

## Policy



## Farm Income, Finance, & Credit Outlook for 2002

The overall financial state of the U.S. agricultural sector is sound, as evidenced by continuing increases in asset values and equity levels. Farm business assets are forecast to surpass \$1.228 trillion, increasing nearly \$12 billion from 2001. Farm business debt is anticipated to approach \$197 billion, up from \$192.8 billion in 2001, while farm business equity (assets minus debt) is expected to rise to \$1.032 trillion in 2002, a gain of almost \$8 billion.

In the face of relatively low commodity prices, the farm business balance sheet has shown steady gains throughout 1999-2001. During this 3-year span, total direct government payments (including disaster, conservation, production flexibility contracts, loan deficiency, and marketing loan gains) contributed more than \$65 billion to the incomes of farmland owners, supporting farm incomes and farmland values. In contrast, investors in U.S. equity markets have witnessed increasing market volatility and lost considerable net worth, especially since March 2000.

From the beginning of 1999 through the end of 2001, however, farmland owners have benefited from a \$111-billion increase in farm equity, driven largely by a \$116-billion rise in farm real estate val-

ues. Since land values largely reflect expected future earnings from farming, the recent strength of land values suggests that farmland owners do not anticipate a significant decline in incomes in the foreseeable future.

Net cash income (before government payments) is expected to increase for the third straight year and exceed \$40 billion for the first time since 1998. In 2002, livestock receipts are expected to improve by over \$10 billion and crop receipts by \$5 billion from their lows in 1998 and 1999, respectively. Cash receipts are expected to be up about \$1 billion for feed grains and oil crops. Cotton and rice are the only major crops with prospects of lower 2002 cash receipts. Relatively low feed costs, strong domestic demand, and gains in export sales have encouraged higher pork and beef output. Receipts from sales of dairy products are forecast to retract by \$2.3 billion in 2002, after a \$4.1 billion gain last year.

Since Congress was debating the next farm bill as USDA prepared its 2002 financial outlook, current law guided the forecast of direct payments—assumed to be \$10.7 billion for 2002. Boosted by emergency assistance and loan deficiency payments (LDPs), government payments

have exceeded \$20 billion in each of the last 3 years. Emergency assistance payments result from separate legislative initiatives enacted in 1999, 2000, and 2001 in response to the economic adversity that farmers were facing. LDPs are intended to be countercyclical with commodity prices, and are determined using the gap between trigger prices and market prices. As a result of higher prices projected for several major program crops, LDPs are expected to decline by 25 percent in 2002.

Relative stability in production expenses is also a contributing factor to higher net incomes. Major crop-related expenses (seeds, fertilizer, and pesticides) are forecast to be \$26.9 billion in 2002, 1.6 percent below 2001. Fertilizer prices are slated to fall about 5 percent, while small increases will likely occur in seed and pesticide prices. Fuel expenses are a major cost factor for farmers producing crops requiring frequent cultivation and/or drying, such as corn. After jumping \$1.6 billion (29 percent) in 2000 as a result of a rise in crude oil prices, fuel expenses are forecast down 7 percent in 2001 and another 2 percent in 2002. For livestock producers, feed represents one of the largest input costs. Following a 7-percent jump in 2001, feed expenses are forecast to rise 8 percent in 2002.

### *Income Prospects Reflect Farm Diversity*

Farm-sector net cash income for 2002 is projected to decline by 15 percent and is not likely to be evenly distributed across all farm operations. The largest gains in crop receipts are projected for corn and soybeans, while cotton and rice are expected to record the largest 2002 declines. Three factors will determine the impacts on individual operations:

- their mix of crop and livestock enterprises;
- the extent to which government payments contribute to gross income; and
- the relative importance of expense items that are forecast to increase (such as feed and labor) versus those expected to decline (such as fertilizer and interest).

Among these factors, the largest impact on the economic outlook for 2002 will be

determined by the level of government payments. Assuming no emergency assistance, the 50-percent drop in government payments will most negatively impact incomes on those operations where payments account for the largest share of gross income. These include farm businesses that specialize in wheat production (with an average of 30 percent of gross cash income from government payments), corn and other cash grains, and soybeans (at least 20 percent of gross cash income). Regional dependence on government payments also varies and generally reflects the concentration of program commodity production.

To gauge the sensitivity of the forecasts, an analysis of total direct payments was conducted in which hypothetical payments were incrementally increased by \$1 billion up to a total of \$10 billion more than assumed in the forecast. Limiting the analysis to commercial farms (i.e., excluding retirement, limited-resource, and rural residence farms) permits more focused study of the impact of changes in government payments on those farms generating the bulk of U.S. agricultural production.

For all farm businesses, \$5 billion in additional government payments, which are assumed to be distributed as they have been historically, would change the outlook for net cash income from a decline of 18 percent to a decline of 8 percent relative to 2001. Adding \$10 billion to government payments (which brings the level of total payments near the amount paid in 2001), would result in average net cash incomes for farm businesses nearly 2 percent higher than in 2001.

Direct government payments have historically been associated with production of program commodities, and have not been evenly distributed across all regions and farm types. Farms in the Heartland, Northern Great Plains, and Prairie Gateway have traditionally been large producers of program crops, and received a large share of payments. USDA's 2000 Agricultural Resource Management Study (ARMS) indicated that these regions accounted for 42 percent of all U.S. commercial farms, but received 68 percent of government payments.

### How Would Alternative Levels of Government Payments Affect Farmers' Net Cash Income?

	2002 income forecast				
	Income	Relative to 1996-2000 average	Alternative government payment levels		
			Base	+ \$5 billion	+ \$10 billion
	\$ per farm	%	% change from 2001 income forecast		
<b>All farm businesses*</b>	31,700	-23.4	-18.3	-8.0	1.8
<b>Resource region</b>					
Heartland	28,400	-33.3	-21.3	-4.4	11.6
Northern Crescent	42,200	-0.2	-19.9	-14.8	-10.1
Northern Great Plains	20,100	-52.5	-33.9	-9.8	12.6
Prairie Gateway	25,200	-28.4	-19.5	-4.2	10.4
Eastern Uplands	11,800	-15.7	-13.2	-8.8	-4.6
Southern Seaboard	25,000	-9.1	-15.5	-9.6	-3.8
Fruitful Rim	66,800	-20.5	-10.6	-7.2	-4.0
Basin and Range	33,000	-0.6	-3.2	4.2	11.4
Mississippi Portal	12,500	-73.8	-52.1	-24.3	2.1
<b>Commodity specialization</b>					
Mixed grain	21,500	-52.0	-37.7	-8.9	18.1
Wheat	14,300	-60.2	-53.4	-18.5	14.5
Corn	22,500	-49.6	-27.7	3.0	32.0
Soybeans	13,600	-54.1	-32.3	-4.9	20.9
Tobacco, cotton, and peanuts	24,700	-44.4	-30.2	-15.4	-1.4
Other crops	25,000	-23.3	-17.5	-4.3	8.2
Specialty crops	74,200	-21.1	6.0	7.5	8.9
Beef cattle	14,300	-8.9	3.6	14.4	24.8
Hogs	64,000	-10.6	-22.4	-16.2	-10.4
Poultry	128,200	34.9	-5.0	-4.6	-4.2
Dairy	67,400	-8.4	-35.1	-31.9	-28.9
Other livestock	14,300	68.2	-14.9	-8.2	-1.8

\* Excludes retirement, limited-resource, and rural residence farms.  
Economic Research Service, USDA

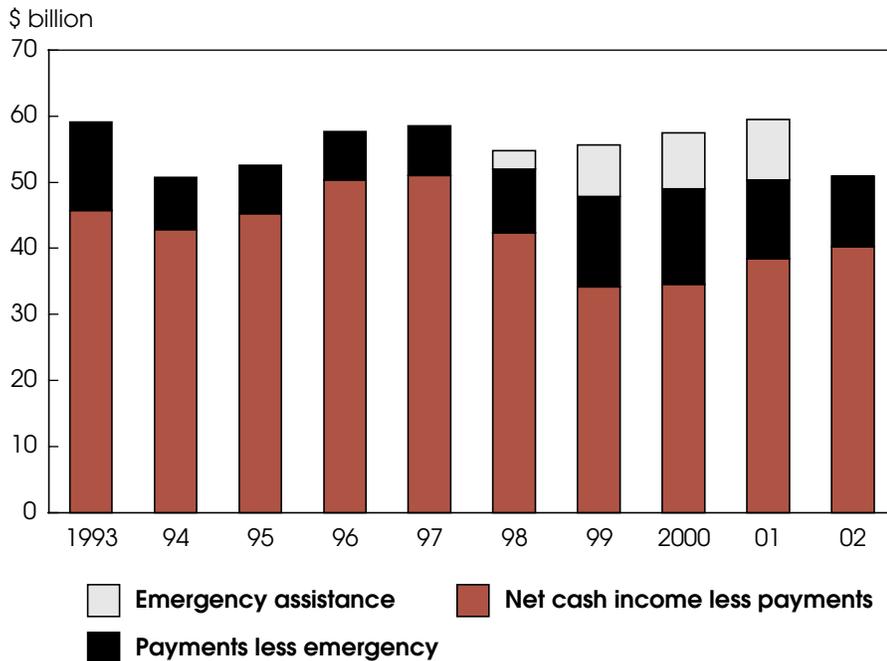
Not surprisingly, sensitivity analysis suggests that farms in these regions would be the prime beneficiaries of increased levels of government payments. In the Northern Plains, 2002 average net cash income is currently projected to be 34 percent below 2001. An additional \$10 billion in government payments would produce an average net cash income 13 percent above 2001. Similar results occur in the Heartland, where average net cash income would rise 12 percent due to additional payments compared with the currently projected 21-percent decline; in the Prairie Gateway, the current 20-percent income decline would change to a 13-percent gain.

Crop farms account for 49 percent of all U.S. commercial farms but receive 76 percent of government payments, and not all crop farms benefit equally. The 26 percent of farms classified as wheat, corn, soybean, and mixed grain operations jointly receive 60 percent of all payments, while the 10 percent of farms producing specialty crops receive less than 3 percent.

Only specialty crop and beef producers are projected to see higher average net cash incomes in 2002 than in 2001. While specialty crop income gains of 6 percent are expected (assuming current payment levels), a \$10-billion increase in payments would result in only a 9-percent increase. Average net cash incomes of beef producers are expected to rise 4 percent in 2002, and, since farms classified as beef operations traditionally receive about 11 percent of government payments, increasing payments by \$10 billion would generate a 25-percent income gain.

Given current government payment assumptions, corn producers are expecting a 28-percent drop in average net cash income in 2002. Adding \$10 billion in government payments would result in average net cash incomes of corn producers rising 32 percent in 2002. Similarly, adding \$10 billion would improve average net cash income for producers of wheat (from a currently projected 53-percent decline to a 14-percent increase), mixed

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**Farm-Sector Net Cash Income, Excluding Government Payments, To Rise for Third Consecutive Year**

2001 and 2002 forecasts.

Economic Research Service, USDA

grains (from a 38-percent decline to an 18-percent rise), and soybeans (from a 32-percent decline to a 21-percent increase).

Livestock producers typically do not receive proportional benefits from government payments. More than half of all farms are livestock operations, but they receive less than one-fourth of payments. In 2002, dairy farms are projected to generate average net cash income 35 percent below 2001 levels. Since dairies traditionally receive little benefit from direct government payments, adding \$10 billion would still result in a 29-percent decline in average net cash incomes.

### **Financial Condition of Farm Operator Households**

After rising each year in the late 1990s, farm household income leveled off last year and is expected to decline slightly this year. However, this minimal drop is much less than the decline expected for the average U.S. household.

To analyze the sensitivity of farm households to changes in the outlook for farming and the economic status of the general economy, four groups were identified based on their relative diversity of income sources. All farm operator households were included. Fewer than one in four of all U.S. farm households earn more than 20 percent of income from the farm business. Farming is the primary source of household income (80 percent or more) for only about 12 percent of farm households. These farms account for 52 percent of total production and received 42 percent of direct government payments. Another 13 percent of farms have proportionate levels of farm and off-farm earnings. This group accounts for 26 percent of farm output and 32 percent of total direct payments.

How off-farm incomes will be affected by changes in the national economy depends heavily on the source of their income, as well as the speed and extent of the current economic recovery. In the 2000 ARMS, about 80 percent of operators (70 percent of spouses) who worked off farm reported an average workweek of more than 35

hours. If their primary occupation has been directly affected by the economic slowdown, they have likely faced greater income reductions than other farmers who earn a much larger share of total household income from farming.

Off-farm wages and salaries represent the primary source of income for 45 percent of farm households. Off-farm job opportunities vary by region. In the Northeast there are durable goods manufacturing plants. The recent slowdown in demand for products such as machinery, equipment, autos, and trucks will be felt by farmers and/or spouses who may have jobs in these industries. In the more rural Midwest, farmers and spouses may more commonly be working in retail trade and services, where layoffs or cutbacks may be less severe than in manufacturing. Across the country, U.S. Labor Department survey data are showing employment growth in health services but declines in transportation and no change in construction.

Many smaller farms are located in the South, which has seen its textile industry eroded by overseas competition. More recently, automobile manufacturing and its input suppliers have moved into the South, but these jobs tend to be located around more urban areas where educational levels of workers are higher and where transportation is readily available. The automobile business has been especially hurt by the recession, and workers in this sector will be affected in the coming year. Spouses or operators working in medical services or in teaching will likely see little if any decrease in earnings as these professions tend to be recession-proof in the short run. However, the food and beverage sector has been hit hard by current economic conditions, certainly in the hotel and motel businesses, and those farm households receiving wages and salaries from this sector will likely be hit in 2002.

Another 30 percent of farm households derive most of their income from interest, dividends, and other nonfarm businesses. Recent drops in interest rates have benefited borrowers but have hurt those dependent on interest and dividends as a source of income. This most likely would affect older farmers who are retired or

nearing retirement and who are more dependent on interest income from investments to supplement Social Security or other savings.

Farm households most dependent on farming had the lowest average household income. At \$35,800, their income was below the average for nonfarm households, while groups that rely less on farming as a source of income had average incomes exceeding nonfarm households. On average, income from farming was negative for households where earnings from off-farm jobs and investments were the dominant sources of income.

### **Government Payments & the Ability to Service Debt**

Farm business debt is projected to rise about 2 percent in 2002, following an estimated 4.8-percent increase in 2001. Anecdotal evidence suggests that farmers may be refinancing farm debt, and converting nondeductible personal debt to farm business debt.

Expansion of Farm Credit System (FCS) lending is contributing to the anticipated rise in farm debt in 2001. Annual changes through the end of the third quarter suggest that FCS debt levels can be expected to surge almost \$6 billion (12 percent) in 2001. FCS loans are projected to rise another \$1 billion in 2002. Bank lending is expected to grow slightly above 2 percent in 2002, after 3-percent growth last year.

About 21 percent of all U.S. commercial farms are expected to experience debt repayment problems in 2002. Since many of these operations carry much more debt than they can service with current income, increasing government payments by \$10 billion is projected to only reduce this number to 19 percent. The additional payments would have the greatest impact in the Northern Great Plains, where 28 percent of farms are projected to have repayment difficulty. About 23 percent of farms in this region would have repayment problems after an infusion of an additional \$10 billion in payments. Similarly, increased payments would lower the number of Heartland operations experiencing repayment problems from 24 percent to less than 21 percent.

Wheat and corn growers are projected to account for the largest percentage of producers with repayment difficulties in 2002. The number of wheat producers experiencing repayment problems would rise, in the absence of additional government payments, from 27 percent in 2001 to 37 percent in 2002. An additional \$10 billion in payments would reduce this to 29 percent. The share of corn producers with repayment problems is projected to rise from 27 percent in 2001 to 30 percent in 2002; an additional \$10 billion in funding would result in loan service problems for only 23 percent of corn producers.



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### **IN UPCOMING ISSUES OF AGRICULTURAL OUTLOOK...**

- Farmland protection programs and the value of rural amenities
- Income, wealth, and well-being of farm operator households
- Land quality, ag productivity, and food security

### **March Releases—National Agricultural Statistics Service**

The following reports are issued electronically at 3 p.m. (ET) unless otherwise indicated.

[www.ers.usda.gov/nass/pubs/pubs.htm](http://www.ers.usda.gov/nass/pubs/pubs.htm)

#### **March**

- 1** Dairy Products Prices (8:30 a.m.)  
Milkfat Prices (8:30 a.m.)  
Livestock Slaughter - Annual Summary  
Poultry Slaughter
- 4** Dairy Products (Egg Products)
- 5** Weather - Crop Summary (noon)
- 6** Broiler Hatchery
- 8** Crop Production (8:30 a.m.)  
Dairy Products Prices (8:30 a.m.)
- 12** Weather - Crop Summary (noon)
- 13** Ag Chemical Usage - Post-harvest Applications - Wheat  
Broiler Hatchery  
Turkey Hatchery
- 14** Potato Stocks
- 15** Dairy Products Prices (8:30 a.m.)  
Milkfat Prices (8:30 a.m.)  
Cattle on Feed  
Milk Production
- 19** Weather - Crop Summary (noon)
- 21** Broiler Hatchery  
Cold Storage
- 22** Cotton Ginnings (8:30 a.m.)  
Dairy Products Prices (8:30 a.m.)  
Cattfish Processing  
Chickens and Eggs  
Hop Stocks  
Livestock Slaughter  
Monthly Agnews
- 26** Weather - Crop Summary (noon)
- 27** Agricultural Prices  
Broiler Hatchery  
Peanut Stocks and Processing
- 28** Grain Stocks (8:30 a.m.)  
Prospective Plantings (8:30 a.m.)  
Rice Stocks (8:30 a.m.)  
Dairy Products Prices  
Milkfat Prices  
Quarterly Hogs and Pigs