



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

CORNELL
AGRICULTURAL ECONOMICS
STAFF PAPER

**An Analysis of the Impact of President Reagan's
Tax Proposals on Taxes paid by Dairy Farmers**

George L. Casler*

November 1985

A.E. Staff 85-32

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

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

An Analysis of the Impact of President Reagan's
Tax Proposals on Taxes paid by Dairy Farmers

George L. Casler*

*George L. Casler is a Professor, Department of Agricultural Economics,
Cornell University.

An Analysis of the Impact of President Reagan's Tax Proposals
on Taxes paid by Dairy Farmers*

George L. Casler

President Reagan released a far-reaching tax proposal in May 1985. Two provisions of the proposal 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 capital gain treatment on sales of dairy cattle. These impacts would be partially offset by increases in the personal exemption allowance (to \$2,000) and an increase in the zero bracket amount (to \$4,000 for a joint return) and lowering of tax rates. Other provisions of the proposal, such as lengthening the recovery period for depreciable assets and requiring capitalization of costs for raising replacements also have the potential to impact Federal taxes paid by farmers.

The purpose of this paper is to present some preliminary calculations of the impact of the investment credit, capital gain, exemption, ZBA and rate reduction proposals 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 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

* Presented at Farm Management Workshop, Dept. of Ag. Econ., October 1, 1985 and American Feed Manufacturers Association Seminar, October 3, 1985.

would be paid under either the current or proposed tax law, but to look at the "big picture". The proposed tax rates and brackets would be for 1986. Tax on 1984 income under current law is computed using the 1984 tax rates and brackets and 1984 income. Taxes computed for the Reagan proposal are those that would have been paid had the proposal been law in 1984.

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.

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 current law.
5. Each operator is married and has one child.
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 current law.

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

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

Table 1 continued:

Reagan proposal (no investment credit, no capital gain treatment of cattle sales, lower rates)

Net farm profit	\$ 4,199
100% of raised cattle sales	10,961
Reportable income	<u>\$15,160</u>
Operators per farm	1.31
Reportable income per operator	<u>\$11,573</u>
Exemptions (2,000 per exemption)	6,000
Taxable income	<u>\$ 5,573</u>
Tax per operator*	236
Tax per farm	309
Increase in tax per operator (plus loss of IC carryover of 1,674)	236
Increase in tax per farm (plus loss of IC carryover of 2,193)	309

* Based on:	<u>Taxable Income</u>	<u>Rate:</u>
	0 - 4,000	0
	4,000 - 29,000	.15
	29,000 - 70,000	.25
	70,000 +	.35

If cattle sales were included in self employment income there would be increased self employment tax. However, cattle sales probably would continue to be reported on Form 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 current law in the 150-199 cow group is \$5,649 but the farm income per operator in the same group is \$-1,002.

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.

The average calculated 1984 tax per operator under current 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 a 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 Reagan proposal, 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 be ordinary rather than capital gain. Average farm taxable income per operator under the Reagan proposal is lower for the two smallest herd size groups but larger for all other groups than under present law. The difference in taxable income is greater as herd size increases.

^{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 some farmers would be lower than the amount calculated here.

The average tax per operator under the Reagan proposal 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 change in tax per operator from the current law to the Reagan proposal 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 investment credit earned in 1984 is greater for each group than the average 1984 tax liability, before investment credit. This 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 Reagan proposal been in effect in 1984. The sum of the change in tax liability under the Reagan proposal 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 Reagan proposal 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 will never be used.

Assuming that carryover credits could still be used even if, in the Reagan proposal, there is no new IC, 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.

Other Provisions of the Reagan Proposal

Two additional provisions of the Reagan proposal that might affect federal income taxes paid by dairy farmers are (1) longer depreciation periods combined with inflation adjusted depreciation charges and (2) the requirement that costs of raising replacements be capitalized.

Dairy cows, as well as most farm equipment, which are now in the 5 year ACRS class would be in the CCRS (Capital Cost Recovery System) Class 4 and depreciated over a 7 year period.^{4/} Adjustments for inflation in CCRS would reduce the unfavorable impact of the longer depreciation period on dairy farms as compared to ACRS. In total, this provision would not appear to have a major impact on taxes paid by dairy farmers.

The requirement to capitalize the cost of raising replacements could have some impact on tax liability in the initial years, but this would become a washout because the amounts not expensed in the early years would be recovered as depreciation in later years. Also, it is not clear what would be capitalized. Some of the cost of raising a dairy replacement is due to depreciation on buildings and equipment. Is it only the cash items such as purchased feed that are to be capitalized? Or would the fertilizer, fuel, etc. used to grow the feed that is fed to the replacements also be capitalized? This author questions whether this provision will be enacted, and if enacted whether it will be effectively enforced.

^{4/} In the opinion of this author, both the ACRS and CCRS lives for dairy cows are too long because the average holding time of a dairy cow after being placed in the milking herd is three to four years. However, the fact that the cow may be depreciated to zero offsets the excessively long ACRS depreciation period so the system turns out to be reasonably fair for dairy cows. It is not clear that the same can be said for CCRS as applied to dairy cows. But if the animal is sold as a cull cow in three or four years at a loss (that is, the sale price is less than the undepreciated balance), such loss would be used to reduce taxable income.

Table 2. Average Federal Income Tax by Herd Size Under 1984 Law

Herd Size	No. of farms	No. of Operators	Reportable Farm Income		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	
			Income Operator	Income Operator	Taxable Income/Operator	Income Operator	Per Operator	Per Operator	Per Operator	Per Operator	Per Operator	Per Operator	Per Operator	Per Operator	Per Operator	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	2,063	428	1,500	802						
150-199	29	1.54	5,649	-	-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 Reagan Proposal and Change from 1984 Law

Herd Size	Reportable Farm Income	Farm Income Per Operator	Farm Taxable Income Per Operator	Tax Per		Change in Net Tax		Change including IC carryover	
				Operator	Farm	Per Operator	Per Farm	Per Operator	Per Farm
1	2	3	4	5	6	7	8	9	10
<40	7,412	6,376	376	465	513	86	78	644	660
40-54	11,121	9,760	3,760	597	662	190	218	617	719
55-69	9,651	7,092	1,092	613	716	397	459	1,198	1,452
70-84	14,564	10,394	4,394	810	1,073	439	561	1,205	1,542
85-99	12,628	8,815	2,815	970	1,199	700	896	2,060	2,546
100-149	17,680	11,014	5,014	1,178	1,778	750	976	2,250	2,881
150-199	17,874	8,290	2,290	1,428	2,368	866	1,356	4,176	5,356
200-249	34,831	24,420	18,420	3,665	4,881	2,563	3,388	6,861	8,741
>=250	94,558	60,347	54,347	13,538	20,490	5,316	7,419	8,202	12,252