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A Preliminary Analysis of the Impact of the Tax Reform Act of 1986 on Taxes paid by Dairy Farmers

George L. Casler

The Tax Reform Act of 1986 was signed by President Reagan on October 22, 1986. Two provisions of the bill that would have important impacts on Federal taxes likely to be paid by dairy farmers are (1) elimination of investment credit and (2) elimination of the capital gain exclusion which would end capital gain treatment of dairy cattle sales. These impacts would be partially offset by increases in the personal exemption allowance (to $2,000 when fully implemented) and an increase in the zero bracket amount (to $5,000 for a joint return) and lowering of tax rates. Other provisions of the proposal, such as lengthening the recovery period for some depreciable assets and the requirement to capitalize pre-productive expenses also have the potential to impact Federal taxes paid by farmers. Income averaging, which has been a benefit for some farmers, was repealed beginning in 1987 as was the two-earner married couple deduction. There are many other important changes in the Tax Reform Act of 1986 that will affect the tax bills of millions of taxpayers. Many of these will not affect most farmers, at least not with respect to income from the farm business.

This paper is a revision of A.E. Staff Paper 85-32, "An Analysis of the Impact of President Reagan's Tax Proposals on Taxes paid by Dairy Farmers", by George L. Casler. The Tax Reform Act of 1986 is similar to Reagan's proposal (Treasury II) in provisions that will affect the tax bills of most farmers with respect to taxes on their farm income. Under the TRA of 1986 by 1989 the personal exemption will be the same as in the Reagan proposal ($2,000) and the standard deduction will be higher ($5,000 vs. $4,000). The TRA of 1986 has a 15 percent rate on the first $29,750 of taxable income (vs. $29,000 in the

Reagan proposal), and 28 percent on income beyond $29,750. The Reagan proposal had a 25 percent rate on taxable income between $29,000 and $70,000 and a 35 percent rate on income over $70,000. In contrast, the TRA of 1986 has a phase-out of the benefits of the personal exemption and the 15 percent bracket for high income taxpayers so that they would pay a 33 percent marginal rate on some income. Few New York dairy farmers would be subject to this phaseout, particularly on their income from farming.

The Reagan proposal included elimination of capital gain treatment of dairy cattle. The TRA of 1986 eliminates the capital gain exclusion on the sale of all assets. The impact on the taxable income and tax bill (with respect to dairy cattle income) is the same under either version.

The primary purpose of this paper is to present some preliminary calculations of the impact of the elimination of investment credit and the capital gain exemption, the increase in the standard deduction and personal exemptions and the rate reductions on taxes likely to be paid by typical New York dairy farmers. The calculations do not include the impact of potentially longer depreciation periods or other provisions that might affect taxes paid by dairy farmers. Comments on these items are made later in the paper.

First, calculations are provided for an example farm which is the average for 458 dairy farms included in the 1984 New York dairy farm business summary prepared at Cornell (dairy herd of 89 cows). Only income from the farm business is included in the calculations. The same calculations were made for each farm in the 1984 summary. The calculations are limited by the data available in the Cornell Dairy Farm Business Summary program. Therefore, the results for most individual farms are not exactly correct.

The calculations require that assumptions be made about a number of items important to the tax calculation. The author believes that these

assumptions are reasonable. The intent is not to compute the precise amount of tax that would be paid under either the current tax law or the TRA of 1986, but to look at the "big picture". The TRA of 1986 tax rates and brackets used are those for 1988. Tax on 1984 income under prior law is computed using the 1984 tax rates and brackets and 1984 income. Taxes computed for the TRA of 1986 are those that would have been paid had the proposal been law in 1984 (or the amount that would be paid on 1988 incomes if they were the same as in 1984).

The 1984 data (and 1984 tax schedule) is used because (1) it was already stored in the computer and (2) it allows making comparisons with the earlier work on the Reagan proposal. If a farmer had the same taxable income in 1988 as in 1984, the tax would be slightly lower under the old law because of indexing of the tax brackets due to inflation. If the 1985 or 1986 tax schedules had been used to calculate tax under the old law, the changes from the old law to the TRA of 1986 in tax due would be slightly larger than shown in Table 3.

Assumptions

1. Livestock depreciation is not shown in the Cornell records. Therefore it was computed using the Accelerated Cost Recovery System (ACRS). For farms where data from 1982 and 1983 were available in addition to 1984, depreciation for 1984 was 21 percent of 1982 purchases, 22 percent of 1983 purchases and 15 percent of 1984 purchases. If 1982 and/or 1983 data was unavailable, depreciation was calculated by assuming that cattle purchases in the missing data years were the same as in the subsequent year where data were available. In a few cases where this procedure would have produced unrealistically high depreciation, adjustments were

made. The results are equivalent to 3 years of 5 year ACRS depreciation and assume that purchased cows are held three years.

2. Machinery depreciation and real estate depreciation on the tax return is equal to that reported for the business summary.

3. Gain or loss on cattle sales is the difference between cattle sales and the adjusted basis of cattle purchased in 1981, 1982 and 1983. The gain is treated as capital gain. In effect, this assumes that purchased cows are sold as cull cows for the adjusted basis so that there is no gain or loss on these animals and the capital gain is from the sale of raised animals.

4. Sixty-percent of the capital gain from cattle sales is excluded from income under prior law.

5. Each operator is married and has one child. The standard deduction or zero bracket amount (ZBA) is used. In other words, it is assumed that itemized deductions would be less than the ZBA.

6. Three-fourths of building purchases are real estate eligible for investment credit. All investment credit on cattle, machinery and real estate is calculated at 10% under prior law.

Table 1. Calculations for the average dairy farm in the 1984 DFBS (89 Cows)

Prior Law	
Cash receipts	$209,155
Less: dairy cow sales	12,240
Schedule F receipts	$196,915
Cash expenses (except replacement livestock)	$168,297
Calculated livestock depreciation	1,766
Machinery depreciation	15,345
Real estate depreciation	7,308
Schedule F expenses	$192,716
Net farm profit	4,199
Plus: 40% of gain on raised cow sales	4,384
Reportable income	$ 8,583
Operators per farm	÷ 1.31
Reportable income per operator	$ 6,552
Exemptions (married, 1 child)	3,000
Taxable income	$ 3,552
Tax per operator (1984 rates) (Tax per farm = 25)	19
Investment credit	
Machinery	$ 1,410
Cattle	304
3/4 of buildings	504
Total	$ 2,218
	÷ 1.31
IC per operator	$ 1,693
Net tax per operator	$ 0
Carryover of IC	$ 1,674
IC carryover per farm	$ 2,193

Table 1 continued

TRA 1986 (no investment credit, no capital gain exclusion, lower rates)

Net farm profit	$ 4,199
100% of raised cattle sales	10,961
Reportable income	$15,160
Operators per farm	÷ 1.31
Reportable income per operator	$11,573
Less: Exemptions (2,000 per exemption)	6,000
Standard deduction*	5,000
Taxable income	$ 573
Tax per operator**	86
Tax per farm	113
Increase in tax per operator (plus loss of IC carryover of 1,674)	86
Increase in tax per farm (plus loss of IC carryover of 2,193)	113

*Note that the standard deduction (or ZBA) is subtracted in the taxable income calculation rather than being built into the tax schedule.

**Based on proposed 1988 Schedule:

Taxable income	Rate:
0 - 29,750	15
29,750+	28

There has been concern that cattle sales would be included in self employment income resulting in increased self employment tax. However, sales of animals held for dairy or breeding purposes will continue to be reported on a form such as 4797 rather than on Schedule F.

Tax Calculations by Herd Size

Data for farms in various herd size groups ranging from less than 40 cows to 250 or more cows are shown in Tables 2 and 3. The tax calculations were made for each of the 537 farms[1] and the results averaged for those farms in each herd size group. This accounts for what appears to be inconsistencies in the data. For example, the average reportable farm income per farm under

[1] This includes all the dairy farms from which data was collected, not just the 458 included in the summary. The summary excludes all rented farms and those with large amounts of crop sales.

prior law in the 150-199 cow group is $5,649 but the farm income per operator in the same group is $-1,002.

The average calculated 1984 tax per operator under prior law ranges from $504 in the less than 40 cow group to $12,410 in the group with 250 or more cows. All the groups with herd sizes under 100 cows have an average calculated tax of less than $1,000 per operator (76 percent of the farms). All groups except the one with 250 or more cows have an average calculated tax of less than $2,000 per operator (97 percent of the farms). The group with the largest herd size has an average calculated tax of over $12,000.[2]

The 1984 average investment credit per operator exceeds the calculated tax per operator for the average of all size groups except the largest. However, the average net tax per operator exceeds zero for all groups.[3] This result appears to be incorrect but is not because the investment credit far exceeds the tax on some farms but the tax exceeds the IC on others. The average net tax per operator is less than $1,000 for all groups except the two with the largest herd sizes. The average IC carryover per operator is positive and exceeds the average net tax per operator in each herd size group except the largest.

Under the TRA of 1986, the average farm income per operator is greater than the farm income per operator under current law in all size groups (Tables 2 and 3). This is due to the fact that gain on the sales of raised dairy cows would not be eligible for the 60 percent capital gain exclusion. Average farm

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[2] Probably the actual tax is lower than this because some of these farms are organized with multiple tax entities (partnerships, corporations and single proprietorships) which is likely to reduce the actual tax compared to the calculated taxes.

[3] It is likely that many farms had IC carryover from years prior to 1984 that could be applied to 1984 tax. Therefore the net tax on many farmers would be lower than the amount calculated here.

taxable income per operator under the TRA of 1986 is lower than under prior law for all groups except the two largest herd size groups.

This is due to the following:

(1) The increase in personal exemption from $1,000 to $2,000.

(2) The standard deduction ($5,000 for a married couple filing jointly) would be deducted in computing taxable income rather than being built into the tax schedule or table ($3,400 in 1984).

(3) These two factors more than offset the increased taxable income from reporting all of the gain from sale of raised cattle rather than 40 percent on all but the two largest herd size groups.

If the standard deduction was not deducted in computing taxable income under the TRA of 1986, taxable incomes would be lower on the smaller farms but higher on the larger farms than with the current tax law. This is because the higher personal exemption and standard deduction more than offset the loss of the 60 percent capital gain deduction on the smaller farms but the reverse is true on the larger farms.

The average tax per operator under the TRA of 1986 is less than $1,000 in the groups with less than 100 cows per farm. The average tax per operator exceeds $2,000 only in the groups with 200 or more cows, and $10,000 only in the group with 250 or more cows per farm.

The average tax calculated in column 6 of Table 3 for all but the two largest herd size groups appears to be incorrect but is not. The average taxable income for the groups up to 200 cows is negative or very small while the tax is positive. Those with a negative taxable income pay zero tax while those with positive incomes pay tax and, therefore, the average tax for all farms in the group is positive.

The average change in tax per operator from prior law to the TRA of 1986 is positive in all groups. The average change is less than $1,000 in all groups except for the two groups with 200 or more cows. The average change in tax per farm is less than $1,000 in all groups with less than 150 cows.

The average calculated tax increase in each herd size group is less for the TRA of 1986 than for the Reagan proposal.

The average investment credit earned in 1984 was greater for each group than the average 1984 tax liability, before investment credit. The excess credit can be carried back three years or forward 15 years to offset tax liability in those years. The IC carryover per operator for 1984 is shown in column 10 of Table 2. In addition to the change in tax per operator shown in column 7 of Table 3, the operators of these farms would have lost the IC carryover had the TRA of 1986 been in effect in 1984. The sum of the change in tax liability under the TRA of 1986 plus the 1984 IC carryover is shown in column 9. In all groups the IC carryover is greater than the change in net 1984 tax. If this IC could have been used to offset taxes paid in the past or to be paid in the future, the tax effect of loss of IC under the TRA of 1986 may be more important than shown in columns 7 and 8 of Table 3. However, it is likely that on many of those farms, the excess investment credit never would be used (particularly if the prior tax law had remained in effect).

The TRA of 1986 allows 65 percent of existing IC carryover to be used in the future (apparently 82.5 percent in 1987). Therefore, many farmers could carry forward the existing balance of IC and pay little or no tax for several years.

As stated earlier, the tax calculations in this paper are based on only income from the farm business. Actual taxes paid by the operators could be greater (or less) due to non-farm income of the operator or spouse. Some of

the IC earned in 1984 could have been used to offset tax on such non-farm income.

In a separate study underway at Cornell using actual 1985 tax return data from a sample of New York farms, preliminary evidence indicates that a high proportion of the farms pay no Federal income tax, even when non-farm income is included. In addition, many farmers have large balances of unused investment credit.

The 1987 Transition Year

There will be a transition tax schedule in effect for 1987:

Taxable Income over:	Marginal rate in %
0	11
3,000	15
28,000	28
45,000	35
90,000	38.5

The denial of deductions such as state sales tax, interest on car loans, etc. and limitations on other deductions such as medical expenses and IRA's will begin in 1987. There will be a transition period of several years on some items.

The personal exemption will be $1,900 in 1987 and $1,950 in 1988.

It is important to note that the definition of taxable income is different from the 1986 definition. The standard deduction ($3,800 in 1987) will be subtracted in the Taxable Income calculation rather than using the 1986 procedure of building the ZBA ($3,670) into the tax schedule and tables.

Other Provisions of the TRA of 1986

One provision of the TRA of 1986 that might affect federal income taxes paid by dairy farmers is the longer depreciation periods on some assets.

Farm equipment and single purpose livestock structures which were in the 5 year ACRS class will be in the 7 year class. Cars and light trucks will be in the 5 year rather than three year class. Dairy cows will stay in the 5 year class. The $5,000 Section 179 deduction (which was scheduled to increase to $7,500 in 1988 and to $10,000 in 1990) will increase to $10,000 in 1987. The $10,000 will be phased out if more than $200,000 of depreciable personal property is placed in service in one year.

The impact of the longer depreciation periods on equipment and single purpose livestock structures would not appear to have a major impact on taxes paid by dairy farmers. Particularly for smaller businesses, it would be partially offset by the increase in the 179 deduction. The 179 deduction would become relatively more attractive because it would no longer involve the loss of investment credit. (No great loss without some small gain!) In addition some farmers are using one of the alternate straight line options on three and five year ACRS property because they did not need the large depreciation deductions that were available with the rapid recovery option.

General purpose farm buildings such as machine sheds that were 19 year property will be 20 year property under the TRA of 1986 and depreciation will be limited to 150 percent declining balance. Tenant houses will be 27.5 year straight line property.

The less rapid depreciation on general purpose buildings and tenant houses have the potential to raise the tax bills of dairy farmers. However, such buildings make up a small proportion of the structures on most dairy farms.

All items, ACRS or non-ACRS, already on the depreciation schedule will continue to be depreciated under the old rules.

Because the new depreciation rules apply only to acquisitions in 1987 and later, the impact of the longer depreciation periods will gradually impact the net farm profit calculation and tax liability except for farmers who make major expansions.

Capitalization of preproductive expenses is required by the TRA of 1986 in cases where the preproduction period is greater than two years. This provision will require capitalization of the cost of raising dairy replacements and has the potential of causing large increases in taxable incomes on dairy farms during the transition period before depreciation deductions begin to offset a large part of the decrease in expenses due to the capitalization requirements.

To avoid the capitalization rules, a taxpayer can elect to use straight line depreciation over the ADR class lives set by IRS for various types of property (for example, 10 years for farm machinery). For most dairy farms, this election appears to cause less of an increase in taxable income during the transition years than would capitalizing the cost of raising replacements.

Whether the taxpayer chooses capitalization or the election of the alternative straight line depreciation, the tax problem is only during the transition period from the old to the new rules. This is because the depreciation or expenses not allowed during the early years will be offset by higher depreciation in the future. The same is true of the impact of longer depreciation periods.

Table 2. Average Federal Income Tax by Herd Size Under Prior Law

Herd Size	No. of farms	No. of Operators	Reportable Farm Income	Farm Income Per Operator	Farm Taxable Income/ Operator	1984 Tax Per Operator	Investment Credit per Operator	Net Tax Per Operator	Investment Credit Carry-over per Operator	Net Tax Per Farm
1	2	3	4	5	6	7	8	9	10	11
<40	60	1.10	4,967	4,109	1,109	504	683	378	558	435
40-54	129	1.18	8,328	7,238	4,238	623	642	407	427	445
55-69	103	1.34	5,244	3,545	545	533	1,118	216	801	256
70-84	70	1.38	9,033	5,935	2,935	724	1,119	372	767	512
85-99	44	1.36	5,560	2,939	- 61	804	1,894	270	1,360	303
100-149	68	1.49	8,815	4,545	1,545	1,012	2,083	428	1,500	802
150-199	29	1.54	5,649	- 1,002	- 4,002	1,179	3,928	562	3,310	1,012
200-249	17	1.47	13,920	8,191	5,191	1,915	5,111	1,102	4,298	1,493
>=250	17	1.74	69,901	42,968	39,968	12,410	7,074	8,222	2,886	13,071

Table 3. Average Federal Income Tax by Herd Size Under the Tax Reform Act of 1986 and Change from Prior Law

Herd Size	Reportable Farm Income	Farm Income Per Operator	Farm Taxable Income Per Operator	Tax Per Operator	Tax Per Farm	Change in Net Tax		Change including IC carryover	
						Per Operator	Per Farm	Per Operator	Per Farm
1	2	3	4	5	6	7	8	9	10
<40	7,412	6,376	- 4,624	415	458	36	23	594	605
40-54	11,121	9,760	- 1,240	523	579	116	135	542	636
55-69	9,651	7,092	- 3,908	542	624	326	368	1,126	1,361
70-84	14,564	10,394	- 606	710	940	338	428	1,105	1,409
85-99	12,628	8,815	- 2,185	862	1,050	592	747	1,952	2,397
100-149	17,680	11,014	14	1,074	1,625	646	823	2,145	2,727
150-199	17,874	8,290	- 2,710	1,331	2,192	769	1,181	4,079	5,181
200-249	34,831	24,420	13,420	3,496	4,611	2,394	3,119	6,692	8,471
>=250	94,558	60,347	49,347	12,178	18,368	3,956	5,297	6,842	10,129