less tax basis value	- 11,200	
	d. net value		64,694
4.	Crops and feed		
	a. market value	19,000	
	b. less selling costs (0%)	0	
	c. net value		19,000
5.	Cash investment in growing crops		
	a. market value	735	
	b. less selling costs (6%)	- 44	
	c. net value		691
6.	Supplies		1609
7.	Prepaid expenses		13,560
8.	Other		0
9.	Total current assets that would be taxed (sum 1-8)		$ 106,394
10.	Accounts payable		2400
11.	Medical and other personal (only those deductible on federal income tax schedule A)		0
12.	Estimated accrued interest		2112
13.	Estimated accrued tax liability		
	a. property		
	b. real estate		
	c. employer payroll withholdings		900
	d. income (only local - excluding Fed, State & SS)		
14.	Accrued rents and lease payments		
15.	Other		
16.	Total current liabilities that could be deducted (sum lines 10-15)		$ 5412
17.	Contingent taxable income (line 9 minus line 16)		100,982

B. Sale of Machinery and Breeding Livestock

		Machinery	*Livestock*
1.	Market value	$131,900	$ 22,555
2.	(-) Selling costs (5%) (4%)	6595	902
3.	(=) Net sale proceeds	$125,305	$ 21,653
4.	(-) Tax basis	106,535	368
5.	(=) Taxable income	$ 18,770	$ 21,285
6.	Total taxable income (sum line 5)		40,055

C. Sale of Marketable Securities and Other Intermediate Assets

		Securities		*Other*
		Marketable	*Nonmarketable*	*Intermediate*
1.	Market value	$ 4275	$ 3500	$ 9375
2.	(-) Selling costs (2%)	86	0	469
3.	(=) Net sale proceeds	$ 4189	$ 3500	$ 8906
4.	(-) Tax basis	2700	3500	0
5.	(-) Tax penalty on R/A	XXXXXX	XXXXXX	938
6.	(=) Taxable income	$ 1489	$ 0	$ 7968
7.	Total taxable income (sum line 6)			9457

D. Sale of Real Estate and Other Fixed Assets

1.	Gross sale amount	$255,000
2.	Selling costs	15,300
3.	Net sale proceeds	$239,700

		House	*Taxable Property*
4.		$ 25,000	$214,700
5.	Less tax basis (excluding house basis)		132,462
6.	Total taxable income		$ 82,238

E. Total Taxable Income

1.	Current assets (table A, line 17)	$100,982
2.	Machinery & Livestock (table B, line 6)	40,055
3.	Securities and other intermediate (table C, line 7)	9457
4.	Real Estate (table D, line 6)	82,238
5.	Estimated taxable income from sale	$232,732

II. ESTIMATED CONTINGENT TAX LIABILITY FROM SALE OF ASSETS (SALE IN ONE YEAR)

State Income Tax:

1.	Expected adjusted gross income without sale	$ 20,000
2.	(-) State standard deduction	- 8000
3.	(-) State exemptions	- 2000
4.	State taxable income without sale	$ 10,000
5.	Taxable income from sale (table E, line 5)	+232,732
6.	State taxable income with sale	$242,732
7.	State tax with sale (tax on line 6)	19,457
8.	State tax without sale (tax on line 4)	340

Federal Income Tax (w/o sale):

9.	Expected adjusted gross income without sale (line 1)	$ 20,000
10.	(-) Federal standard deduction	- 5000
11.	(-) Federal exemptions	- 7800
12.	Federal taxable income subtotal	$ 7200
13.	(-) State tax without sale (line 8)	- 340
14.	Federal taxable income without sale	$ 6860
15.	Federal tax without sale (tax on line 14)	1029

Federal Income Tax (with sale):

16.	Federal taxable income subtotal (line 12)	$ 7200
17.	(-) State tax with sale (line 7)	- 19,457
18.	(+) Taxable income from sale (line 5)	+232,732
19.	Federal taxable income with sale	$220,475
20.	Federal tax with sale (tax on line 19)	57,865

21. Investment Credit Carried Forward and Recapture:

		New York State		*Federal*	
		w/sale	*w/o sale*	*w/sale*	*w/o sale*
a.	Tax from lines 7, 8, 20 & 15	$19,457	$ 340	$57,865	$ 1029
b.	Less IC carried forward	3000	3000	8000	8000
c.	Plus IC recapture	1000	0	2500	0
d.	Tax net of IC (min=0)	$17,457	$ 0	$52,365	$ 0

22. Additional Self Employment Tax:

a.	Net income from sale of current assets (table A, line 17)	$100,982
b.	Net operating (sch. F) income w/o sale	+ 12,000
c.	Self employment income w/ sale	= 112,982
d.	Self employment tax, line 22c x .1302 (max. $6,510[a])	6510
e.	Self employment tax w/o sale, 22b x .1302 (min=0, max=6,510)	1562
f.	Increase in self employment tax (line 22d - 22e)	$ 4948

23. Summary of Contingent Tax Liability from Sale:

a.	Increase in federal tax (line 21d; w/ - w/o)	$ 52,365
b.	Increase in state tax (line 21d; w/ - w/o)	17,457
c.	Plus additional social security tax (line 22f)	4948
d.	Estimated CTL from sale of farm	$ 74,770

24. Distribution of Contingent Tax Liability:

a. 74,770 (Total CTL (line 23d)) ÷ 232,732 (Taxable income from sale (line 5)) = .32 (Ave. Tax Rate)

Item	*Taxable Income*	*CTL*	*Selling Costs*	*Total*
Current assets	$100,982	$ 32,314	$ 3206	$ 35,520
Marketable securites	1489	476	86	562
Machinery	18,770	6006	6595	12,601
Livestock	21,285	6811	902	7713
Nonmktable securities	0	0	0	0
Retire acct & other	7968	2550	1407 [b]	3957
Real estate	82,238	26,316	15,300	41,616

Note: *The potential tax savings from spreading the sale over two or more years can be estimated by calculating the expected taxable income for each year and using a separate contingent tax liability worksheet for each year.*

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[a] 1988 estimated earnings base of $45,000
[b] Include tax penalty from Table C, line 5