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Farm Capital Gains—A Supplement to Farm Income?

By Ernest W. Grove

Net farm income has shown a generally downward trend since the postwar highs of 1947 and 1948. Even with allowance for nonfarm sources of income and for declining numbers of farms, average farm family income has lagged behind the steadily rising levels of nonfarm family incomes. But the farmer has had an additional return of sorts in the increased capital value of his assets—farm land and buildings and, to a lesser extent, working capital. Such increments in capital value are not included in regular estimates of gross and net farm income because the latter are designed specifically to measure returns from farming operations only. Capital gains and losses are purposely omitted from the estimates of income from farming. Capital gains and losses are referred to here in their general economic sense of changes in capital values associated with price changes, not in any specific tax sense. There is a difference of opinion among economists as to the desirability of lumping capital gains and losses with ordinary income. But some agricultural economists would argue that farm capital gains have been a clearly recognizable supplement to farm incomes in recent years, and most would probably concede that capital gains or losses have some bearing on the economic welfare of farm operators and their families, especially owner operators. Reasonably satisfactory information is available for an assessment of the approximate magnitude and general significance of farm capital gains and losses. Without necessary commitment to either side of the argument, therefore, it is the purpose of this study: First, to raise the basic question concerning farm capital gains and losses; second, to discuss some of its implications in terms of various possible answers; and third, to develop estimates of the average amounts involved annually in the last 20 years.

THE EXTENT to which farmers may have benefited since January 1, 1940, from increased values of farm land, buildings, machinery, and inventories of crops and livestock is indicated in table 1.¹ This table compares farm

capital gains or losses with net farm income, in terms of averages per farm, for each year from 1940 through 1959. Increasing capital values in agriculture, exclusive of net investments in farm assets,² averaged nearly \$1,000 per farm per year

¹The only other published work along this line is a paper by Dale E. Hathaway, "Agriculture and the Business Cycle." See pp. 55-6 of "Policy for Commercial Agriculture, its Relation to Economic Growth and Stability," papers submitted by panelists appearing before the Subcommittee on Agricultural Policy of the Joint Economic Committee, Nov. 22, 1957, 85th Congress, 1st Session, Joint Committee Print.

²Net investment in farm dwellings, service buildings, and other structures is excluded. However, William H. Scofield has pointed out to the author that there has been some increase in total land in farms since 1940, and that clearance, drainage, and other forms of investment in land as distinct from structures have also been common. To this extent, the capital gains and losses of table 1 are not entirely net of farm investment.

TABLE 1.—Farm capital gains in relation to farm income, 1940-59

Year	Average net income of farm operators per farm ¹	Average capital gain or loss (-) per farm	
		Amount ²	Percentage of average net income
	<i>Dollars</i>	<i>Dollars</i>	<i>Percent</i>
1940.....	720	125	17
1941.....	1,044	850	81
1942.....	1,600	1,300	81
1943.....	1,942	1,300	67
1944.....	1,967	1,200	61
1945.....	2,080	1,150	55
1946.....	2,574	1,725	67
1947.....	2,648	1,775	67
1948.....	3,065	150	5
1949.....	2,259	-650	-29
1950.....	2,479	2,850	115
1951.....	2,951	2,200	75
1952.....	2,829	-1,100	-39
1953.....	2,502	-1,250	-50
1954.....	2,440	600	25
1955.....	2,313	400	17
1956.....	2,338	1,700	73
1957.....	2,426	1,900	78
1958.....	2,990	2,750	92
1959 ³	2,547	875	34
Average 1940-59...	2,286	993	43

¹ From page 41 of the July 1959 Farm Income Situation. Includes the value of changes in farm inventories.

² From table 2.

³ Preliminary.

over the last 20 years. The annual average of farm operators' net income per farm, including inventory changes, was \$2,286. Thus, capital gains in agriculture, realized and unrealized, have averaged 43 percent as large as total net income from farming operations.

There were, on the average, some capital gains in farming in 17 of the last 20 years. Only in 1949, 1952, and 1953 were there declines in the average values of total farm assets after subtracting net investments. The average farm capital gain in 1950, the year of the Korean outbreak, exceeded the average net farm income in that year by 15 percent. Another year of unusually large capital gains in farming was 1958, when the average farm had a net appreciation in its capital value of approximately \$2,750, chiefly because of higher values of farm real estate. This average capital gain failed to exceed the 1958 average net income per farm only because the latter was the second highest on record.

Note that the averages of table 1 are for all census farms, including part-time, residential, and sharecropper farms. Capital gains on farms of commercial size undoubtedly have averaged much larger.

Some Practical Considerations

Net income and capital gains or losses are not added together in table 1 because they are not entirely comparable magnitudes. The net income of column 1 is "realized" income except for the value of changes in crop and livestock inventories. If inventory changes were omitted, the averages of exclusively realized net income would not differ much from those shown. On the other hand, the average capital gain or loss in the second column of the table represents a mixture of realized and unrealized, chiefly the latter. A farmer cannot realize his capital gains unless he sells out and retires or goes into some other business. He then realizes a capital gain for the period during which he has had the farm, not just the year previous to sale.

Relatively few farms change hands each year,³ so that the bulk of farm capital gains or losses are of the unrealized variety. They are sometimes called "paper profits" because, if real estate and other asset values should decline, those profits could disappear in short order.

Another difference between the two columns of table 1 is that net income is for farm operators exclusively, whereas capital gains and losses, whether realized or unrealized, accrue to the owner of the assets. The percentage of owner operators rose considerably in the last 20 years, and the relative number of tenant operators declined. Since many of the changes in asset values were associated with changes in real estate values, a variable but significant fraction of farm capital gains and losses accrued to farm landlords instead of farm operators.

Thus, the second column of table 1 shows the average capital gain or loss that would have been realized in each of the last 20 years if all farms, with their machinery, livestock and other assets, had been sold regularly each year at the end of

³ Voluntary transfers over the last 20 years reached a high of 6 percent of all farms in 1946. The low point was 3 percent in 1953.

the year. This concept is not one that permits the addition of capital gains to net income of farm operators. Yet it should help considerably in appraising the significance of capital gains and losses to farmers. A man who bought a farm on January 1, 1940, and sold it on December 31, 1959, would have realized a very substantial capital gain. One who bought a farm 20 years ago and still holds it does not have the cash value in his hands or in the bank ready for immediate disposal, but he has certainly not suffered from rising farm asset values.⁴ The averages of table 1 represent an effort to indicate something with respect to the impact of capital gains and losses on the overall economic status of farmers as a group.

Some Theoretical Considerations

Capital gains and losses, whether realized or not, are usually excluded from measures of income. This may be due partly to lack of suitable information, but mainly it is in accordance with theoretical considerations applicable at the national level of income measurement.

In measuring national income, the guiding objective is the coverage of all national output of commodities and services. This coverage should be comprehensive, but without any double counting. Since commodities and services cannot be added together as units, they must be combined in terms of market values and dollar totals. In dealing with sums of money representing income, however, the national income estimator must not lose sight of the fundamental "goods" character of income, and no money should be allowed in the estimates that does not have its counterpart in the production flow of commodities or services. More specifically, what might be called the ebb and flow in value of existing goods is not national income. So capital gains and losses, realized or not, must be excluded.

⁴This statement is true only on the assumption that pecuniary gain is the farmer's primary motivating force. If other considerations are uppermost in his mind—as, for example, the need to remain in farming as a desirable way of life—he may actually suffer from appreciation in the value of his farm. Frederick V. Waugh and Jean L. Pennock have both reminded the author that some farmers in suburban fringe areas around large cities have been driven from their farms by increased taxes and other costs associated with rising land values.

Changes in capital values are important to the owners of capital goods, but obviously they have no bearing on the total amount of commodities and services available to the Nation.

This viewpoint, which is clearly valid for national income, has generally been accepted rather uncritically in other types of income measurement as well. For example, the estimates of farm operators' income have always deliberately excluded the effects of price changes on the value of crop and livestock inventories—one form of unrealized capital gain or loss. Similarly, estimates of total personal income and its distribution by size classes seldom include any allowance for capital gains or losses, although these may have an important bearing on the actual distribution of income among individuals and families.

Recent years have seen some shift in expert opinion on this question, and many economists would now argue that at least the realized capital gains and losses should be taken into account in measuring the size distribution of income. This shift in view was probably accelerated by the increasing prevalence of stock options for corporate executives, plus other tax devices whereby compensation may be viewed as capital gain instead of current income. The special tax treatment of capital gains and losses was originally enacted because they were considered to be entirely different from current income, but the resulting tax incentive has brought about widespread tax avoidance which calls in question the original premise.

In other words, the income of one person—the flow of commodities and services which that person consumes or saves—obviously will be increased by a realized capital gain and decreased by a realized capital loss; so there is every reason to include such gains and losses in estimates of the income of single persons or families. Should this line of reasoning also apply to groups of individuals and families—for example, a group as large as all farm operators?

Further consideration of this question indicates that it is not the size of the group so much as its degree of self-containment that matters. If a family could consume only what it has itself produced, then capital gains and losses would be of no significance. But for an individual in an exchange economy, a realized capital gain is a clear addition to his purchasing power, and a realized capital loss is an obvious reduction in purchasing power.

TABLE 2.—Gross and net change in value of farm assets, total and per farm, 1940-59

Year	Total assets of agriculture, Jan. 1 ¹	Gross change in value of assets during year ²	Investment in farm assets during year ³	Net change in value of assets (due to price changes) ⁴	Number of farms	Average capital gain or loss (-) per farm ⁵
	(1)	(2)	(3)	(4)	(5)	(6)
	Billions of dollars	Billions of dollars	Billions of dollars	Billions of dollars	Millions	Dollars
1940	53.0	2.1	1.3	0.8	6.4	125
1941	55.1	7.4	2.0	5.4	6.3	850
1942	62.5	10.8	2.8	8.0	6.2	1,300
1943	73.3	10.5	2.4	8.1	6.1	1,300
1944	83.8	9.3	2.1	7.2	6.0	1,200
1945	93.1	8.9	2.0	6.9	6.0	1,150
1946	102.0	11.9	1.7	10.2	5.9	1,725
1947	113.9	11.3	.8	10.5	5.9	1,775
1948	125.2	6.9	6.1	.8	5.8	150
1949	132.1	-1.3	2.4	-3.7	5.7	-650
1950	130.8	18.8	2.8	16.0	5.6	2,850
1951	149.6	16.0	3.8	12.2	5.5	2,200
1952	165.6	-2.7	3.4	-6.1	5.4	-1,100
1953	162.9	-3.2	3.4	-6.6	5.3	-1,250
1954	159.7	5.0	2.0	3.0	5.2	600
1955	164.7	3.6	1.4	2.2	5.1	400
1956	168.3	8.1	-.4	8.5	5.0	1,700
1957	176.4	10.0	.7	9.3	4.9	1,900
1958	186.4	16.7	3.8	12.9	4.7	2,750
1959 ⁶	203.1	5.1	1.1	4.0	4.6	875
1960 ⁶	208.2					

¹ From The Balance Sheet of Agriculture, 1959.

² Difference between successive totals in column 1.

³ From table 3.

⁴ Column 2 minus column 3.

⁵ Column 4 divided by column 5.

⁶ Preliminary.

Even the Nation as a whole is not entirely self-contained. But it is so nearly so that capital gains and losses may be safely ignored. Are farmers as a group so self-contained that farm capital gains and losses may also be ignored? Probably they were at one time, but not any more.

Since farm income is often used in comparisons with nonfarm income, perhaps the more appropriate question is, May capital gains and losses be ignored for farmers and nonfarmers alike on the assumption that they are about equal on the average? There is serious doubt as to the validity of this assumption. Nonfarm capital gains have certainly been much larger in the aggregate than farm capital gains in the last 20 years. Whether they have been larger in terms of averages per capita or per family is not known. But one important fact is known: Farm capital gains are much more widely distributed among farmers than are nonfarm capital gains among nonfarmers. This fact alone is probably sufficient justification for this study.

There is reason, therefore, to include realized capital gains and losses with income. A realized capital gain is just as "good" as ordinary income to its recipient—and it is a great deal better than ordinary income for families in the upper income brackets.

The case for counting unrealized capital gains and losses is less obvious but perhaps no less valid. All property values in an exchange economy can be turned into current income at the owner's option. The value of property is merely the present value of the goods which that property is expected to produce in the future. A self-contained group can obtain these goods only by waiting until they mature. But any individual in an exchange economy can obtain the current discounted equivalent of these goods any time he chooses to liquidate his property.

Thus, for any farm operator, the whole of his assets might well be added to his current income to indicate his purchasing power or "control" over commodities and services. Any individual farmer

TABLE 3.—*Net investment in farm assets, by type of asset, 1940-59*

Year	Real estate ¹	Live-stock ²	Machinery and motor vehicles ³	Crops stored on and off farms ⁴	Household furnishings and equipment ⁵	Financial assets ⁵	Total
	<i>Billions of dollars</i>	<i>Billions of dollars</i>	<i>Billions of dollars</i>	<i>Billions of dollars</i>	<i>Billions of dollars</i>	<i>Billions of dollars</i>	<i>Billions of dollars</i>
1940.....	(⁶)	0.1	0.1	0.5	(⁶)	0.6	1.3
1941.....	(⁶)	.3	.4	.3	.2	.8	2.0
1942.....	-.1	.6	-.2	.6	(⁶)	1.9	2.8
1943.....	-.1	.4	-.5	-.7	-.1	3.4	2.4
1944.....	-.1	-.6	.1	.2	-.1	2.6	2.1
1945.....	-.1	-.2	.3	-.5	(⁶)	2.5	2.0
1946.....	.5	-.5	.3	.2	.3	.9	1.7
1947.....	.6	-.6	1.1	-1.0	.6	.1	.8
1948.....	.8	-.1	1.7	3.0	.6	.1	6.1
1949.....	.7	.2	1.8	-.6	.5	-.2	2.4
1950.....	.8	.6	1.3	-.8	.7	.2	2.8
1951.....	.7	1.0	1.1	(⁶)	.5	.5	3.8
1952.....	1.0	.6	.2	1.0	.5	.1	3.4
1953.....	.9	-.1	.7	1.2	.4	.3	3.4
1954.....	.7	.3	(⁶)	.1	.4	.5	2.0
1955.....	.6	.1	-.1	-.1	.4	.5	1.4
1956.....	.6	-.3	-.6	-.5	.4	(⁶)	-.4
1957.....	.5	-.1	-.5	.4	.2	.2	.7
1958.....	.3	.7	.1	1.7	.2	.8	3.8
1959 ⁷6	.9	.1	-1.1	.2	.4	1.1

¹ Capital expenditures less depreciation and accidental damage of farm dwellings, service buildings, and other structures. There are no estimates of investment in land as distinct from structures.

² Value of changes in numbers of livestock on farms.

³ Expenditures less depreciation.

⁴ CCC loans less redemption and deliveries plus the value of changes in farm inventories of crops not under loan.

⁵ Change during year in total of farm financial assets.

⁶ Less than .05 billion dollars.

⁷ Preliminary.

can cash in on an increase in farm asset values at any time he chooses. The obvious fact that all farmers could not do this at the same time is not a valid objection.

Methods of Estimation

Averages per farm are given in table 1, and figure 1 provides a convenient summary of the aggregates from which they were derived. Table 2, starting with the total assets of agriculture in column 1, shows the steps necessary to derive the average annual capital gain or loss in column 6. Table 3 gives annual net investment in various types of farm assets. The totals of table 3 are shown again in one of the steps of table 2 (col. 3), and are cumulated over time in one segment of the chart.

The top line in figure 1 represents the total value of farm assets as shown in The Balance Sheet of Agriculture. It is worth noting, however, that

the data on farm debt and "proprietors' equity," so prominent in the regular balance sheet tables, have no place in the present calculations. An increase in farm debt is an offset to saving or investment, not to higher land and other asset values. In fact, if an increase in debt permits the acquisition of additional capital assets—which may increase in value—then the greater the debt the better from the farm owner's standpoint.

As shown in figure 1, the value of farm assets has risen almost continuously throughout the last 20 years. Total assets of agriculture—value of land and buildings, machinery and motor vehicles, crop and livestock inventories, household equipment, and financial assets—increased from \$53 billion on January 1, 1940, to more than \$208 billion on January 1, 1960. This was almost a four-fold increase. Approximately 30 percent of the increase in total farm assets resulted from investment by farmers in the various types of farm capital assets, in excess of depreciation or deple-

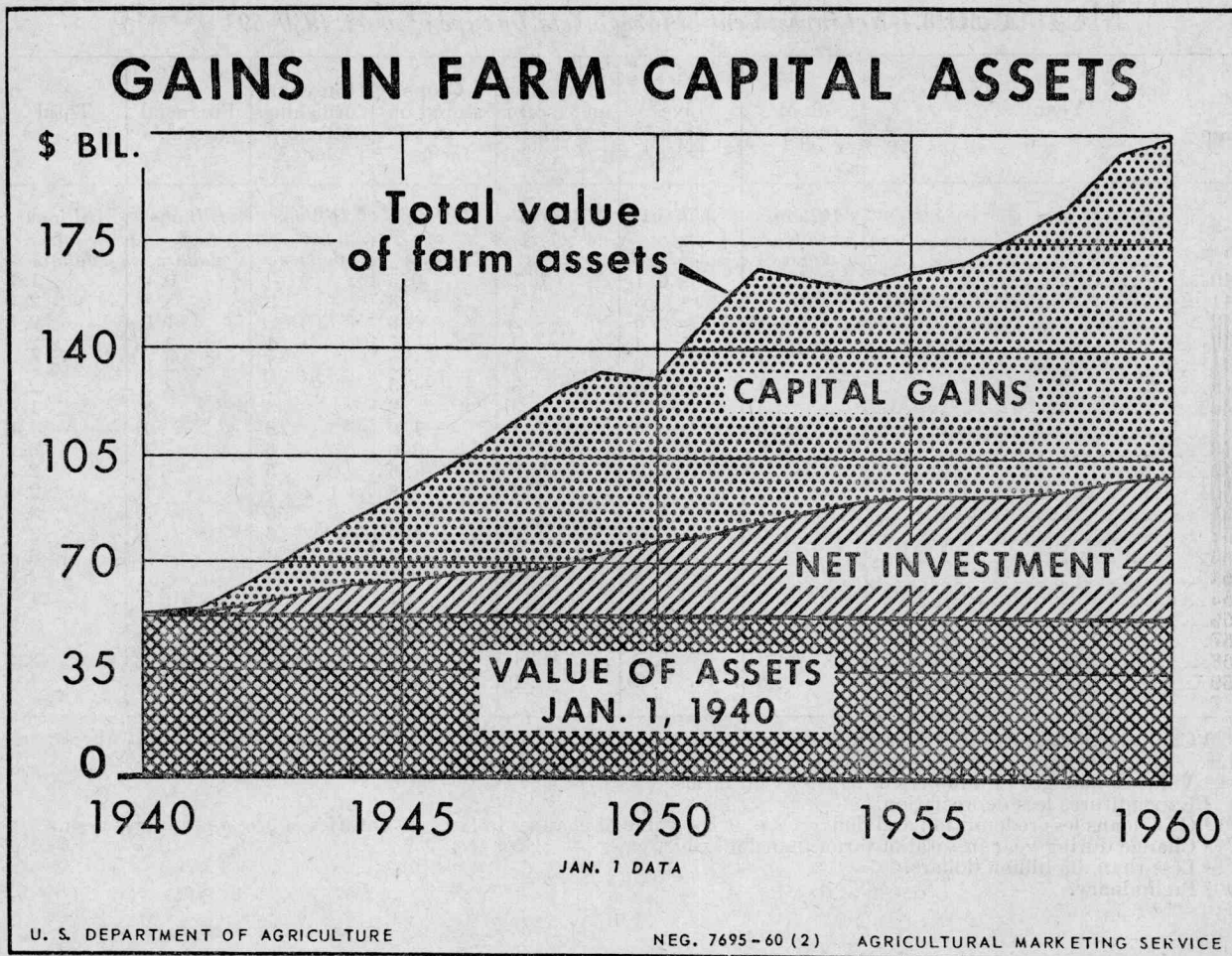


Figure 1.

tion. The remaining 70 percent represent capital gains to the owners.

The aggregate increase in value of farm assets from 1940 through 1959, net of farm investment, was \$109.6 billion, or an average of \$5½ billion each year. Higher values of farm real estate have been most important, accounting for about 80 percent of all farm capital gains in the last 20 years.

The averages of table 1 could not be derived directly from the totals shown in figure 1. With a 28-percent decline in number of farms since 1940, the average capital gain or loss had to be computed separately for each year. Otherwise, capital gains and farm consolidations would have

been hopelessly confused. These separate annual calculations are carried out in table 2.

Table 3, which shows net farm investment by type of asset, is merely one step in the procedure for deriving farm capital gains and losses. However, it may have some interest in its own right, because the totals in the last column are new. Total net investment has varied to some extent with changes in the size of total net farm income. The largest annual total of net investment in the last 20 years was \$6.1 billion in 1948, when total net farm income was at an all-time record. On the other hand, the only year in which net investment was a minus quantity was 1956, which was also the postwar low in total net income.