CRS Report for Congress

Received through the CRS Web

The U.S. Farm Economy

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Summary

Forecasts of two key indicators of U.S. farm well-being — net cash income and the debt-to-asset ratio — suggest a third consecutive robust year for the U.S. agricultural sector heading into 2005. While 2004 was a year of record receipts, expenses, and income for the U.S. farm economy, 2005 is likely to see a modest decline in net farm income due to lower prices and output for most major crops and several livestock products. However, preliminary projections for 2005 net cash income are for a record \$78.1 billion on the strength of carryover sales from 2004 crops and record government payments, according to income forecast data from the USDA's Economic Research Service (ERS). Direct government payments are projected to be up nearly \$9 billion in 2005 at a record \$24.1 billion, offsetting lower cash receipts.

Farm asset valuation at \$1,505 billion and total farm debt at \$213.3 billion are also projected at record levels in 2005. The debt-to-asset ratio of 14.2 remains equivalent to last year's 42-year low, suggesting a strong financial position for the agricultural sector as a whole. This report will be updated as events warrant.

Introduction

Two indicators that measure the economic well-being of the farm economy are net cash income and net farm income. *Net cash income* compares cash receipts to cash expenses. As such, it is a cash flow measure representing the funds that are available to farm operators to meet family living expenses and make debt payments. *Net farm income* differs from net cash income by including the value of home consumption, changes in inventories, capital replacement, and implicit rent and expenses related to the farm operator's dwelling that are not reflected in cash transactions during the current year. Net farm income is a value of production measure, indicating the farm operator's share of the net value added to the national economy within a calendar year, independent of whether it is received in cash or a noncash form.

Net cash income is generally less variable than net farm income. Farmers can manage the timing of crop and livestock sales and of the purchase of inputs to stabilize

the variability in their net cash income. For example, farmers can hold crops from large harvests to sell in the forthcoming year when output may be lower and prices higher.

Outlook for Calendar Year 2005

Early prospects for 2005 are for a modest fallback from last year's record net farm income and production levels. Yet, at \$64.4 billion, net farm income in 2005 is projected to be second only to the 2004 record of \$73.6 billion. Preliminary forecasts suggest that cash receipts for both livestock products and crops will be lower in 2005. In contrast, production expenses are projected to decline only slightly due to continued strong energy, fertilizer costs, and higher interest rates. Because farmers postponed selling much of their bumper 2004 harvests until 2005, net cash income in 2005 is projected to rise marginally to a record \$78.1 billion, up from \$77.8 billion in 2004 (see **Table 1**).

Cash Receipts. The combined value of cash receipts from marketings of both crop and livestock commodities is projected at \$222.4 billion in 2005, the second-highest amount on record, but down \$13 billion from the record \$235.4 billion in 2004.

Livestock. Market prices for most livestock and products (cattle, hogs, broilers, milk, etc.) are expected to remain favorable in 2005, although at somewhat reduced levels from 2004, when strong livestock prices were the primary force behind record net farm income (see **Table 2**). Beef supplies are expected to remain tight relative to demand, thereby supporting prices and receipts in 2005. An uncertainty to this outlook is the anticipated resumption of beef trade with Canada. In contrast to beef, cash receipts for hogs, eggs, and dairy products are projected significantly lower in 2005 due to lower prices. Weaker demand for pork and dairy and stronger supply growth for eggs are behind the price outlook. Poultry receipts are projected stable. In sum, livestock receipts are projected down \$4.5 billion to \$117.9 billion in 2005.

Crops. The preliminary outlook for large stock carry-ins are likely to pressure crop prices lower across the board in 2005. In addition, most market analysts are reluctant to forecast a repeat of the 2004 record harvests of corn, soybean, cotton, and rice crops. As a result, crop receipts are projected \$8.6 billion lower in 2005 to \$104.6 billion.

Government Payments. The early outlook for government direct payments is for a record \$24.1 billion in 2005, up sharply from \$14.5 billion in 2004. Projected lower market prices (relative to crop loan rates) are projected to swell counter-cyclical payments to a record \$6 billion, while loan deficiency payments and marketing loan gains are also projected to grow sharply to a combined \$5.6 billion in 2005. Ad hoc emergency assistance payments are also expected to be larger in 2005, as most of the estimated \$2.9 billion in emergency payments for agriculture authorized by the Military Construction Appropriations and Emergency Hurricane Supplemental Appropriations Act (P.L. 108-324) of October 13, 2004, are expected to be paid out in 2005. Farm disaster assistance and emergency assistance payments have figured heavily in sectoral income in 14 of the

¹ For more information on commodity programs, see CRS Report RS21779, Farm Commodity Programs: Direct Payments, Counter-Cyclical Payments, and Marketing Loans.

² For more information, see CRS Report RL31095, *Emergency Funding for Agriculture: A Brief History of Supplemental Appropriations*, FY1989-FY2005.

previous 15 years (1989-2004). Fixed direct payments are estimated at \$5.3 billion, unchanged from 2004.

Production Expenses. Total cash production expenses are forecast at \$185.3 billion, down slightly from the 2004 record of \$188.7 billion. Lower costs for livestock feed and feeder stock more than offset higher costs for energy, fertilizer, and manufactured inputs.

Farm Asset Values and Debt. Strong cash income is expected to support higher farm asset values, projected up 3.6% in 2005 to a record \$1,504.5 billion, on the strength of higher values for real estate, machinery, and financial assets. Farm debt is also projected to rise by 3.6% (or \$7.4 billion) to a record \$213.6 billion in 2005. Farm equity is projected at a record \$1,291.2 billion, while the farm debt-to-asset ratio in 2005 is expected to hold steady at last year's 42-year low of 14.2%. The U.S. farm debt-to-asset ratio peaked in 1985 at 23%.

Farm Household Income. Average farm-operator household income is projected at a record \$73,059 in 2005. Off-farm income sources are expected to account for 89% of the national average farm household income compared with 11% from farming activities. However, the share of income from farming increases with farm size (as measured by gross sales). For example, "large" family farms (farms with annual sales between \$250,000 and \$499,999), on average, obtain 60% of their total household income from farming activities; "very large" family farms (farms with annual sales in excess of \$500,000) obtain 80%.

Additional Farm Financial Information

ERS publishes a periodical, *Agricultural Income and Financial Outlook*, that provides historical estimates and forecasts of farm sector financial information.³ The report gauges the financial health of the nation's farmers and ranchers. Common topics include trends in farm sector receipts, expenses, debt, assets, and costs of producing crops and livestock. Each issue concentrates on a particular area of the farm financial picture. In addition, ERS publishes online several summary data tables of historical, current, and projected indicators relevant to understanding the U.S. agricultural economy. These include the following.

Farm Income Data. These tables, which include national- and state-level data on farm income, cash receipts, production expenses, balance sheet, and government payments for 2000-2004, are available at [http://www.ers.usda.gov/data/FarmIncome/finfidmu.htm].

Farm Structural Characteristics. These charts and text, which include information about both farm characteristics (such as farm size, tenure, specialization, and sources of income) and characteristics of the sector (such as concentration and contracting), are available at [http://www.ers.usda.gov/Briefing/FarmStructure/Questions/farmstruct.htm#conc].

³ Current and historical copies of *Agricultural Income and Financial Outlook* are available at [http://www.ers.usda.gov/publications/so/view.asp?f=economics/ais-bb/].

State Fact Sheets. State-specific data tables that provide information on population, employment, income, farm characteristics, and farm financial indicators for each state in the United States are available at [http://ers.usda.gov/StateFacts/].

Other Resources

USDA's National Agricultural Statistics Service (NASS). NASS publishes reports on farm production data, prices received, and prices paid for most agricultural activities undertaken in the United States, which are available at [http://www.usda.gov/nass/pubs/pubs.htm]. In addition, NASS publishes charts and supporting data highlighting trends in U.S. agriculture such as farm numbers, land values, commodity production, etc., from the early 1900s on; these are available at [http://www.usda.gov/nass/pubs/trends/].

USDA's Agricultural Marketing Service (AMS). AMS continuously monitors prices at major commodity and terminal markets; see [http://www.ams.usda.gov/marketnews.htm].

USDA's Farm Service Agency (FSA). FSA administers commodity support programs and publishes fact sheets describing program operations and activity details; they are available at [http://www.fsa.usda.gov/pas/publications/facts/pubfacts.htm]. In addition, FSA publishes information on various program budgetary outlays (current and projected), as well as commodity specific outlays in Summary Table 35, "CCC Net Outlays by Commodity and Function"; see [http://www.fsa.usda.gov/dam/bud/bud1.htm].

USDA's Foreign Agricultural Service (FAS). FAS monitors and publishes U.S. and international commodity supply and demand data; see [http://www.fas.usda.gov/psd/]. FAS also monitors and publishes U.S. agricultural trade data by country and commodity; see [http://www.fas.usda.gov/ustrade/].

USDA's World Agricultural Outlook Board. WAOB uses data from NASS, AMS, FSA, FAS, and other sources to make monthly supply and demand projections for major commodities. These projections are published monthly in the *World Agricultural Supply and Demand Estimates* (WASDE) report, available at [http://www.usda.gov/oce/waob/index.htm].

The Center for the Study of Rural America (CSRA). CSRA at the Federal Reserve Bank of Kansas City publishes a summary of the rural nonfarm and farm economies, which is available at [http://www.kc.frb.org/RuralCenter/AtaGlance/AtaGlanceMain.htm].

Table 1. Overview of the U.S. Farm Economy

(\$ billion)

| Commodity | 2000 | 2001 | 2002 | 2003 | 2004F ^a | 2005F ^a |
|--------------------------------------|---------|-------------------|-------------------|-------------------|--------------------|--------------------|
| 1- Cash receipts | 192.1 | 200.1 | 195.1 | 211.6 | 235.4 | 222.4 |
| $Crops^b$ | 92.5 | 93.4 | 101.3 | 106.2 | 113.2 | 104.6 |
| Livestock | 99.6 | 106.7 | 93.8 | 105.5 | 122.2 | 117.9 |
| 2- Government payments ^c | 22.9 | 20.7 | 11.0 | 15.9 | 14.5 | 24.1 |
| Fixed direct payments ^d | 5.0 | 4.0 0.0 6.2 | 3.8 0.2 1.7 | 6.4 2.3 0.8 | 5.3 2.0 3.7 | 5.3 6.0 5.6 |
| CCP^e | 0.0 | | | | | |
| $LDP \ \& \ MLG^f$ | 7.6 | | | | | |
| Conservation | 1.7 | 1.9 | 2.0 | 2.2 | 2.6 | 2.8 |
| Ad Hoc & emergency | 8.6 | 8.5 | 1.3 | 3.1 | 0.7 | 3.9 |
| All other ^g | 0.0 | 0.1 | 1.9 | 1.1 | 0.3 | 0.6 |
| 3- Farm-related income ^h | 13.7 | 14.8 | 16.0 | 16.3 | 16.1 | 16.8 |
| 4- Gross cash income | 228.7 | 235.6 | 222.0 | 243.9 | 266.1 | 263.4 |
| 5- Cash expenses | 172.0 | 176.0 | 171.3 | 175.4 | 188.3 | 185.3 |
| 6- NET CASH INCOME | 56.7 | 59.5 | 50.7 | 68.6 | 77.8 | 78.1 |
| 7- Total gross revenues ⁱ | 241.3 | 248.3 | 230.7 | 256.9 | 285.0 | 273.4 |
| 8- Total expenses ^j | 193.4 | 197.7 | 193.4 | 197.6 | 211.4 | 208.9 |
| 9- NET FARM INCOME | 47.9 | 50.6 | 37.3 | 59.2 | 73.6 | 64.4 |
| Farm Assets | 1,203.2 | 1,255.9 | 1,304.0 | 1,378.8 | 1,452.9 | 1,504.5 |
| Farm Debt | 177.6 | 185.7 | 193.3 | 198.0 | 205.9 | 213.3 |
| Debt-to-asset | 14.8 | 14.8 | 14.8 | 14.4 | 14.2 | 14.2 |

Source: USDA, Economic Research Service, *Farm Income and Costs: Farm Sector Income* briefing room, available at [http://www.ers.usda.gov/Briefing/FarmIncome/nationalestimates.htm].

a. F = forecast.

b. Includes CCC loans.

c. For more information on U.S. farm commodity programs, see CRS Report RS21999, *Farm Commodity Policy: Programs and Issues for Congress*; for more information on agricultural conservation programs see CRS Issue Brief IB96030, *Soil and Water Conservation Issues*.

d. Direct payments include production flexibility payments of the 1996 Farm Act through 2001, and fixed direct payments under the 2002 Farm Act since 2002.

e. CCP = counter-cyclical payments.

f. LDP = loan deficiency payments; MLG = marketing loan gains.

g. Peanut quota buyout, milk income loss payments, and other miscellaneous program payments.

h. Income from custom work, machine hire, recreational activities, forest product sales, and other farm sources.

i. Gross cash income plus inventory adjustments, the value of home consumption, and the imputed rental value of operator dwellings.

j. Cash expenses plus depreciation and perquisites to hired labor.

Table 2. U.S. Prices and Loan Rates for Selected Farm Commodities, 1998/99-2005/06

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| Commodity | Unit | Year ^a | 1998/99 | 1999/00 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05F ^a | 2005/06F ^a | Loan Rate |
|-----------------------------|--------|-------------------|---------|---------|---------|---------|---------|---------|-----------------------|-----------------------|--------------|
| Wheat ^b | \$/bu | Jun-May | 2.65 | 2.48 | 2.62 | 2.78 | 3.56 | 3.40 | 3.30-3.45 | _ | 2.75 |
| Rice ^b | \$/cwt | Aug-Jul | 8.89 | 5.93 | 5.61 | 4.25 | 4.49 | 7.49 | 7.25-7.55 | _ | 6.50 |
| Corn ^b | \$/bu | Sep-Aug | 1.94 | 1.82 | 1.85 | 1.97 | 2.32 | 2.42 | 1.85-2.05 | _ | 1.95 |
| Sorghum ^b | \$/bu | Sep-Aug | 1.66 | 1.57 | 1.89 | 1.94 | 2.32 | 2.39 | 1.60-1.80 | _ | 1.95 |
| Barley ^b | \$/bu | Jun-May | 1.98 | 2.13 | 2.11 | 2.22 | 2.72 | 2.83 | 2.45-2.55 | _ | 1.85 |
| Oats ^b | \$/bu | Jun-May | 1.10 | 1.12 | 1.10 | 1.59 | 1.81 | 1.48 | 1.35-1.45 | _ | 1.33 |
| Soybeans ^b | \$/bu | Sep-Aug | 4.93 | 4.63 | 4.54 | 4.38 | 5.53 | 7.34 | 4.80-5.40 | _ | 5.00 |
| Soybean oil ^c | ¢/lb | Oct-Sep | 19.8 | 15.6 | 14.1 | 16.5 | 22.0 | 30.0 | 21.5-23.5 | _ | _ |
| Soybean meal ^c | \$/st | Oct-Sep | 138.6 | 154.1 | 173.6 | 167.7 | 181.6 | 256.1 | 150-165 | _ | _ |
| Cotton, Upland ^b | ¢/lb | Aug-Jul | 60.2 | 45.0 | 49.8 | 29.8 | 44.5 | 61.8 | 46.0^{d} | _ | 52.0 |
| Choice Steers ^e | \$/cwt | Jan-Dec | 61.5 | 65.6 | 70.0 | 72.6 | 67.0 | 84.7 | 84.8 | 79-85 | _ |
| Barrows/Gilts ^e | \$/cwt | Jan-Dec | 33.5 | 34.0 | 45.3 | 45.8 | 34.9 | 39.5 | 52.5 | 47-50 | _ |
| Broilers ^e | ¢/lb | Jan-Dec | 63.0 | 58.1 | 56.2 | 59.1 | 55.6 | 62.0 | 74.1 | 71-76 | _ |
| Eggs ^e | ¢/doz | Jan-Dec | 75.8 | 65.6 | 68.9 | 67.1 | 67.1 | 87.9 | 82.2 | 64-68 | _ |
| Milk ^e | \$/cwt | Jan-Dec | 15.43 | 14.35 | 12.32 | 14.98 | 12.11 | 12.52 | 16.04 | 14.00-14.80 | |

a. Calendar year data is for the first year, e.g., 1998/99 = 1998. F=forecast from *World Agricultural Supply and Demand Estimates* (WASDE) Feb. 9, 2005. NA = not available. — = no loan rate. USDA's out-year 2005/06 crop price forecasts will first appear in the May 2005 WASDE report.

b. Season average farm price from USDA, National Agricultural Statistical Service, Agricultural Prices.

c. USDA, Agr. Marketing Service (AMS), Decatur, IL, cash price, simple ave. crude for soybean oil, and simple ave. 48% protein for soybean meal.

d. Weighted average for Aug.-Dec. 2004. USDA is prohibited by law from publishing cotton price projections [12 U.S.C. 1141(j)(d)].

e. USDA, AMS: choice steers — Nebraska, direct 1100-1300 lbs.; barrows/gilts — national base, live equivalent 51-52% lean; broilers — wholesale, 12-city average; eggs — Grade A, New York, volume buyers; and milk — simple average of prices received by farmers for all milk.