FEDERAL RESERVE BANK OF CHICAGO

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FARM INCOME ESTIMATES were recently revised following the USDA's normal midyear review of the evidence of the past four years. Estimates of farm income for 1977 through 1979 were raised slightly. However, the estimates for 1980 were scaled back from the low levels previously forecast and the projections for this year were cut to comparably low levels. Initial prospects for 1982, moreover, are not optimistic, as the pending record crop harvest weighs heavily on prices and the chances of any significant rebound in farm earnings.

The USDA provides several measures for gauging trends in aggregate farm earnings of farm operator families. Three of the more common measures—net cash income, and net income before and after inventory adjustment—are depicted in the table below. The revised estimates show net cash income fell 13 percent last year and may decline another 5 percent this year. Net farm income before inventory adjustment—which includes noncash income and expenses—fell 20 percent in 1980 and is projected to decline perhaps another 9 percent this year. Net income after inventory adjustment—which incorporates the sometimes large swings in inventory values—is estimated to have declined 40 percent in 1980. Because of an anticipated upturn in inventory values—largely reflecting the record crops now forecast—this measure of net income is expected to register an inconsequential rise of about 10 percent in 1981.

In terms of current dollars, all three measures depict the conditions of this year and last as the worst since 1977. Obviously, an even gloomier picture is portrayed when the various measures are adjusted for inflation. For instance, the 1980 measure of net income after inventory adjustment, deflated by the consumer price index, is the lowest for any year since the Depression and 45 percent below the annual average of the 1970s. This year's outturn is not likely to be any better since the rise in consumer prices will offset most, if not all, of the current dollar rise forecast for net farm income.

A better perspective of the financial condition of farm operator families takes account of the long-term decline in the number of farms and the uptrend in off-farm earnings of farm families. The farm income picture, adjusted for these trends, is still bleak, but clearly much brighter than in the Depression. On a per farm basis, for instance, the purchasing power of net farm income in 1980 was triple the annual average during the Depression, but still nearly 40 percent below the annual average of the 1970s. With the exception of 1964, real net farm income per farm in 1980 was also the lowest since the latter half of the 1950s.

Inclusion of income earned by farm operator families from nonfarm sources makes the historical comparisons less ominous but still dismal. The comparisons are somewhat distorted since a change in the definition of a farm in 1977 lopped off a proportionately large amount of off-farm earnings from the historical series. In general, however, off-farm earnings of farm families have risen faster than inflation, although 1980 was an excep-

1981 will likely mark the second consecutive year of depressed farm earnings

	1976	1977	1978	1979	1980	1981*
			(billion dollars)			
Cash receipts	94.8	96.3	112.9	131.9	136.4	144
Crops	48.7	48.7	53.7	63.4	69.0	70
Livestock	46.1	47.6	59.2	68.5	67.4	74
Government payments	.7	1.8	3.0	1.4	1.3	1
Other cash income	1.4	1.6	1.7	2.1	2.2	3
Total cash income	96.9	99.7	117.6	135.4	139.9	148
Nonmoney income**	7.3	8.0	9.3	11.1	12.6	14
Total farm income	104.2	107.7	126.9	146.5	152.5	162
Cash expenses	68.8	74.4	83.2	98.9	108.2	117
Noncash expenses***	14.3	15.9	17.9	20.3	22.5	25
Total expenses	83.1	90.3	101.1	119.2	130.7	142
Net cash income	28.1	25.3	34.4	36.5	31.7	30
Net farm income before inventory adjustment	21.1	17.4	25.9	27.4	21.9	20
Value of inventory change	- 2.4	1.0	0.6	5.3	- 2.0	2
Net farm income after inventory adjustment	18.7	18.4	26.5	32.7	19.9	22

*Figures for 1981 represent midpoints of forecast ranges.

**Imputed value of dwellings and farm products consumed on the farm.

***Includes depreciation of farm capital and perquisites to hired labor.

SOURCE: U.S. Department of Agriculture.

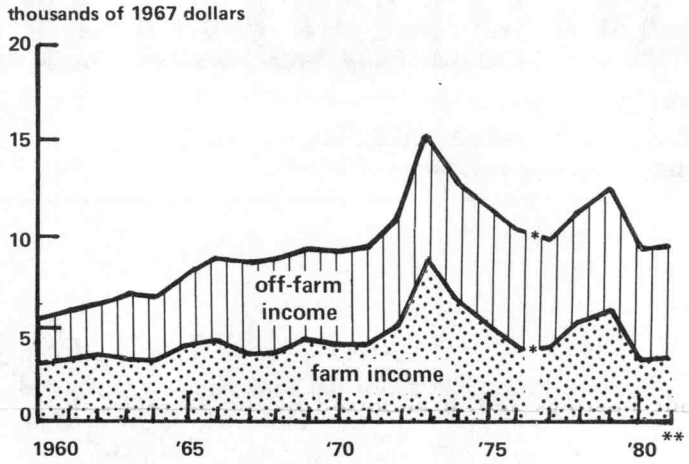
tion. As a result, inflation-adjusted total earnings per farm operator family in 1980—including income from farm and nonfarm sources—was at least a fourth higher than the annual average of the 1960s, but still at a ten-year low. Official forecasts for total earnings of farm families for this year are not yet available. The inflation-adjusted final outturn, however, is not likely to be much higher than in 1980.

Initial prospects for 1982 are not optimistic, although conditions may change significantly in the months ahead. Export demand for U.S. grains has been sluggish since spring and domestic inventories of hogs and cattle on feed are below year-ago levels. These developments suggest utilization of crops in the year ahead will fall short of the record harvests expected this fall, holding prices and earnings of crop farmers in check. Earnings of livestock producers, which were substantially depressed in 1980 and the first half of this year, will likely improve next year. But unless inflation slows considerably, it seems doubtful that real farm earnings will rise significantly in 1982.

The possibility of three consecutive years of depressed earnings has raised questions about the impact on farm debt and farm asset values. Farm lenders will have little choice but to be cautious in their lending practices. Although supplemented with significant growth in off-farm earnings, the depressed farm earnings encumber farmers' ability to repay debt. Most farmers are backed by substantial equity in their assets. Highly leveraged farmers, however, are vulnerable to the liquidity squeeze that has accompanied the downturn in farm earnings and record-high interest rates.

Net farm earnings represent the return to farm operators' labor and management, as well as the return to farm capital. The residual return to equity in agricultural assets in 1980 fell to a low unprecedented since the 1930s. With the chances of an equally low return this year and prospects for low earnings again next year, the rise in farm asset values will no doubt be held in check. In 1980 the rise was less than inflation, implying a loss in the purchasing power of the value of agricultural assets. That pattern could be repeated this year and next. Two or three years of real capital losses, however, are not unprecedented for the agricultural sector. Similar situations occurred in the late 1940s, the early 1950s, and again in 1969-70. Hopefully, the current period will prove to be just as temporary as the past experiences, leaving the favorable long-run outlook for agriculture intact.

Real income of farm families, on a per farm basis, fell to a ten-year low in 1980



*Because of a change in the definition of a farm, data for years since 1976 are not strictly comparable to earlier years.
**1981 estimates partially based on USDA forecasts.

Gary L. Benjamin

FEDERAL MARKETING ORDERS have long been a part of U.S. agricultural policy. In 1980, 47 federal milk marketing orders and 48 marketing orders on fruits, vegetables, and specialty crops were in force. About two-thirds of the milk marketed in the United States went to handlers—processors—regulated by federal milk orders. About 95 percent of fresh fruit production and 13 percent of the fresh vegetable production moved to handlers affected by market orders. The costs and benefits of marketing orders to consumers and farmers have been debated for years. Recently a task force was formed to specifically review fruit and vegetable marketing orders in view of the Administration's intent to reduce government involvement in business activities.

Several pieces of legislation were enacted during the 1930s to relieve the depressed economic conditions in the U.S. agricultural sector. Among these was the Agricultural Marketing Agreement Act (AMAA) of 1937. This act was designed to promote orderly marketing conditions so as to improve prices, incomes, and market power of agricultural producers and assure more stable supplies. The AMAA provided for the creation of marketing orders which prescribe the marketing activities

r a commodity. Commodities eligible for regulation by marketing orders are largely limited to milk, fresh fruits and vegetables, tobacco, hops, nuts, and a few processed fruits and vegetables. If imposed, orders are prepared for each commodity separately and are binding on all the handlers of the commodity within the order area. The order may be limited to a small geographic region or it may comprise several states.

The process for instituting a marketing order begins initially with producers. Producers or cooperatives—producer associations—send a proposal for a marketing order based on their appraisal of supply and demand conditions to the USDA. The proposals are opened to public hearings and, if endorsed by the Secretary of Agriculture, submitted as a referendum to all producers. The marketing order is enacted if approved, in most cases, by two-thirds of the producers or those who account for two-thirds of production within the order area.

The provisions enacted under a marketing order vary in accordance with the objectives of the producers. Federal marketing orders for milk set the minimum prices handlers in the market order area are required to pay to producers. Higher prices are paid for Class I milk—milk used in fluid products. Supplies in excess of fluid milk needs receive lower prices. This milk is designated Class II and III and is used for perishable or storable manufactured products. The Minnesota-Wisconsin manufactured grade milk price, determined in a non-regulated area, is the base upon which the class prices are built. But supply-demand conditions, the amount of milk purchased from nonmarket order processors, butter fat content, location, seasonality, and other factors also enter into the price calculation. (The dairy support program complicates price formulation further by setting a floor under the Minnesota-Wisconsin base price.)

Federal orders for fruits, vegetables, and nuts, in contrast to the milk orders, contain provisions that determine market supplies rather than price. By regulating supplies, however, these orders have significant impacts on prices. These provisions stipulate quality measures and/or quantity measures. Nearly all marketing orders include quality provisions which impose minimum standards for grade or size of produce or else set standards for shipping cartons and packs. Since some of the fruits and vegetables are also imported, the AMAA requires that imports meet these standards, too.

Quantity provisions include measures which limit weekly sales in order to spread the supplies more evenly over the season and reduce gluts. In the process prices are more stable throughout the season. Market allocation provisions also are used to provide producers with higher returns. These provisions involve the diversion of excess supplies away from primary markets—domestic, fresh markets—and into secondary markets, such as process or export markets, or carryover stocks. By doing so, producers realize higher prices in the primary markets and higher overall returns for their crops. Nearly a third of the fruit and vegetable market orders specify the flow of supplies and a fifth use market allocation schemes. In addition, some orders provide for product inspection, promotions, or other aggregate activities.

Marketing orders have been challenged by consumer groups and farmers. Consumers argue that higher prices result whenever supplies of commodities are controlled or restricted. While marketing orders no doubt improve the producers' incomes and returns, they also lead to more stable prices and supplies of commodities since producers' marketing risks are reduced. They may also provide incentives for the entry of new firms and encourage innovation and new technology—improved products for the consumer. Higher returns and price stability may, however, prolong the exit of marginal producers.

Farmers, in some instances, cite the loss of "free enterprise" since marketing orders spell out the rules of trade. But in doing so, marketing orders help to balance the marketing power between a large number of producers and a few processors. Marketing orders also improve trade practices through the coordination of production and marketing, leading to more standardized products. Without marketing orders, the terms of trade could be dominated by the very few processors handling particular commodities.

A task force, formed by the USDA, is currently reviewing the economic efficiency of fruit, vegetable, and specialty crop marketing orders. The Administration sought this special review more in light of its interest in removing federal regulations that are not needed or hamper productivity than in response to consumers' or farmers' complaints. But the USDA's task force will examine the probable effects of various administrative and legislative changes in marketing orders on consumers, producers, and handlers and will report its findings this fall.

Jeffrey Miller

Selected agricultural economic developments

Subject	Unit	Latest period	Value	Percent change from Prior period	Percent change from Year ago
Farm finance					
Total deposits at agricultural banks†	1972-73=100	August	233	+ 0.1	+11
Total loans at agricultural banks†	1972-73=100	August	268	+ 0.3	+ 6
Production credit associations					
Loans outstanding					
United States	mil. dol.	July	22,449	+ 1.5	+11
Seventh District states	mil. dol.	July	4,609	+ 1.4	+11
Loans made					
United States	mil. dol.	July	2,560	- 6.5	+18
Seventh District states	mil. dol.	July	555	-10.3	+20
Federal land banks					
Loans outstanding					
United States	mil. dol.	July	40,970	+ 1.7	+20
Seventh District states	mil. dol.	July	9,785	+ 1.6	+22
New money loaned					
United States	mil. dol.	July	803	- 2.5	+33
Seventh District states	mil. dol.	July	182	-16.6	+23
Interest rates					
Feeder cattle loans††	percent	2nd Quarter	17.14	+ 1.2	+10
Farm real estate loans††	percent	2nd Quarter	15.89	+ 2.1	+ 7
Three-month Treasury bills	percent	9/10-9/16	14.52	- 7.0	+41
Federal funds rate	percent	9/10-9/16	16.09	-11.5	+51
Government bonds *(long-term)*	percent	9/10-9/16	14.51	+ 4.2	+29
Agricultural trade					
Agricultural exports	mil. dol.	July	2,842	-10.9	- 6
Agricultural imports	mil. dol.	July	1,200	- 8.4	-16
Farm machinery sales[P]					
Farm tractors	units	August	7,103	-39.0	- 6
Combines	units	August	2,410	-18.1	+14
Balers	units	August	1,461	-52.8	-17

†Member banks in Seventh District having a large proportion of agricultural loans in towns of less than 15,000 population.

††Average of rates reported by District agricultural banks at beginning and end of quarter.

[P]Preliminary.

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