

Farm Income and Farm Financial Conditions

Farm income and financial conditions in the U.S. agricultural sector reflect adjustments in the near-term, followed by improvements beyond 2000 through the end of the baseline. The agricultural sector remains financially strong in the aggregate throughout the projections.

Net Farm Income

Net farm income is projected to be lower in the short-term, but prospects are for income gains beyond 2000. Farm income projections for the 1998-2008 baseline forecast period are similar to levels experienced from 1990 through 1997. Net farm income averaged \$45 billion in 1990-97, with a record high of \$53.4 billion in 1996. If current projections hold, net farm income for 1998-2008 would average modestly higher than during 1990-97, but would not be likely to reach the 1996 record. In the near term, net farm income has been declining since its peak in 1996, a year of both exceptional harvests and market opportunities. Income is expected to continue declining through 2000, to \$43.8 billion, modestly lower than the 1990-97 average. Beyond 2000, net farm income begins climbing to reach a plateau of about \$50 billion from 2005 onward. With net farm income falling until 2000 and then growing by only about 1.7 percent per year while inflation (GDP deflator) increases at 3.0 percent per year, the real value of net farm income declines throughout the period of 1998 to 2008.

Farm Cash Receipts

Cash receipts are lower in 1998-1999 but increase in the 2000s with stronger prices expected. Lower farm commodity receipts, particularly for crops, is the key reason for declining net farm income from 1998 to 2000. Some of the adverse impact of low grain prices on net farm income in 1998 and 1999 is countered by approximately \$5.6 billion in additional government support provided under the 1999 Appropriations Act and by declining production expenses. Given price and production projections in the baseline period, crop cash receipts will bottom out in 1999 and begin rising in 2000 and continue to grow through 2008. Total cash receipts from sales of farm commodities can be expected to grow at approximately 3.0 percent from 2000 onward.

Reductions in acreage devoted to corn, wheat, and soybeans, occurring in response to low prices, will likely reverse in the early 2000s. As prices strengthen, largely due to a recovery in agricultural export value, acreage of these crops is expected to rise through the rest of the baseline. With yields also trending upward and strengthened prices, total crop receipts could reach \$135 billion by 2008, compared with the \$104.7 billion forecast for 1998 (30 percent increase). Prices of major crops over the baseline period, however, are not expected to rise to the levels of 1996.

Livestock receipts, are also expected to grow from a 1998 forecast of \$93.4 billion to \$118 billion by 2008. Cattle and calves returns represent 44 percent of the increased livestock receipts, pork 10 percent, and broilers 18 percent. Most of the remaining increase comes from dairy production.

Cattle production surged in 1998 due in part to a sustained liquidation of the beef herd (involving both cows and heifers) that led to weak producer prices. In 1999, however, sharply lower supplies of feeder cattle and a comparable drop in beef production are expected. Cattle production is expected to be below the 1998 output through the remainder of the baseline. Lower beef supplies, in turn, are expected to lead to stronger prices, higher cash receipts, and a return to profitability for cattle producers.

The outlook for pork production, prices, and revenue is almost the opposite of cattle. Hog prices in 1999 are expected to remain near 1998 levels, which were significantly below 1997 and any other year in the decade before. Further, hog prices are expected increase only marginally through 2008, and will not approach the average price of \$47 a hundredweight for the 1988-1997 period. A moderate expansion of hog output is anticipated through 2008. Significant structural changes that have been occurring in recent years have lowered the cost of production and may have lengthened producers' planning periods. For large operations and for producers under contracts to processors with substantial investments in existing plants, production plans may be based more on the outlook for prospects over several years rather than several months. Earnings of the producers under contract are determined by fee schedules established in the contract and are not based on cash market prices. Overall, total annual revenue from hog production is likely to remain close to the average for the previous decade.

Broiler production is projected to rise in 1999 due to a substantial decline in feed costs and the higher prices that led to increasing profitability during 1998. For the rest of the baseline, both quantity and prices are expected to continue rising. Broiler output has been steadily rising over the last decade, and shows no indication of changing course.

Government Payments

Additional government assistance bolsters gross income in the short term, but without new programs government payments will be a declining share of sector revenue. Expected government payments for 1998 and 1999 changed substantially due to:

- C supplemental support from the provisions of last fall's appropriations bill (the Omnibus Consolidated and Emergency Supplemental Appropriations Act for Fiscal Year 1999),
- C the emerging importance of loan deficiency payments, and
- C the offer to farmers of taking 100 percent of their fiscal year 1999 production flexibility contract payments before January 1, 1999.

Disbursement of disaster relief funds, market loss assistance payments, and loan deficiency payments significantly boosted government payments in 1998 and 1999. Current projections are for \$12.9 billion to be received by farmers by the end of calendar 1998 and \$11.3 billion in 1999. With the exception of 1993, these are the highest levels of direct government payments in the 1990s. Barring program changes, government payments will decline in 2000 and remain lower through 2008.

The 1996 Farm Act's production flexibility were pegged to a declining budget allocation. Regardless of commodity prices, participants would have received about \$5.7 billion in production flexibility payments in 1998 and \$5.5 billion in 1999. Legislation enacted in the summer of 1998 changed the rules so that farmers could elect to take all of their fiscal 1999 production flexibility payments any time in the fiscal year (instead of a limit of 50 percent of the fiscal year's PFC payments in December, under payment timing provisions of the 1996 Farm Act), potentially shifting payments from calendar year 1999 to calendar 1998. It was assumed that some farmers, particularly those in areas affected most by climatic disasters and lower prices for grains and soybeans, took their entire fiscal 1999 payment in calendar year 1998 rather than waiting. This action does not increase payment levels, but simply shifts amounts between the calendar years.

However, almost \$6.0 billion of new funding was introduced in the October appropriations bill that does affect the agricultural sector, of which about \$5.6 billion is expected be disbursed as direct government payments in 1998 and 1999. An amount of \$2.857 billion was intended as market loss assistance payments, to be paid before the end of the calendar year 1998 (proportionate to the fiscal 1998 payments under production flexibility contracts). The bulk of the remaining funding is intended for disaster payments. Most of the disaster component is likely to be disbursed in calendar 1999.

Loan deficiency payments (see Marketing Assistance Loans and Loan Deficiency Payments box, page 25) emerged as a significant portion of direct government payments in 1998, rising to more than \$1.5 billion. Current expectations are that loan deficiency payments will be still higher in 1999 and 2000, but will then decline as commodity prices strengthen later in the baseline.

Government payments are forecast to be over 5 percent of gross cash income for 1998 and 1999, then decline to 3 percent by 2002 and to slightly over 2 percent by 2008. Unless new policies and programs develop, government payments will be a small part of farm revenues by the end of the period.

Farm Production Expenses

A recent decline in farm production expenses is helping to offset lower cash receipts in the near term, but the long-term trend is toward increased expenses. Countering a long-term trend, production expenses are expected to be lower in 1998 and 1999. By the end of 1998, interest rates and fuel prices were at the lowest levels seen in recent years and will help farmers hold down production costs in 1999. Low fuel prices should translate into stable to lower fertilizer prices. Lower grain prices have contributed to lower costs for feed and for livestock feeders. Also, farmers likely sought lower rental rates from landlords in response to lower crop returns per acre.

Beginning with 2000, farm production expenses are expected to begin growing again. Farm expenses are projected to rise almost as rapidly as farm receipts, limiting the growth in net farm income during the next decade. The cost of farm-origin inputs, which represent approximately 25 percent of expenses, is expected to increase. The higher crop prices projected will increase feed costs for livestock producers. Higher cattle prices, due to lower overall cattle production, will

result in more expensive feeder calves and replacements. Expanded crop acreage will increase expenditures for seeds.

Expenditures on manufactured farm inputs are expected to increase more rapidly than inputs of farm origin. Low prices of fuel and oil in 1998 and 1999 are not expected to continue. Even with larger equipment and field crop practices which reduce machinery use per acre, overall costs of fuel and oil are expected to increase. Fertilizer and pesticide expenses also are expected to increase, reflecting higher prices and expanding area planted.

Hired labor expenses, about 12 percent of total production costs, are expected to increase an average of 2.5 percent annually.

While interest rates for both farm real estate and production expense are forecast to be stable over the 1998-2008 period, total interest expenditures are expected to rise as a result of increasing debt. Debt from nonreal estate loans rises more than real estate debt, related to larger planted area and increased operating loans. Even so the share of production costs represented by interest payments is about 8.6 percent in 1998 and is expected to decline slightly by the end of the period.

Rental payments to nonoperator landlords are expected to fall in the short term, with lower expected crop earnings, but they are most likely to rise again as crop receipts begin rising and area planted increases. The projection is for rental expenditures to rise by about 28 percent by the 2008.

Farm Balance Sheet

In large part, the viability of the farm economy is represented by the financial soundness of the balance sheet. Assets continue to increase in value through the baseline, although at a slower rates for 1998 and 1999 than in the recent past. Growth in farm debt is expected to level off in the short-term, but when debt begins to grow again it will be at a lower rate than farm assets, so farm equity will continue to expand. Farmers' equity in agricultural assets is projected to increase through the baseline, reaching \$1.4 trillion by 2008.

Most, but not all, financial problems faced by producers in 1999 will be cash-flow related. These cash-flow difficulties, however, will reflect different conditions than in the early 1980s. At that time, falling asset values and excessive debt in the farm sector together with high inflation and interest rates in a fragile general economy triggered a widespread financial crisis. For 1998 through 2000, while many farms may struggle with cash flow due to low commodity prices and the inevitable occurrences of unfavorable weather, overall financial prospects for the sector look fairly good.

Farm real estate, which represents the largest component of farm assets, is expected to increase in value in 1999, partly due to favorable returns to assets and relatively low inflation and borrowing costs. While net farm income has been falling since 1996, cash receipts remain historically high and are expected to rise over the baseline period, returns to farm assets are favorable, and borrowing costs and inflation are relatively low. These factors provide the

foundation for continued growth in farm real estate values. In addition, nonfarm demand for farmland in many parts of the nation supports farm real estate values.

As a measure of the solvency of the farm sector, the debt-to-asset ratio will remain favorable for 1998-1999 and is forecast to decline continually through 2008, indicating that the agricultural sector will remain financially strong. The debt-to-asset ratio indicates the relative dependence of farm businesses on debt and their ability to use additional credit without impairing their risk-bearing ability.

Table 29. Farm receipts, expenses, and incomes in nominal dollars

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	<i>Billion dollars</i>											
Cash receipts:												
Crops	112.1	104.7	102.0	104.4	108.3	114.0	119.0	123.0	126.2	129.2	132.1	135.4
Livestock and products	96.6	93.4	96.0	94.9	97.7	100.1	103.9	107.2	110.4	112.8	115.6	117.8
All commodities	208.7	198.0	198.0	199.3	206.0	214.1	222.9	230.2	236.6	242.0	247.7	253.2
Farm-related income	11.8	11.8	11.6	11.6	11.7	11.7	11.8	11.9	11.9	12.0	12.0	12.1
Government payments	7.5	12.9	11.3	9.2	7.8	6.7	6.1	6.1	6.1	6.1	6.1	6.1
Gross cash income	228.0	222.7	220.9	220.1	225.4	232.5	240.8	248.2	254.6	260.0	265.8	271.3
Cash expenses	167.2	163.6	164.3	167.5	172.3	178.8	185.9	191.9	197.5	202.9	208.4	214.5
Net cash income	60.8	59.1	56.6	52.7	53.2	53.7	55.0	56.2	57.1	57.1	57.4	56.9
Value of inventory change	-0.4	-1.0	-0.4	0.7	1.2	0.9	0.4	0.2	0.3	0.2	0.1	0.0
Non-money income	10.7	11.3	11.9	11.9	11.9	12.0	12.1	12.2	12.2	12.5	12.7	13.0
Gross farm income	238.3	233.0	232.4	232.7	238.6	245.4	253.4	260.5	267.1	272.7	278.7	284.3
Noncash expenses	15.8	15.9	16.1	15.8	15.3	14.9	14.5	13.9	13.2	13.3	13.4	13.6
Operator dwelling expenses	5.5	5.6	5.7	5.7	5.7	5.7	5.7	5.8	5.8	5.8	5.8	5.8
Total production expenses	188.4	185.1	186.1	188.9	193.3	199.4	206.1	211.6	216.6	222.0	227.6	233.9
Net farm income	49.8	48.0	46.4	43.8	45.3	46.0	47.3	49.0	50.5	50.6	51.0	50.4
Farm assets	1,088.8	1,124.7	1,162.9	1,189.2	1,226.0	1,271.0	1,325.0	1,381.2	1,436.4	1,488.8	1,547.6	1,607.2
Farm debt	165.4	170.4	169.1	173.6	177.6	182.8	188.4	193.5	198.7	203.5	208.3	213.6
Farm equity	923.4	954.3	993.8	1,015.6	1,048.4	1,088.1	1,136.6	1,187.7	1,237.7	1,285.4	1,339.3	1,393.6
	<i>Percent</i>											
Debt/equity ratio	17.9	17.9	17.0	17.1	16.9	16.8	16.6	16.3	16.1	15.8	15.6	15.3
Debt/assets ratio	15.2	15.2	14.5	14.6	14.5	14.4	14.2	14.0	13.8	13.7	13.5	13.3

Table 30. Farm receipts, expenses, and incomes in 1992 dollars

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	<i>Billion 1992 dollars 1/</i>											
Cash receipts:												
Crops	100.5	92.4	87.9	87.5	88.1	90.1	91.4	91.8	91.6	91.1	90.5	90.2
Livestock and products	86.6	82.4	82.7	79.6	79.5	79.1	79.9	80.1	80.2	79.6	79.2	78.5
All commodities	187.0	174.9	170.6	167.2	167.6	169.3	171.3	171.9	171.7	170.7	169.8	168.6
Farm-related income	10.6	10.4	10.0	9.7	9.5	9.3	9.1	8.9	8.7	8.4	8.2	8.1
Government payments	6.7	11.4	9.7	7.7	6.3	5.3	4.7	4.5	4.4	4.3	4.1	4.0
Gross cash income	204.3	196.7	190.3	184.7	183.4	183.9	185.1	185.3	184.8	183.4	182.2	180.7
Cash expenses	149.8	144.5	141.5	140.5	140.2	141.4	142.8	143.3	143.4	143.1	142.8	142.9
Net cash income	54.5	52.2	48.8	44.2	43.2	42.5	42.3	42.0	41.4	40.3	39.3	37.9
Value of inventory change	-0.4	-0.9	-0.3	0.6	1.0	0.7	0.3	0.2	0.2	0.1	0.1	0.0
Non-money income	9.6	10.0	10.2	10.0	9.7	9.5	9.3	9.1	8.9	8.8	8.7	8.6
Gross farm income	213.6	205.8	200.2	195.2	194.1	194.0	194.7	194.6	193.8	192.3	191.0	189.4
Noncash expenses	14.1	14.0	13.9	13.2	12.5	11.8	11.1	10.4	9.6	9.4	9.2	9.0
Operator dwelling expenses	4.9	4.9	4.9	4.8	4.6	4.5	4.4	4.3	4.2	4.1	4.0	3.9
Total expenses	168.9	163.4	160.3	158.5	157.3	157.7	158.4	158.0	157.2	156.6	156.0	155.8
Net farm income	44.7	42.3	40.0	36.7	36.8	36.4	36.4	36.6	36.6	35.7	35.0	33.6
Farm assets	975.9	993.2	1,001.9	997.6	997.5	1,005.0	1,018.2	1,031.5	1,042.4	1,050.0	1,060.7	1,070.5
Farm debt	148.3	150.5	145.7	145.6	144.5	144.6	144.8	144.5	144.2	143.5	142.8	142.3
Farm equity	827.7	842.7	856.2	852.0	853.0	860.4	873.4	886.9	898.2	906.5	918.0	928.2

1/ Nominal dollar values divided by the GDP deflator.