

CRS Report for Congress

Received through the CRS Web

The U.S. Farm Economy

Randy Schnepf
Specialist in Agricultural Policy
Resources, Science, and Industry Division

Summary

Forecasts of two key indicators of U.S. farm well-being — net farm income and the debt-to-asset ratio — suggest a third consecutive robust year for the U.S. agricultural sector in 2005. However, 2005 is likely to see a 13% decline in net farm income to \$71.5 billion (still second largest on record) following two consecutive years of record receipts, expenses, and income for the U.S. farm economy. Record production expense (\$221.9 billion) driven by a surge in the cost of fuel and fertilizer, as well as higher interest charges, are expected to more than offset continued strong cash receipts of \$239.6 billion and an \$9.4 billion jump in direct government payments to \$22.7 billion, according to income forecast data from USDA's Economic Research Service (ERS).¹

Farm asset valuation at \$1,592 billion and total farm debt at \$213 billion are also projected at record levels in 2005. The debt-to-asset ratio of 13.4 represents a fourth consecutive year of decline (to a 44-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

¹ ERS's 2005 farm sector income forecast was last updated on Nov. 3, 2005, and is available at the *Farm Income and Costs Briefing Room*, "Farm Sector Income," at [<http://www.ers.usda.gov/Briefing/FarmIncome/nationalestimates.htm>].

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

Prospects for 2005 are for a modest fallback from last year's record net farm income and production levels. Yet, at \$71.5 billion, net farm income in 2005 is projected to be second only to last year's \$82.5 billion (**Table 1**). Cash receipts for livestock products in 2005 are projected at a record \$123.7 billion, just ahead of last year's record \$123.5 billion. In contrast, 2005 crop receipts are projected slightly lower at \$116 billion due to a weaker price outlook for most major field crops (**Table 2**). Production expenses are projected to rise sharply (up \$12.1 billion to \$221.9 billion) due to strong energy and 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 decline only marginally to \$83.2 billion, down from \$85.5 billion in 2004.

Cash Receipts. The combined value of cash receipts from marketings of both crop and livestock commodities is projected at \$239.6 billion in 2005, the second-highest amount on record and down slightly from last year's record \$241.2 billion.

Livestock. Cash receipts by the livestock sectors continue to be dominated by strong returns to beef. Even with Canadian fed cattle under 30 months old allowed to enter the U.S. beef market for slaughter on July 18, 2005, beef producers are projected to have an increase in their receipts of more than \$1.8 billion over 2004. Cattle prices in 2005 are expected to be more than \$1.2 per cwt higher than in 2004. In contrast to beef, cash receipts for hogs, eggs, and dairy products are projected lower in 2005 due to stronger supply growth and lower prices. Poultry receipts are projected stable. In sum, livestock receipts are projected at a record \$123.7 billion in 2005.

Crops. The outlook for large stock carry-ins coupled with better-than-expected production is expected to pressure most major crop prices lower in 2005 (rice is the notable exception). However, gains in fruits and nuts, vegetables, and greenhouse and nursery crops partially offset declines in field crop receipts. Total crop receipts for 2005 are projected \$1.8 billion lower to \$116.0 billion.

Government Payments. Government direct payments are forecast at \$22.7 billion in 2005, up sharply from \$13.3 billion in 2004, but still below the record \$22.9 billion in 2000. Large crop supplies following record harvests in 2004 for several major crops have contributed to dropping market prices low enough (relative to crop loan rates) to bring price-triggered government programs into play. Counter-cyclical payments are projected at a record \$4.2 billion in 2005, while loan deficiency payments and marketing loan gains are also projected to grow to a combined \$6.2 billion.² 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

² For more information on commodity programs, see CRS Report RS21779, *Farm Commodity Programs: Direct Payments, Counter-Cyclical Payments, and Marketing Loans*, by Jim Monke.

(P.L. 108-324) of October 13, 2004, are expected to be paid out in 2005.³ Farm disaster assistance and emergency assistance payments have figured heavily in sectoral income in 14 of the previous 15 years (1989-2004). Fixed direct payments are estimated at \$5.0 billion, down slightly from 2004.

Production Expenses. Total cash production expenses are forecast at a record \$197.4 billion, up \$11.2 billion from last year's record level. Higher costs for energy, fertilizer, and interest charges are behind the surge in costs.

Farm Asset Values and Debt. Continued strong cash income is expected to support higher farm asset values, projected up 6.1% in 2005 to a record \$1,592 billion, on the strength of higher values for real estate, machinery, and financial assets. Farm debt is projected to rise by a much smaller 2.9% (or \$6 billion) to a record \$213 billion in 2005. Farm equity is projected at a record \$1,379 billion, while the farm debt-to-asset ratio in 2005 is expected to decline to a 44-year low of 13.4%. 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 \$83,660 in 2005. Off-farm income sources are expected to account for 84% of the national average farm household income compared with 16% 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.⁴ 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 2001-2005, are available at [<http://www.ers.usda.gov/data/FarmIncome/finfidmu.htm>].

Farm Structural Characteristics. Charts and text, which include information about both farm characteristics (such as farm size, tenure, specialization, and sources of

³ For more information, see CRS Report RL31095, *Emergency Funding for Agriculture: A Brief History of Supplemental Appropriations, FY1989-FY2005*, by Ralph M. Chite.

⁴ 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/>].

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>].

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 at [<http://www.fas.usda.gov/psd/>], and U.S. agricultural trade data at [<http://www.fas.usda.gov/ustrade/>].

USDA's World Agricultural Outlook Board (WAOB). WAOB uses data from NASS, AMS, FSA, FAS, and other sources to make monthly supply and demand projections for major commodities, 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	195.0	216.6	241.2	239.6
<i>Crops^b</i>	92.5	93.3	101.0	111.0	117.8	115.9
<i>Livestock</i>	99.6	106.7	94.0	105.6	123.5	123.7
2. Government payments ^c	22.9	20.7	11.2	17.2	13.3	22.7
<i>Fixed direct payments^d</i>	5.0	4.0	3.9	6.4	5.2	5.0
<i>CCP^e</i>	0.0	0.0	0.2	2.3	1.1	4.2
<i>LDP & MLG^f</i>	7.6	6.2	1.7	2.0	3.8	6.2
<i>Conservation</i>	1.7	1.9	2.0	2.2	2.3	2.5
<i>Ad Hoc & emergency</i>	8.6	8.5	1.6	3.1	0.6	3.7
<i>All other^g</i>	0.0	0.1	1.9	1.2	0.2	1.0
3. Farm-related income ^h	13.7	14.8	14.8	15.7	17.2	18.3
4. Gross cash income (1+2+3)	228.7	235.6	221.0	249.5	271.7	280.6
5. Cash expenses	172.0	175.5	171.6	177.9	186.2	197.4
6. NET CASH INCOME (4-3)	56.7	60.1	49.5	71.6	85.5	83.2
7. Total gross revenues ⁱ	241.3	248.7	229.9	259.8	292.3	293.4
8. Total expenses ^j	193.4	197.1	193.4	200.3	209.8	221.9
9. NET FARM INCOME (7-8)	47.9	51.5	36.6	59.5	82.5	71.5
Farm Assets	1,203.2	1,255.9	1,304.0	1,378.8	1,500.8	1,591.9
Farm Debt	177.6	185.7	193.3	198.0	206.9	213.0
Debt-to-asset ratio (expressed as %)	14.8%	14.8%	14.8%	14.4%	13.8%	13.4%

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*, by Jim Monke; for more information on agricultural conservation programs see CRS Issue Brief IB96030, *Soil and Water Conservation Issues*, by Jeffrey Zinn.

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, 1998/1999-2005/2006

Commodity	Unit	Year	1999/2000	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006F	2006/2007F	Loan rate
Wheat ^a	\$/bu	Jun-May	2.48	2.62	2.78	3.56	3.40	3.40	3.25-3.50	—	2.75
Corn ^a	\$/bu	Sep-Aug	1.82	1.85	1.97	2.32	2.42	2.06	1.75-2.05	—	1.95
Sorghum ^a	\$/bu	Sep-Aug	1.57	1.89	1.94	2.32	2.39	1.79	1.55-1.85	—	1.95
Barley ^a	\$/bu	Jun-May	2.13	2.11	2.22	2.72	2.83	2.48	2.35-2.55	—	1.85
Oats ^a	\$/bu	Jun-May	1.12	1.10	1.59	1.81	1.48	1.48	1.50-1.60	—	1.33
Rice ^a	\$/cwt	Aug-Jul	5.93	5.61	4.25	4.49	8.08	7.33	7.65-7.95	—	6.50
Soybeans ^a	\$/bu	Sep-Aug	4.63	4.54	4.38	5.53	7.34	5.75	5.10-5.80	—	5.00
Soybean oil ^b	¢/lb	Oct-Sep	15.6	14.1	16.5	22.0	30.0	23.0	20.5-22.5	—	—
Soybean meal ^b	\$/st	Oct-Sep	154.1	173.6	167.7	181.6	256.1	182.9	165-180	—	—
Cotton, Upland ^c	¢/lb	Aug-Jul	45.0	49.8	29.8	44.5	61.8	42.9	— ^c	—	52.0
Choice Steers ^d	\$/cwt	Jan-Dec	65.6	70.0	72.6	67.0	84.7	84.8	87.3	81-87	—
Barrows/Gilts ^d	\$/cwt	Jan-Dec	34.0	45.3	45.8	34.9	39.5	52.5	50.1	44-47	—
Broilers ^d	¢/lb	Jan-Dec	58.1	56.2	59.1	55.6	62.0	74.1	70.8	66-71	—
Eggs ^d	¢/doz	Jan-Dec	65.6	68.9	67.1	67.1	87.9	82.2	65.5	68-73	—
Milk ^d	\$/cwt	Jan-Dec	14.35	12.32	14.98	12.11	12.52	16.05	15.14	13.40-14.20	—

a. Season average farm price from USDA, National Agricultural Statistical Service, *Agricultural Prices*. Calendar year data is for the first year, e.g., 2000/2001 = 2000; F = forecast from *World Agricultural Supply and Demand Estimates* (WASDE) Jan. 12, 2006; — = no loan rate; and USDA's out-year 2006/2007 crop price forecasts will first appear in the May 2006 WASDE report.

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

c. USDA is prohibited by law from publishing cotton price projections [12 U.S.C. 1141(j)(d)].

d. 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.