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CRS Report for Congress

The U.S. Farm Economy

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Summary

According to USDA's Economic Research Service (ERS), national net farm income — a key indicator of U.S. farm well-being — is expected to decline in 2006 following three years of robust receipts and income.[1] Net farm income is forecast to decline by $14.9 billion (or 20%) to $58.9 billion in 2006 due to a decline in government payments (down $7.8 billion) combined with a sharp rise in production expenses (up $11.2 billion).

Crop receipts are projected to reach a record high in 2006, despite a smaller crop outlook, on the strength of higher prices. However, gains in crop receipts are expected to be partially offset by lower livestock receipts due to weaker hog, broiler, and dairy prices. The projected rises in crop prices are expected to reduce price-triggered marketing loan benefits, leading to lower total government payments. Finally, energy, fertilizer, and pesticide costs, as well as feed and interest charges, are expected to rise significantly in 2006, cutting into net farm returns.

Farm asset value of $1,919 billion and total farm debt of $218 billion are both projected at record levels in 2006. However, the debt-to-asset ratio of 11.3% represents a fourth consecutive year of decline (and the lowest level since 1960), suggesting a strong financial position for the agricultural sector as a whole. This report will be updated as events warrant.

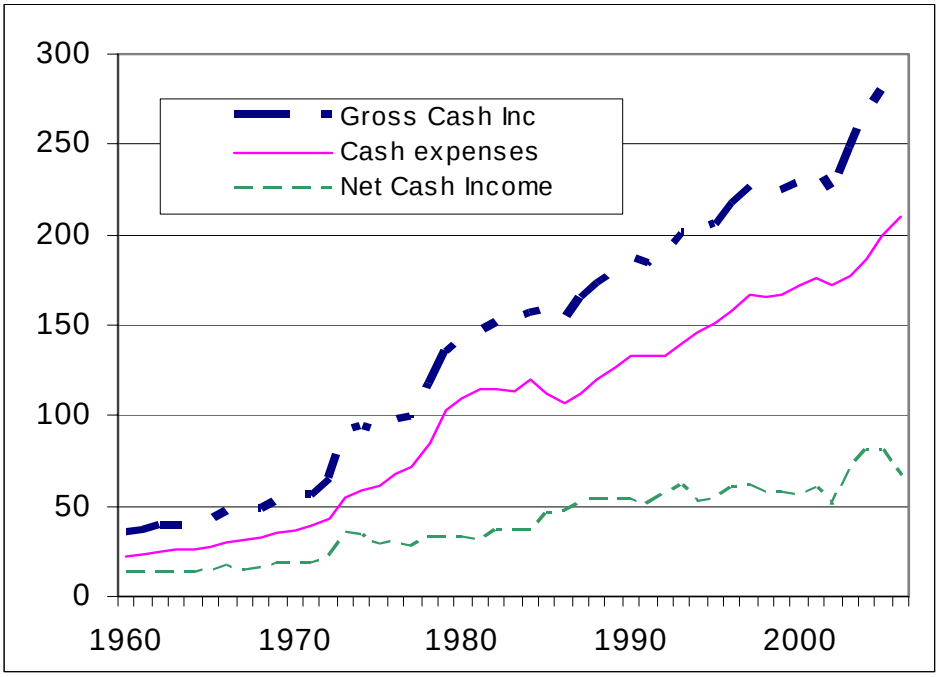
Introduction

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. In contrast, *net farm income* is a value of production measure, indicating the farm operator's share of the

[1] ERS's 2006 farm sector income forecast, last updated on Nov. 29, 2006, is available at the *Farm Income and Costs Briefing Room*, at [http://www.ers.usda.gov/Briefing/FarmIncome/nationalestimates.htm].

net value added to the national economy within a calendar year, independent of whether it is received in cash or a noncash form. 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 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.

Figure 1. U.S. Farm Net Cash Income Outlook, 1960 to 2006F



Source: USDA, Economic Research Service, "2006 Farm Income Forecast," at [http://www.ers.usda.gov].
Note: 2006 is projected.

Outlook for Calendar Year 2006

Net farm income estimates for 2006 of $58.9 billion represent a sharp decline from last year's $73.8 billion and are well below 2004's record of $85.4 billion (**Table 1**). When measured in cash terms, net cash income in 2006 is also projected to decline sharply to $66.6 billion, down 22.2% from $81.2 billion in 2005 (**Figure 1**).

Cash Receipts. The combined value of cash receipts from marketings of both crop and livestock commodities is projected at $242 billion in 2006, the highest amount on record and up $3 billion from the previous year's record $238.9 billion. Farm cash receipts experienced sharp variation in sources in 2006 as record crop receipts, up $7.3 billion, were partially offset by a projected $4.2 billion decline in livestock receipts.

Crops. Dry weather across the Plains states, western Corn Belt, and parts of the southeastern United States reduced harvests in 2006 for several major field crops: wheat, sorghum, barley, oats, and cotton. Corn and rice crops were also lower, due primarily to declines in planted and harvested area. Soybeans were the exception as U.S. producers harvested a record 2.3 billion bushels in 2006. However, the reduced grain production outlook coupled with steady to higher demand has pushed crop prices up substantially from 2005's relatively low levels for nearly all grain and oilseed crops (**Table 2**). Rapid growth in corn-based ethanol production in 2006, coupled with an outlook for continued strong expansion in both production and production capacity of ethanol have helped to fuel a dramatic runup in grain and oilseed prices since September 2006. Preliminary 2006/2007 projections for corn call for continued robust demand growth from the ethanol sector, which is projected to use 20% of the U.S. corn crop in 2006, up sharply from a 14.4% usage rate in 2005. Higher crop prices are expected to more than offset production declines and generate record crop cash receipts of $121.2 billion. Wheat cash receipts are projected at a record $7.4 billion. Cash receipts for fruits and nuts, vegetables, and greenhouse and nursery crops are also expected to rise on strong sales volume.

Livestock. Cash receipts in the poultry, hogs, and dairy sectors are projected to fall in 2006 due to year-to-year price declines in those sectors. Cattle prices in 2006 are expected to remain in the mid-$80s per cwt., bolstered in part by a reopening of Japan's market for U.S. beef, and cash receipts for beef producers to hold steady. In sum, livestock receipts are projected to decline by $4.2 billion to $120.7 billion.

Government Payments. Government direct payments are forecast at $16.5 billion in 2006, down from a record $24.3 billion in 2005. A $4.1 billion decrease in marketing loan benefits (loan deficiency payments, marketing loan gains, and certificate exchange gains) in 2006 accounts for most of the decline in government payments.[2] Higher projected market prices are also expected to limit payments under the Counter-Cyclical Program (CCP) for the 2006 crops; only sorghum, cotton, and peanut producers are expected to receive CCP payments on 2006 crops. However, total CCP payments are actually expected to edge slightly higher in calendar 2006, as both the second and final CCP payments for the 2005 crop are made in 2006.

Farm disaster assistance and emergency assistance payments — which have figured heavily in sectoral income in 16 of the previous 17 years (1989-2005) — are expected to decline to $0.8 billion in 2006.[3] This estimate includes hurricane assistance for 2005 losses, but does not include any assistance for 2005 and 2006 crop and livestock losses elsewhere. Fixed direct payments, whose payment rates are fixed in legislation and are not affected by the level of program crop prices, are estimated unchanged at $5.2 billion. Conservation payments are projected up slightly at $2.9 billion. The gradual rise in conservation payments since 2001 reflects programs being brought up toward authorized funding levels.

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[2] For more information on commodity programs, see CRS Report RL33271, *Farm Commodity Programs: Direct Payments, Counter-Cyclical Payments, and Marketing Loans*, by Jim Monke.

[3] For more information, see CRS Report RL31095, *Emergency Funding for Agriculture: A Brief History of Supplemental Appropriations, FY1989-FY2006*; and CRS Report RS21212, *Agricultural Disaster Assistance*, both by Ralph M. Chite.

Production Expenses. Total production expenses are forecast at a record $237.2 billion in 2006, up $11.2 billion (5.0%) from last year's record level. Higher costs for manufactured inputs, farm origin inputs, interest charges, and general operating expenses all contributed to the surge in costs. Manufactured inputs — such as fuel, fertilizer, electricity, and pesticides — that account for about 16% of national average farm operating expenses are projected up 7%, while interest charges (7% of operating expenses) are projected up 8%. Farm origin inputs, e.g., feed and seed, which account for over 25% of average farm expenses, are expected to rise by 5% due to projected higher crop prices. Finally, other operating expenses (e.g., repair and maintenance, hired labor, hired custom work, etc.) account for one-third of operating expenses and are also projected to rise by 5%.

Farm Asset Values and Debt. Despite the relative declines in net cash income and government payments, farm asset values are projected up 6.3% (or $114.2 billion) in 2006 to a record $1,919 billion, on the strength of higher real estate values. Farm debt is projected to rise by a much smaller 1.8% (or $2.5 billion) to a record $218 billion in 2006. As a result, farm equity (defined as asset value minus debt) is projected at a record $1,702 billion, while the farm debt-to-asset ratio in 2006 is expected to decline to a 45-year low of 11.3%. The U.S. farm debt-to-asset ratio peaked in 1985 at 23%.

Farm Household Income. Average farm-operator household income is projected at $80,703 in 2006, down about 1% from 2005. Off-farm income sources are expected to account for nearly 85% of the national average farm household income in 2006, compared with about 15% from farming activities. However, the share of income from farming increases with farm size (as measured by gross sales).

Commercial farm households (farms with annual sales in excess of $250,000), on average, obtain 76% of their total household income from farming activities. This grouping includes "large" family farms (farms with annual sales between $250,000 and $499,999) and "very large" family farms (farms with annual sales in excess of $500,000). Large family farms obtained 63% of their total household income from farming activities in 2005; while "very large" family farms obtained 79%. These two classes of farms represented slightly less than 8% of family farms, but accounted for 74% of total production value in 2005.[4]

Intermediate family farms (farms with annual sales in excess of $100,000 but less than $250,000) represented about 23% of family farms and obtained about 16% of household income from on-farm sources. The remaining 69% of family farms are classified as rural residence farms and either receive little or no income from farm sources or their total income level qualifies them as limited-resource farms.

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[4] For more information on farm typology see the ERS Briefing Room, *Farm Household Economics and Well-Being: Farm Operator Household Income Forecasts*, at [http://www.ers.usda.gov/Briefing/WellBeing/farmhouseincome.htm].

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

Commodity	2001	2002	2003	2004	2005F[a]	2006F[a]
	($ billions)					
1. Cash receipts	200.1	195.0	215.5	237.9	238.9	242.0
Crops[b]	*93.3*	*101.0*	*109.9*	*114.3*	*114.0*	*121.2*
Livestock	*106.7*	*94.0*	*105.6*	*123.6*	*125.0*	*120.7*
2. Government payments[c]	20.7	12.4	16.5	13.0	24.3	16.5
Fixed direct payments[d]	*4.0*	*3.9*	*6.4*	*5.2*	*5.2*	*5.2*
CCP[e]	*0.0*	*0.2*	*2.3*	*1.1*	*4.1*	*4.2*
Marketing Loan Benefits[f]	*6.2*	*2.8*	*1.3*	*3.5*	*7.0*	*2.0*
Conservation	*1.9*	*2.0*	*2.2*	*2.3*	*2.8*	*2.9*
Ad Hoc & emergency	*8.5*	*1.7*	*3.1*	*0.6*	*3.2*	*0.8*
All other[g]	*0.1*	*1.9*	*1.2*	*0.2*	*2.1*	*1.5*
3. Farm-related income[h]	14.8	14.8	15.7	16.9	17.6	18.6
4. Gross cash income (1+2+3)	**235.6**	**222.2**	**247.8**	**267.8**	**280.9**	**277.1**
5. Cash expenses	175.5	171.6	177.8	186.3	199.7	210.5
6. NET CASH INCOME (4-3)	**60.1**	**50.7**	**70.0**	**81.5**	**81.2**	**66.6**
7. Total gross revenues[i]	248.7	233.6	260.9	296.2	299.8	296.1
8. Total production expenses[j]	197.1	193.4	200.4	210.8	226.0	237.2
9. NET FARM INCOME (7-8)	**51.5**	**40.2**	**60.4**	**85.4**	**73.8**	**58.9**
Farm Assets	1,255.9	1,304.0	1,378.8	1,584.8	1,805.3	1,919.3
Farm Debt	185.7	193.3	198.0	201.7	214.1	218.0
Farm Equity	1,070.2	1,110.7	1,180.8	1,383.1	1,591.2	1,701.5
Debt-to-asset ratio (expressed as %)	14.8%	14.8%	14.4%	12.7%	11.9%	11.3%

	2001	2002	2003	2004	2005F[a]	2006F[a]
Average farm household income	$63,983	$65,761	$68,597	$81,596	$81,420	$80,703
Average U.S. household income	$58,208	$57,852	$59,067	$60,528	$63,344	na

Source: USDA, Economic Research Service, briefing rooms: *Farm Income and Costs: Farm Sector Income*, and *Costs: Farm Sector Income*, available at [http://www.ers.usda.gov/]; U.S. farm income data updated as of Nov. 30, 2006.

na = not available.
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 conservation programs see CRS Report RL33556, *Soil and Water Conservation: An Overview*, 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. Includes LDP = loan deficiency payments; MLG = marketing loan gains; and commodity certificate exchange 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, 1998/1999-2006/2007F

Commodity	Unit	Year	1999/2000	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007F	2007/2008F	Loan rate
Wheat[a]	$/bu	Jun-May	2.48	2.62	2.78	3.56	3.40	3.40	3.42	4.15-4.55	—	2.75
Corn[a]	$/bu	Sep-Aug	1.82	1.85	1.97	2.32	2.42	2.06	2.00	3.00-3.40	—	1.95
Sorghum[a]	$/bu	Sep-Aug	1.57	1.89	1.94	2.32	2.39	1.79	1.86	3.00-3.40	—	1.95
Barley[a]	$/bu	Jun-May	2.13	2.11	2.22	2.72	2.83	2.48	2.53	2.75-3.05	—	1.85
Oats[a]	$/bu	Jun-May	1.12	1.10	1.59	1.81	1.48	1.48	1.63	1.75-1.95	—	1.33
Rice[a]	$/cwt	Aug-Jul	5.93	5.61	4.25	4.49	8.08	7.33	7.62	9.70-10.00	—	6.50
Soybeans[a]	$/bu	Sep-Aug	4.63	4.54	4.38	5.53	7.34	5.74	5.66	5.75-6.45	—	5.00
Soybean oil[b]	¢/lb	Oct-Sep	15.6	14.1	16.5	22.0	30.0	23.0	23.4	26.5-28.5	—	—
Soybean meal[b]	$/st	Oct-Sep	154.1	173.6	167.7	181.6	256.1	182.9	174.2	170-185	—	—
Cotton, Upland[c]	¢/lb	Aug-Jul	45.0	49.8	29.8	44.5	61.8	41.6	47.7	46.4[c]	—	52.0
Choice Steers[d]	$/cwt	Jan-Dec	65.6	70.0	72.6	67.0	84.7	84.8	87.3	85.4	82-88	—
Barrows/Gilts[d]	$/cwt	Jan-Dec	34.0	45.3	45.8	34.9	39.5	52.5	50.1	47.3	42-44	—
Broilers[d]	¢/lb	Jan-Dec	58.1	56.2	59.1	55.6	62.0	74.1	70.8	64.4	66-71	—
Eggs[d]	¢/doz	Jan-Dec	65.6	68.9	67.1	67.1	87.9	82.2	65.5	71.0	78-84	—
Milk[d]	$/cwt	Jan-Dec	14.35	12.32	14.98	12.11	12.52	16.05	15.14	12.91	13.60-14.40	—

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, 2007; — = no loan rate; and USDA's out-year 2007/2008 crop price forecasts first appeared in the May 2007 WASDE report.

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

c. Average farm price received for August-November 2006. 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.