U.S. Farm Income

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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 forecast at $77.1 billion in 2010, up 24% from the previous year's total of $62.2 billion, but well off of the 2004 record of $87.4 billion. Higher revenues from strengthening livestock markets (while crop revenues hold steady) are expected to offset a slight increase in input costs to account for the forecast higher net returns.

A major catalyst behind projections for stronger farm income is the outlook for sharply higher U.S. agricultural exports in 2010 (forecast up 11% to $107.5 billion) and 2011 (projected up 5% to $113 billion). A recovering global economy is expected to support strong demand for cotton, feed grain, and livestock products. In addition, severe drought in Russia, Kazakhstan, and the Ukraine has lowered export supplies from those traditional feed grain export markets, while continued strong income growth in China is driving robust Chinese import demand for cotton, grains, and oilseeds. As a result, strong international demand is firming up market prices and improving the earnings outlook for most agricultural commodities, but especially for livestock and cotton producers.

Government farm payments are projected down about 2.7% in 2010 at $11.9 billion, as higher cotton prices are expected to sharply reduce payments under the marketing loan and counter-cyclical payment programs (down a combined $1.8 billion). In contrast, ad hoc and emergency disaster assistance is projected at $2.3 billion in 2010, up sharply from 2009. In particular, eligible recipients under the Supplemental Revenue Assistance Payments (SURE) Program are expected to begin receiving payments in calendar year 2010. About half of the rise in government farm payments is attributable to payments made under the SURE Program and the Dairy Economic Loss Assistance Payments Program.

Farm production expenses are forecast up only slightly (1.1%) at $284 billion in 2010, as lower feed and fertilizer costs partially offset expected rises in fuel costs and property taxes.

Farm asset values—which reflect farm investors' and lenders' expectations about long-term profitability of farm sector investments—are expected to rebound (up 1.4%) in 2009 to $2,043 billion after having fallen nearly 2% in 2008 with the decline in the general economy. Farm asset values are projected to rise another 2.5% in 2010 to $2,096 billion. Higher farm asset values are due primarily to stronger farm real estate values, which had fallen by 3.2% during 2009, the first decline since 1987. Farm land cash markets in early 2010 suggest that land values have stabilized but could see renewed gains related to strong crop prices in 2010. This same pattern is reflected in both cropland and pastureland values.

The farm debt-to-asset ratio had been steadily declining since 1998's value of 16% to a recent low of 10.4% in 2007, before rising to 12% in 2008 and 2009. The ratio is expected fall in 2010 to about 11.2%.

These data suggest a mildly stronger financial position in 2010 for the agriculture sector as a whole. An improving global economic outlook for 2010 is expected to slowly reinvigorate international consumer demand while the U.S. economy remains sluggish. Signs of this can already be seen as strong demand-led growth, primarily from export markets, has pushed most commodity prices higher in the first half of 2010.

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Introduction

The U.S. farm sector is vast and varied. It encompasses production activities related to traditional field crops (such as corn, soybeans, wheat, and cotton), livestock and poultry products (including meat, dairy, and eggs), as well as fruits, tree nuts, and vegetables. In addition, U.S. agricultural output includes greenhouse and nursery products, forest products, custom work, machine hire, and other farm-related activities. The intensity and economic importance of each of these activities, as well as their underlying market structure and production processes, vary regionally based on the agro-climatic setting, market conditions, and other factors. As a result, farm income and rural economic conditions may vary substantially across the United States.[1] However, this report focuses singularly on aggregate national net farm income and the farm debt-to-asset status as reported by the U.S. Department of Agriculture (USDA).[2]

Annual U.S. net farm income is the single most watched indicator of farm sector well-being, as it captures and reflects the entirety of economic activity across the range of production processes, input expenses, and marketing conditions that have persisted during a specific time period. When national net farm income is reported together with a measure of the national farm debt-to-asset situation, the two summary statistics provide a quick indicator of the economic well-being of the national farm economy.

Two different indicators measure farm profitability: 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. For example, crops that are produced and harvested but kept in on-farm storage are not counted in net cash income. Farm output must be marketed (i.e., exchanged for payment) before it is counted as part of the household's cash flow.
- **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 noncash form. In contrast to net cash income, net farm income includes 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. Thus, once a crop is grown and harvested it is included in the farm's net income calculation, even if it remains in on-farm storage.

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. Off-farm income, which has increased in importance in recent decades, is not included in the calculation of aggregate farm income. Instead, it is included in the discussion of farm income at the household level.

[1] For information on state-level farm income, see the "U.S. and State Farm Income Data," available as part of the Farm Income Data Files, Farm Income and Costs Briefing Room, Economic Research Service (ERS), USDA, at http://www.ers.usda.gov/data/FarmIncome/finfidmu.htm.

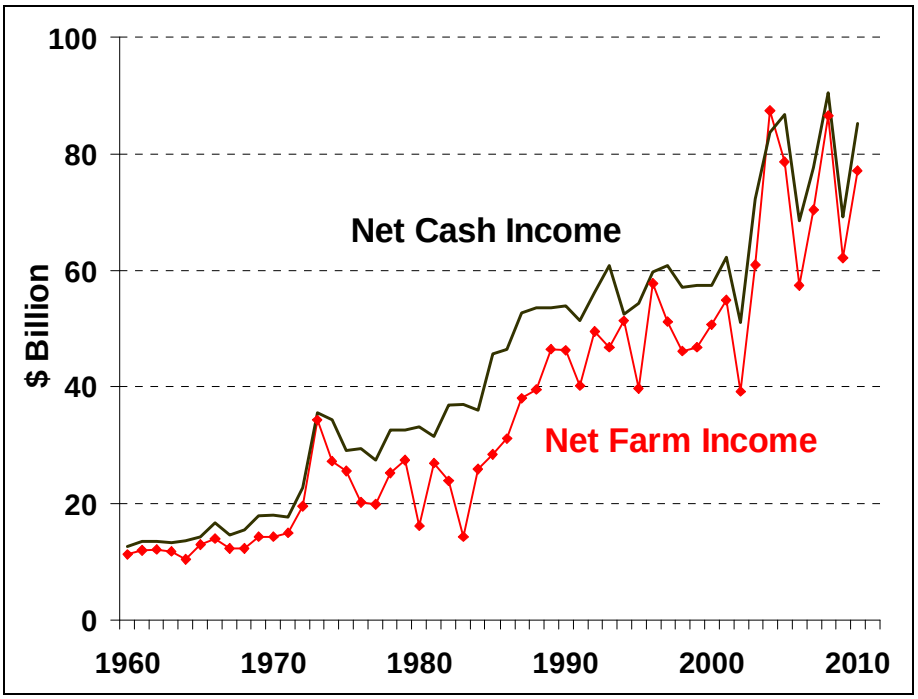
[2] For a more detailed discussion of the issues in this report, see the Briefing Room "Farm Income and Costs: 2009 Farm Sector Income Forecast," ERS, USDA, at http://www.ers.usda.gov/Briefing/FarmIncome/nationalestimates.htm.

Calendar Year 2010: Farm Income Forecast Up

U.S. net farm income is forecast at $77.1 billion in 2010, up $14.9 billion (24%) from the 2009 slump (**Figure 1** and **Table 4**).[3] When measured in cash terms, net cash income in 2010 is projected up 23.4% to $85.3 billion, compared with the previous year's total of $69.1 billion.

The 2010 outlook for a return to higher farm income occurs in spite of continued weak domestic economic conditions, and is being driven, in large part, by robust agricultural export growth and concomitant higher commodity prices, accompanied by only modest increases in production expenses.

Figure 1. Annual U.S. Farm Sector Income, 1960 to 2010F



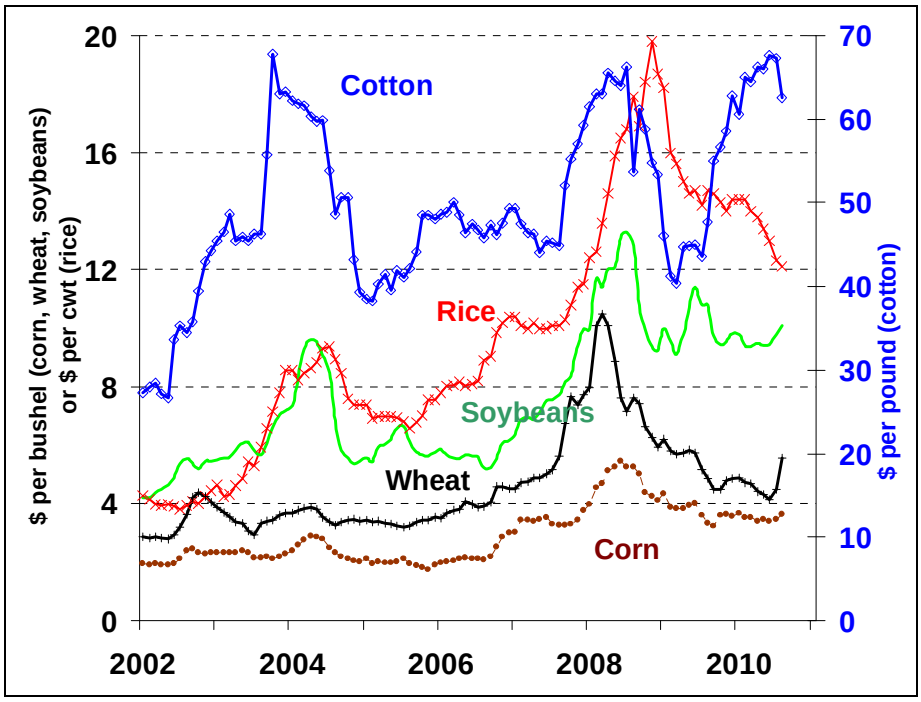
Source: USDA, Economic Research Service, "2010 Farm Income Forecast," August 31, 2010, at http://www.ers.usda.gov/Briefing/FarmIncome/.

Notes: All values are in nominal terms, i.e., not adjusted for inflation. 2009 is preliminary, 2010 is forecast.

A recovering global economy is expected to support strong demand for cotton, feed grain, and livestock products. In addition, severe drought in Russia, Kazakhstan, and the Ukraine has lowered export supplies from those traditional feed grain export markets, while continued strong income growth in China is driving robust Chinese import demand for cotton, grains, and oilseeds. As a result, strong international demand is firming up market prices (**Figure 2** and **Figure 3**) and improving the earnings outlook for most agricultural commodities, but especially for livestock and cotton producers.

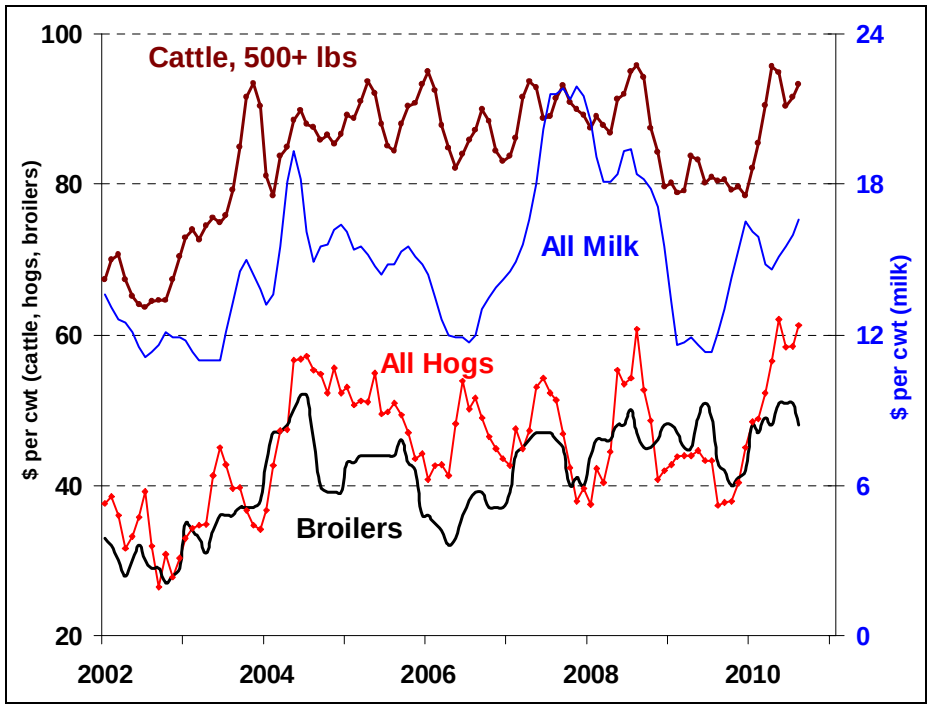
[3] ERS's 2010 farm sector income forecast, last updated on August 31, 2010, is available at the Farm Income and Costs Briefing Room, at http://www.ers.usda.gov/Briefing/FarmIncome/nationalestimates.htm.

Figure 2. Monthly Farm-Prices-Received for Major Field Crops



Source: USDA, National Agricultural Statistics Service.

Figure 3. Monthly Farm-Prices-Received for Major Livestock Products



Source: USDA, National Agricultural Statistics Service.

Note: cwt = hundredweight or units of 100 lbs.

During the 2005-2008 period, U.S. domestic demand was supported by the rapid emergence of the U.S. agriculture-based ethanol industry. In addition, strong export demand through 2007 and the first half of 2008, aided in part by a weak dollar, helped to draw stocks for major grains and oilseeds to historically low levels in 2008, thus supporting higher market prices. After reaching record net cash income and near-record net farm income in 2008, the U.S. farm economy slowed considerably in 2009 owing to falling global demand and weak commodity prices for most major field crops and livestock products.

The economic conditions that arose in late 2008—a global financial crisis, economic recession, rising unemployment, limited credit availability, and plummeting asset values—persisted into 2009 and contributed to a severe weakening of consumer demand through most of 2009. As a result, domestic and international demand for biofuels, as well as meat and dairy products (and subsequently feed grain), eroded dramatically.

But an improving global economic outlook for 2010 is expected to slowly reinvigorate international consumer demand while the U.S. economy remains sluggish. Signs of this can already be seen as strong demand-led growth, primarily from export markets, has pushed most commodity prices higher in the first half of 2010.

Cash Receipts

Most livestock product prices—milk, cattle, hogs, and broilers—are expected to remain strong through the 2010 calendar year (**Table 7**). As a result, livestock receipts are forecast up nearly 15% (**Table 2**). In contrast, total crop receipts are forecast to remain steady. Crop price prospects for wheat, corn, sorghum, and cotton are expected to improve dramatically in 2010, also driven in large part by international market demand. Receipts for cotton are forecast at $5.3 billion for 2010, up over 50% year-to-year. USDA is currently (August 12, 2010) forecasting record harvests for corn soybeans in 2010; however, these record harvests appear necessary to hold supplies steady with strong demand thus supporting crop prices.

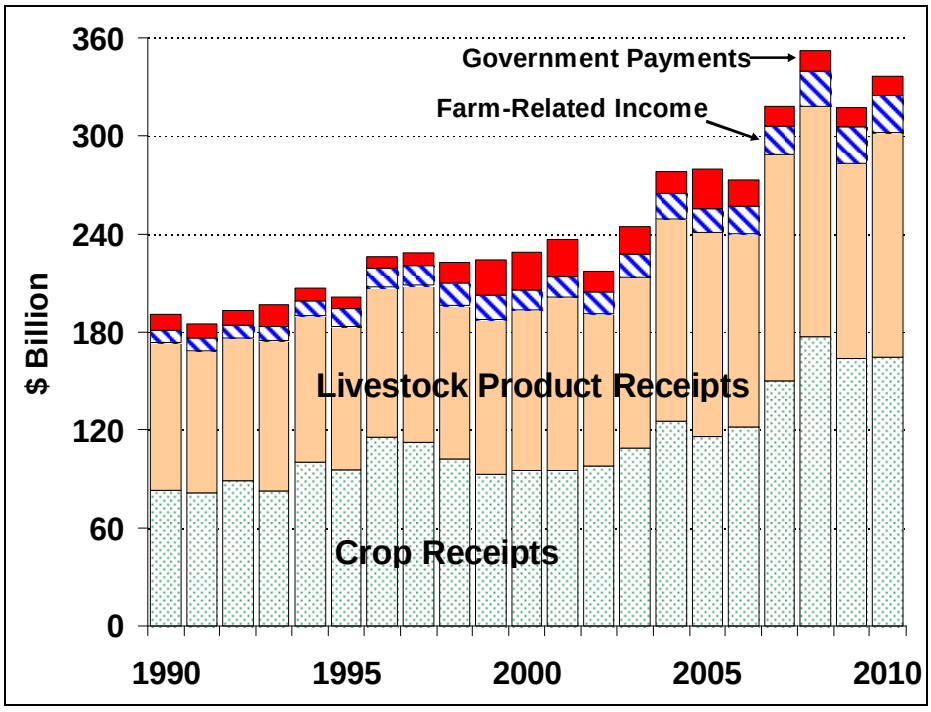
The combined value of cash receipts from sales of both crop and livestock commodities is projected at $301.8 billion in 2010, up $18.4 billion (6.5%) from 2009 (**Table 4** and **Figure 4**), but well short of the record $318.3 billion in 2008.[4]

Crops

Crop cash receipts in 2010 are projected nearly steady at $164.3 billion, up a slim 0.4% from 2009 (**Figure 5**). Sales of field crops (i.e., feed, food, and oil crops) are expected to decline about 1% from 2009 to $98.8 billion. This total includes feed crop (i.e., corn, sorghum, barley, and oats) sales of $48 billion, down 4%, food crop (i.e., wheat and rice) sales of $13.2 billion, down 8%, and oil crop (i.e., soybeans, sunflowers, rapeseed/canola, and other minor oilseeds) sales of a record $32.3 billion, up 1.2%. The major exception is cotton, with sales forecast at $5.3 billion, a rise of over 50% due to projected higher exports in 2010.

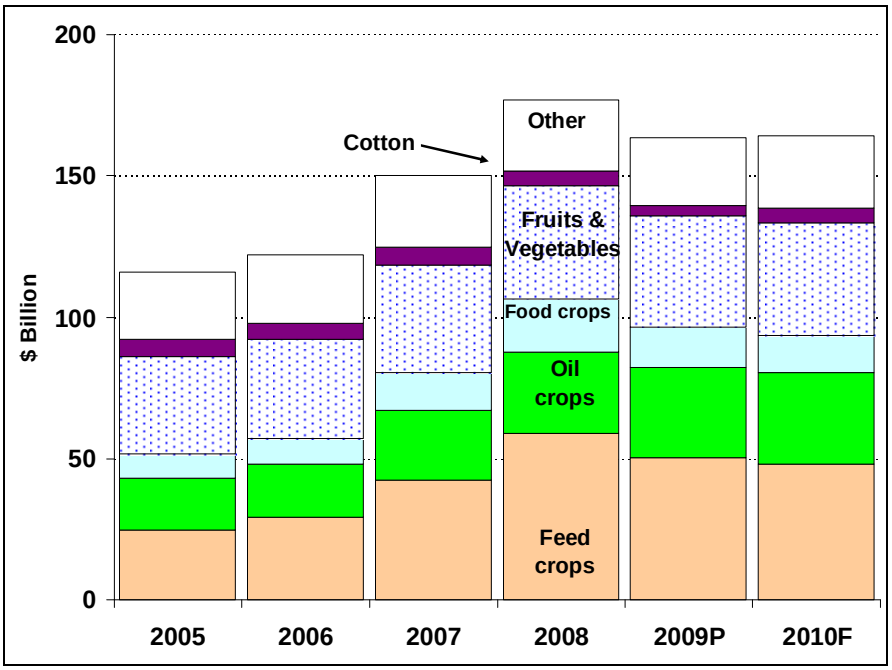
[4] For details regarding individual commodity market developments, refer to the monthly commodity outlook reports prepared by USDA's Economic Research Service (ERS), available at http://www.ers.usda.gov/Publications/Outlook/.

Figure 4. Farm Cash Receipts by Source, 1990 to 2010F



Source: USDA, Economic Research Service, "2010 Farm Income Forecast," August 31, 2010, at http://www.ers.usda.gov/Briefing/FarmIncome/.
Notes: 2009 is preliminary, 2010 is forecast. Receipts from crop and livestock product sales, and government payments, are described in more detail below. Farm-related income includes income from custom work, machine hire, agri-tourism, forest product sales, insurance indemnities, and cooperative patronage dividend fees.

Figure 5. Crop Cash Receipts by Source, 2005 to 2010F



Source: USDA, Economic Research Service, "2010 Farm Income Forecast," August 31, 2010, at http://www.ers.usda.gov/Briefing/FarmIncome/.
Notes: 2009 is preliminary, 2010 is forecast. See **Table 2** for details.

During the 2005-2009 period, crop output and sales were influenced by the rapid expansion of corn-based biofuel production, due in large part to strong federal incentives. With strong federal support, the U.S. corn-based ethanol industry has grown rapidly from 2004, when 3.4 billion gallons of ethanol were produced, to 2009, when 10.7 billion gallons were produced.[5]

The U.S. ethanol sector received a substantial boost in December 2007, when the Energy Independence and Security Act (EISA) was signed into law (P.L. 110-140). EISA greatly expands the mandate for corn-based ethanol use from 10.5 billion gallons in 2009 to 12 billion gallons in 2010, and 15 billion gallons by 2015.[6] As a result of surging ethanol production, an ever-increasing share of the U.S. corn crop has been used to produce ethanol. This additional demand has helped to push corn and other crop prices steadily higher since 2005 as they compete for a fixed amount of cropland (**Figure 2** and **Table 7**).

However, the global financial crisis and weakened economies sharply curtailed demand for energy, feed grain, meat, and dairy products (among other consumer goods) in 2009, thereby pushing energy and commodity prices lower. In addition, a record corn crop of 13.11 billion bushels in 2009 added to the slump in grain prices. The weak corn price outlook helped to improve ethanol profit margins substantially into late 2009, and the demand for corn for ethanol is expected to continue through 2010. USDA projects that corn-for-ethanol use will reach a record 4.7 billion bushels (or 35% of the entire crop) in 2010/2011.[7] When coupled with the events occurring in the international feed grain markets—drought in Russian, Kazakhstan, and the Ukraine, plus strong Chinese demand for corn and feedstuffs—corn's price outlook once again appears positive despite an expected second consecutive record U.S. corn harvest in 2010.

Fruit and tree nuts are expected to experience lower cash receipts in 2010, while vegetable and melons recover to record sales volume of $21.4 billion, up nearly 4% year-to-year. "Other" crops are expected to increase by 6%, led by their major component, greenhouse and nursery, as well as by both sugar crops—sugarcane and sugarbeets.

Livestock

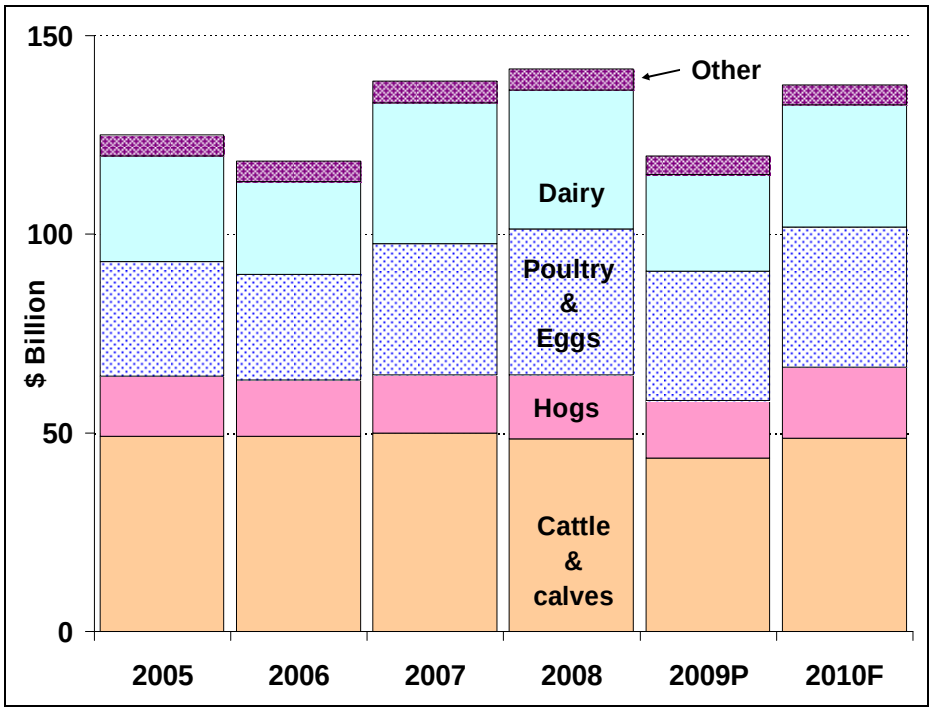
The livestock sector is projected to show a strong recovery in 2010 with cash receipts of $137.5 billion, up nearly 15% from 2009's depressed total of only $119.8 billion (**Figure 6**). This compares with 2008's record livestock cash receipt total of $141.5 billion. As a result, the livestock sector is projected to account for nearly 41% of total U.S. farm cash receipts in 2010 (**Figure 4**). Higher market prices are projected for all major livestock categories, particularly milk (up 25%), hogs (up 32%), choice steers (up 13%), and broilers (up 7%) in 2010. Dairy cash receipts are forecast 26% higher in 2010, due primarily to sharply higher milk prices on tighter supplies and strengthening consumer demand. Hog cash receipts are expected to grow by 25% in 2010.

[5] Ethanol production estimates, Renewable Fuels Association, at http://www.ethanolrfa.org/industry/locations/.

[6] For more information, see CRS Report R40155, *Renewable Fuel Standard (RFS): Overview and Issues*, by Randy Schnepf and Brent D. Yacobucci.

[7] *World Agricultural Supply and Demand Estimates (WASDE)*, World Agricultural Outlook Board (WAOB), USDA, August 12, 2010; available at http://www.usda.gov/oce/commodity/wasde/.

Figure 6. U.S. Livestock Product Cash Receipts by Source, 2005 to 2010F



Source: USDA, Economic Research Service, "2010 Farm Income Forecast," August 31, 2010, at http://www.ers.usda.gov/Briefing/FarmIncome/.

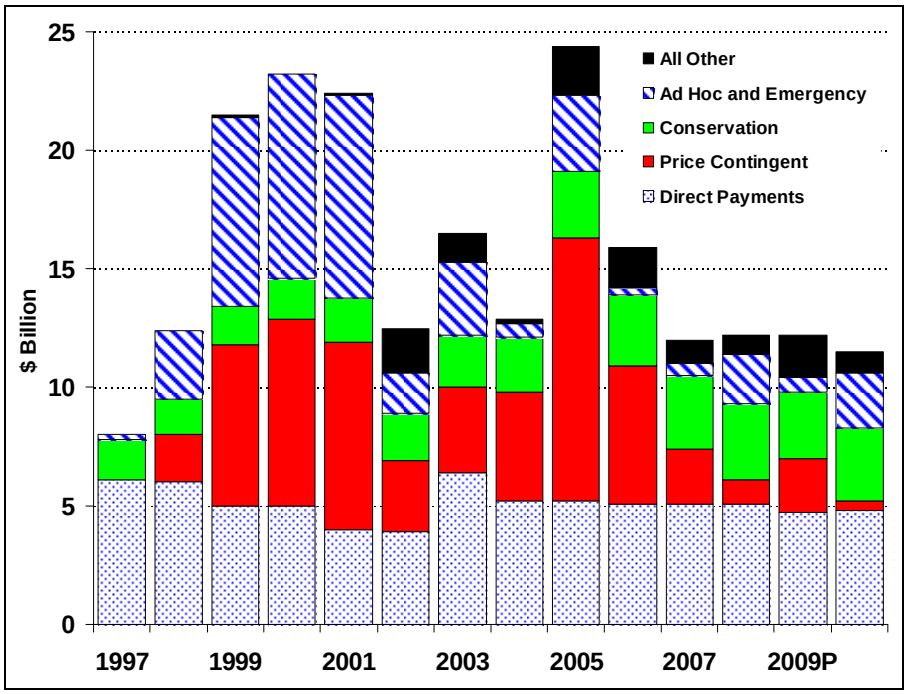
Notes: 2009 is preliminary, 2010 is forecast. See **Table 2** for details.

Government Payments

Direct government payments are forecast 2.7% lower, at $11.9 billion, in 2010, and well below the record of $24.4 billion in 2005 (**Figure 7**). Combined payments under the counter-cyclical program and marketing loan provisions declined by $1.8 billion. Nearly all of this decline is due to higher cotton prices, as other program crop prices remain above program payment triggers for these programs (**Table 7**).[8] In 2009, almost all of the year-to-year increase in payments under the marketing loan and counter-cyclical payment programs was directed to cotton producers, as cotton prices had fallen below relatively high support prices. Payments under the Milk Income Loss Contract Program (MILC)—which compensates dairy producers when domestic milk prices fall below a specified level—are also expected to fall sharply to about $53 million in 2010 (from $880 million in 2009) due to the higher milk prices.

[8] For more information on commodity programs, see CRS Report RL34594, *Farm Commodity Programs in the 2008 Farm Bill*, by Jim Monke.

Figure 7. U.S. Government Farm Support, Direct Outlays, 1997 to 2010F



Source: USDA, Economic Research Service, "2010 Farm Income Forecast," August 31, 2010, at http://www.ers.usda.gov/Briefing/FarmIncome/; and USDA, Risk Management Agency, Current Year-to-Date National Summary of Business Reports, at http://www.rma.usda.gov/data/sob.html.

Notes: Data are on a fiscal year basis and may not correspond exactly with the crop or calendar year; 2009 is preliminary, 2010 is forecast. Direct payments include production flexibility contract payments enacted under the 1996 farm bill and fixed direct payments of the 2002 and 2008 farm bills; price-contingent outlays include loan deficiency payments, marketing loan gains, and counter-cyclical payments; conservation outlays include Conservation Reserve Program payments along with other conservation program outlays; Ad Hoc and Emergency includes emergency supplemental crop and livestock disaster payments and market loss assistance payments for relief of low commodity prices; and "all other" outlays include peanut quota buyout payments, milk income loss payments, tobacco transition payments, and other miscellaneous expenditures.

In contrast, ad hoc and emergency disaster assistance is projected at $2.27 billion in 2010, up sharply from 2009. Ad hoc and emergency disaster assistance has figured heavily in farm sector income in most of the previous 20 years (1989-2008).[9] In particular, the 2008 farm bill (P.L. 110-246) created a permanent fund for disaster assistance, the Agricultural Disaster Relief Trust Fund. Producers in disaster counties who are eligible for Supplemental Revenue Assistance (SURE) payments made from this trust fund are expected to begin receiving payments in calendar year 2010. About half of the rise in government farm payments is attributable to payments made under the SURE Program and the Dairy Economic Loss Assistance Payments Program.[10]

Conservation payments have grown slowly but steadily since 1998; they are expected to be about $3.1 billion in 2010. Farm fixed direct payments, whose payment rates are fixed in legislation and are not affected by the level of program crop prices, are forecast steady year-to-year at $4.8 billion, but are down slightly when compared with about $5.1 billion in 2008. Part of this decline

[9] CRS Report RS21212, *Agricultural Disaster Assistance*, by Dennis A. Shields and Ralph M. Chite.

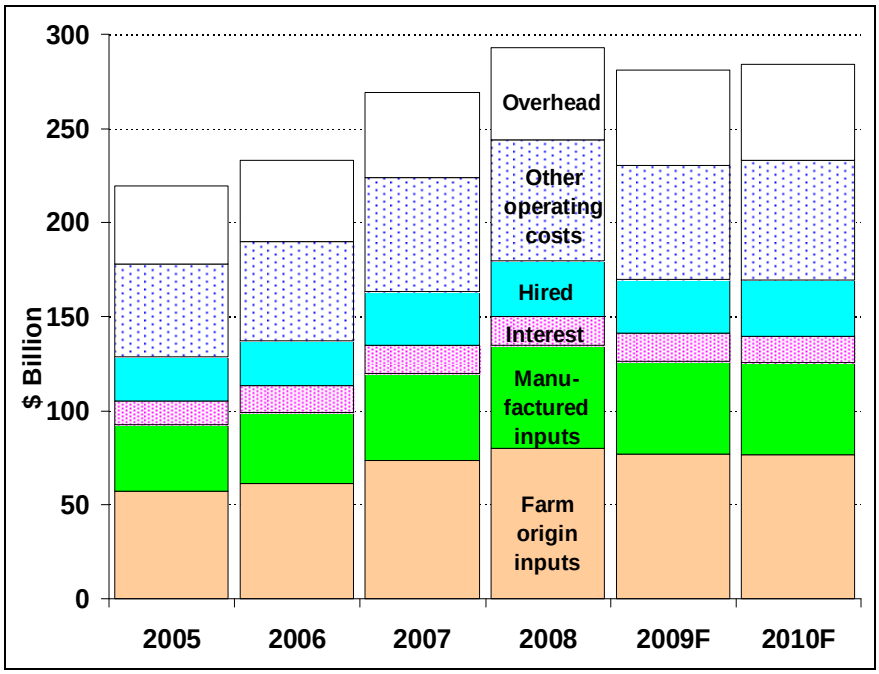
[10] CRS Report R40452, *A Whole-Farm Crop Disaster Program: Supplemental Revenue Assistance Payments (SURE)*, by Dennis A. Shields.

in direct payments may be attributable to enrollment in the Average Crop Revenue Program (ACRE). ACRE was authorized by the 2008 farm bill (P.L. 110-246) and provides revenue insurance to producers in exchange for a 20% reduction in their annual direct payment allotments. Payments under the ACRE program are forecast at $432 million in 2010.

Production Expenses

Total farm production expenses are forecast to rise by about $3 billion to $284.0 billion in 2010, about 1.1% higher than in 2009 (**Table 3**), but well below the anticipated $18.4 billion (6%) rise in cash receipts. The small increase in production expenses follows a dramatic drop in 2009, when total expenses fell by $8 billion (2.7%), and puts expenses at the second-highest level ever (behind 2008's record tally of $293 billion). Lower fertilizer and feed costs are forecast to be offset by higher fuel and livestock acquisition costs (**Figure 8** and **Figure 9**). Lower cattle numbers and slightly lower forecast prices for certain feed grains are expected to lower feed costs (classified as farm-origin inputs) to $43 billion for livestock producers. This would represent a second consecutive year of declining feed costs. However, rising cattle prices raise the cost of acquiring feeder cattle for fattening in feedlots.

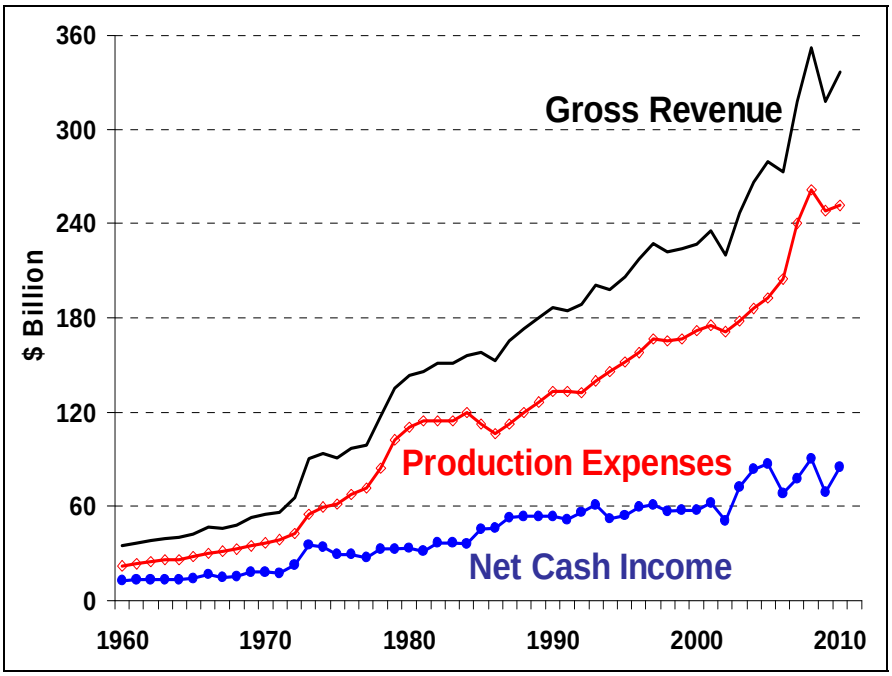
Figure 8. Farm Cash Production Expenses by Source, 2005 to 2010F



Source: USDA, Economic Research Service, "2010 Farm Income Forecast," August 31, 2010, at http://www.ers.usda.gov/Briefing/FarmIncome/.

Notes: 2009 is preliminary, 2010 is forecast. See for **Table 3** details.

Figure 9. U.S. Farm Gross Revenue, Production Expenses, and Net Income



Source: USDA, Economic Research Service (ERS), "2010 Farm Income Forecast," August 31, 2010, at http://www.ers.usda.gov/Briefing/FarmIncome/.

Notes: All values are in nominal terms, i.e., not adjusted for inflation. 2009 is preliminary, 2010 is forecast.

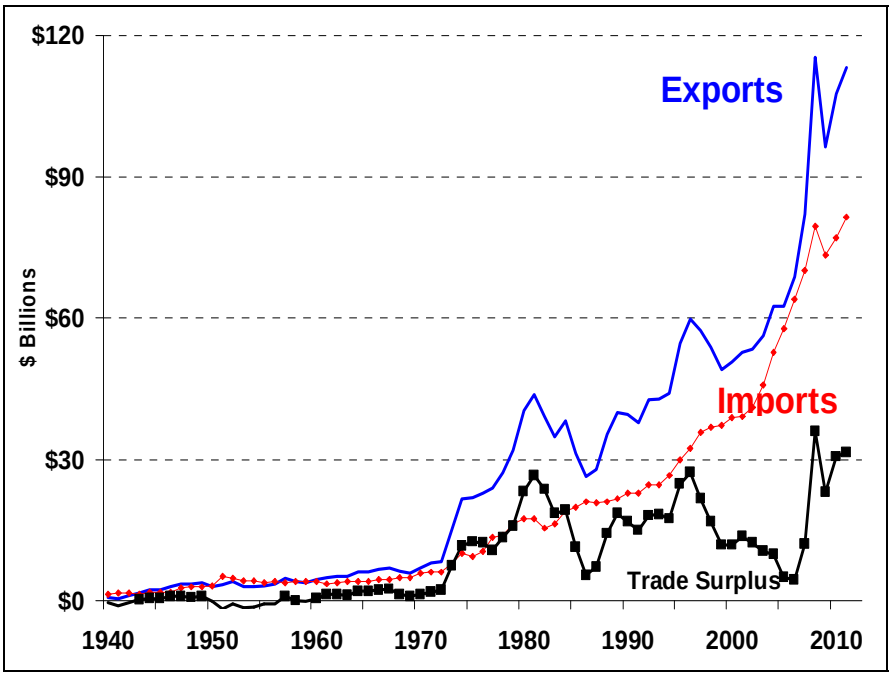
Agricultural Trade Outlook

A major catalyst behind projections for stronger farm income is the outlook for sharply higher U.S. agricultural exports in 2010 (forecast up 11% to $107.5 billion) and 2011 (projected up 5% to $113 billion; **Figure 10**). Much of the increase is due to greater grain and feed shipments, owing to sharply reduced competition from Russia, Kazakhstan, and the Ukraine.[11]

Over the past four decades, steady growth in high-valued export products (**Figure 11**) has helped to push U.S. agricultural export value to ever higher totals; however, the current outlook is driven primarily by growth in bulk commodity shipments (primarily wheat, rice, feed grains, soybeans, cotton, and unmanufactured tobacco), which are forecast up 24% in 2010, followed by a projected 10% rise in 2011. Horticultural exports are forecast up $1.7 billion from 2010 on strong demand from Canada, the EU, and Asian markets. Increased livestock and poultry product exports are expected to more than offset slight declines in dairy product exports. Cotton exports are forecast up significantly with larger domestic supplies and less export competition. The only major category expected to fall is oilseeds, due in part to increased competition from South America.

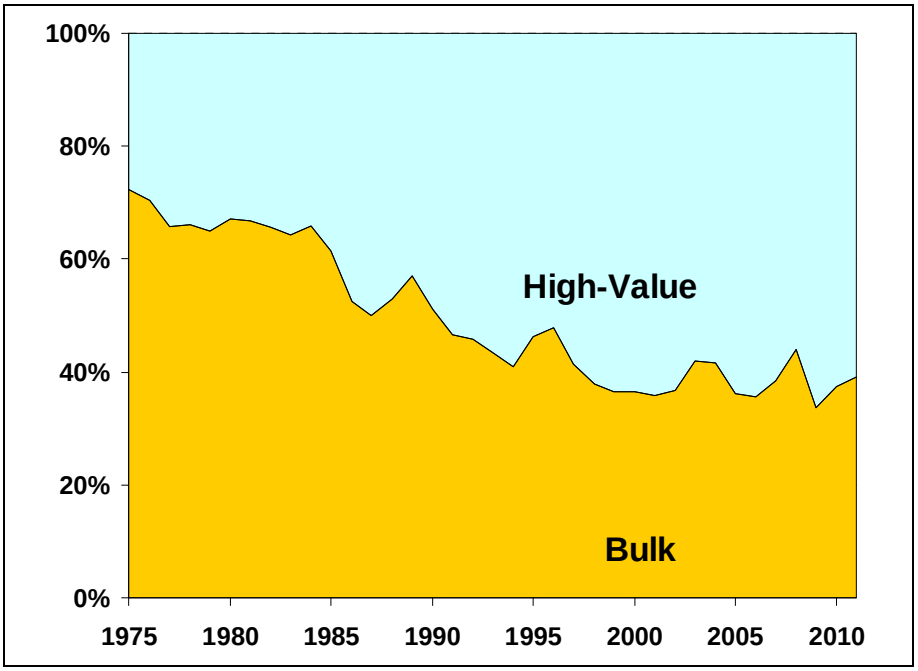
[11] USDA, ERS, *Outlook for U.S. Agricultural Trade*, AES-67, August 31, 2010. For more information on the U.S. agricultural trade outlook see the ERS quarterly report available at the ERS Agricultural Trade Briefing Room at http://www.ers.usda.gov/Briefing/AgTrade/.

Figure 10. U.S. Agricultural Trade, Since 1940



Source: USDA, ERS, *Outlook for U.S. Agricultural Trade*, AES-67, Aug. 31, 2010.

Figure 11. U.S. Agricultural Trade: Bulk vs. High-Value Shares



Source: USDA, ERS, *Outlook for U.S. Agricultural Trade*, AES-67, Aug. 31, 2010.

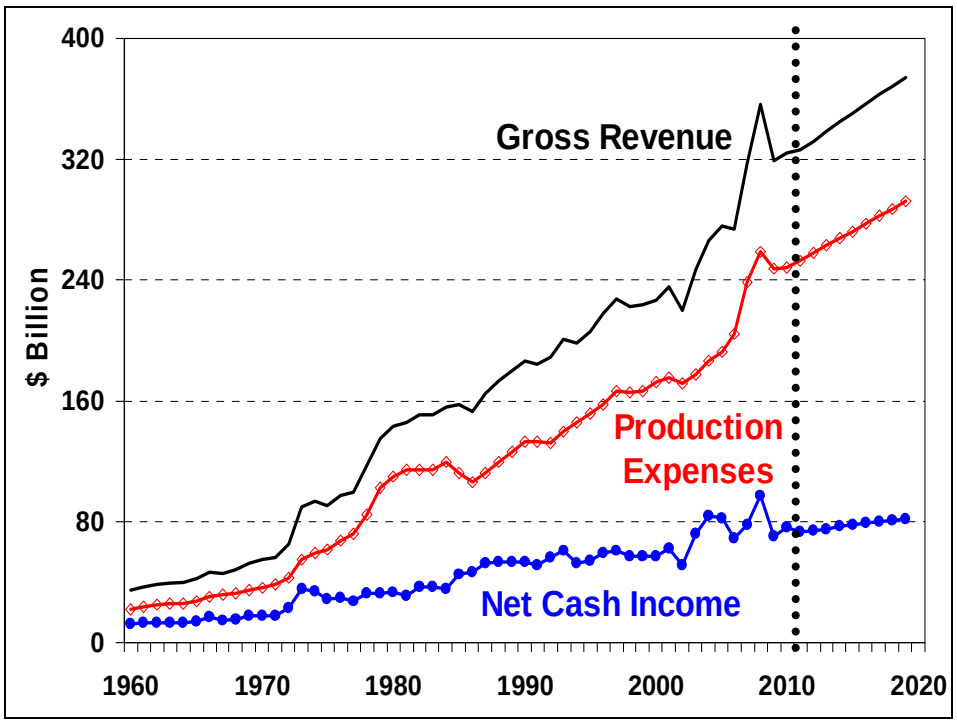
The top three forecast markets for U.S. agricultural exports in 2010 are Canada ($16.4 billion), Mexico ($14.1 billion), and China ($14 billion), followed by Japan ($11.2 billion) and the EU-27 ($8.5 billion). U.S. agricultural imports are projected to be record-large in 2011 at $81.5 billion; however, the trade surplus is expected to remain large at over $30 billion.

Long-Run Farm Income Projections to 2019

Several institutions (both public and private)—including USDA, the Organization for Economic Cooperation and Development (OECD), the Food and Agricultural Policy Research Institute (FAPRI), and IHS Global Insight—routinely produce long-run 10- to 15-year agricultural projections for the U.S. farm sector. These annual projections cover agricultural commodities, agricultural trade, and aggregate indicators of the sector, such as farm income and food prices. The most recent projections available at the time of this report's preparation are made by USDA and cover the period 2009-2019.[12] The projections are highly conditional on critical long-term assumptions made for U.S. and international macroeconomic conditions, U.S. and foreign agricultural and trade policies, and growth rates of agricultural productivity in the United States and abroad.

Appending the long-term projections for the 2010-2019 period to the current USDA agricultural outlook for 2010 produces the chart seen in **Figure 12**. Based on October 2009 macroeconomic conditions, USDA projects net farm income levels at around $80 billion (slightly above 2010's projected $77.1 billion) with no significant improvement through 2019.

Figure 12. USDA Long-Run Farm Income Projections, 2010-2019



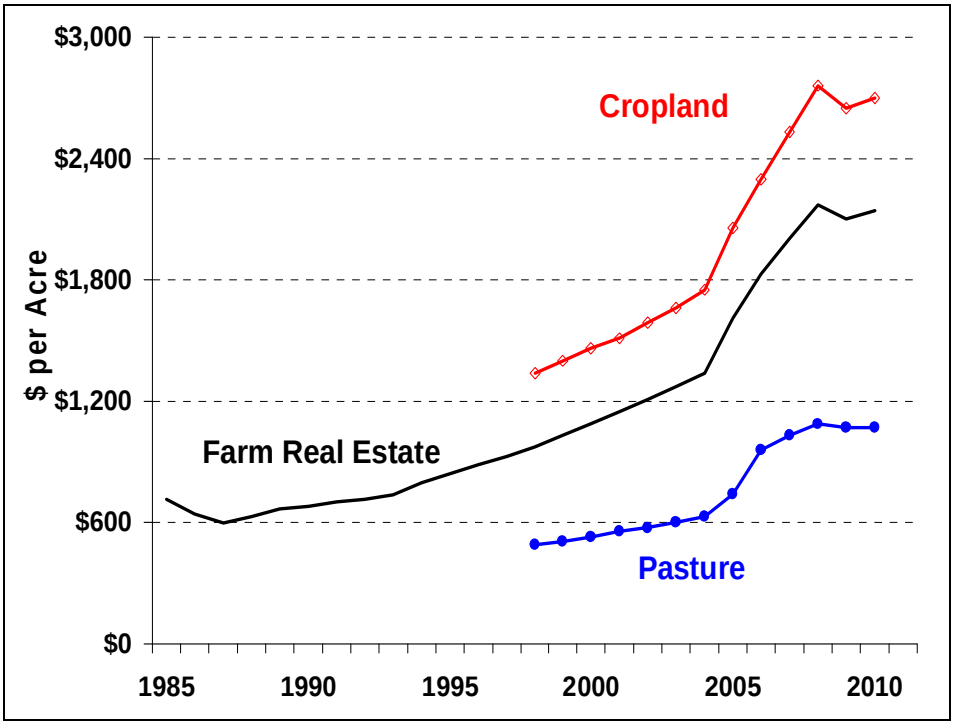
Source: Data for 1960-2009 are from USDA, ERS, Briefing Room: Farm Income and Costs; data for 2011 to 2019 are from USDA, ERS, Briefing Room: Agricultural Baseline Projections, February 11, 2010.

[12] *USDA Agricultural Projections to 2019*, OCE-2010-1, USDA, ERS, Briefing Room: Agricultural Baseline Projections, February 11, 2010; at http://www.ers.usda.gov/Briefing/Baseline.

Farm Asset Values and Debt

Farm asset values—which reflect farm investors' and lenders' expectations about long-term profitability of farm sector investments—are expected to rebound (up 1.4%) in 2009 to $2,043 billion after having fallen nearly 2% in 2008 with the decline in the general economy. Farm asset values are projected to rise another 2.5% in 2010 to $2,096 billion (**Table 6**). Higher farm asset values are due primarily to stronger farm real estate values (**Figure 13**), which had fallen by 3.2% during 2009, the first decline since 1987. Farm land cash markets in early 2010 suggest that land values have stabilized but could see renewed gains related to strong crop prices in 2010. This same pattern is reflected in both cropland and pastureland values.

Figure 13. U.S. Average Farm Land Values, 1985 to 2010



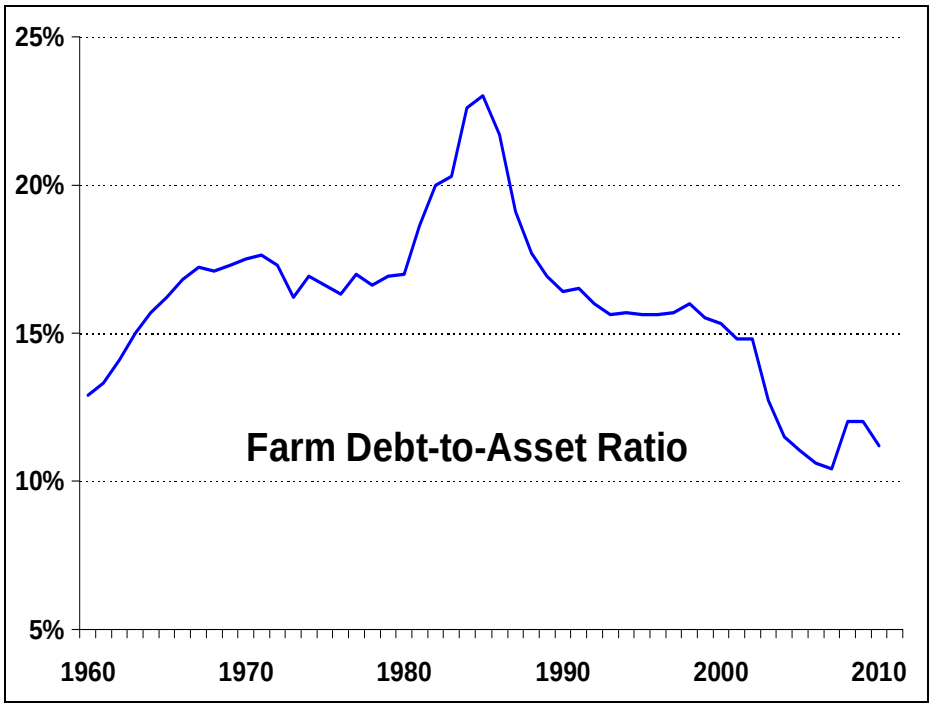
Source: USDA, NASS, *Land Values and Cash Rents,* various issues.

Notes: Farm real estate value measures the value of all land and buildings on farms. Cropland and pasture values are only available since 1998.

Meanwhile, total farm debt is forecast to decline by over 4% to $235 billion in 2019, down from a record $245 billion in 2009. As a result of the relative improvement between farm asset values and farm debt, farm equity (or net worth, defined as asset value minus debt) is projected higher in 2010 at $1,861 billion.

The farm debt-to-asset ratio (**Figure 14**)—which had been steadily declining since 1998's value of 16%, rose abruptly to 12% in 2008 and 2009. However, it is forecast to decline sharply in 2010, falling to 11.2%. These data suggest a mildly stronger financial position in 2010 for the agriculture sector as a whole. The U.S. farm debt-to-asset ratio peaked in 1985 at 23%.

Figure 14. U.S. Farm Debt-to-Asset Ratio Since 1960



Source: USDA, Economic Research Service, "2010 Farm Income Forecast," August 31, 2010, at http://www.ers.usda.gov/Briefing/FarmIncome/.

Note: 2009 is preliminary, 2010 is forecast.

Average Farm Household Income

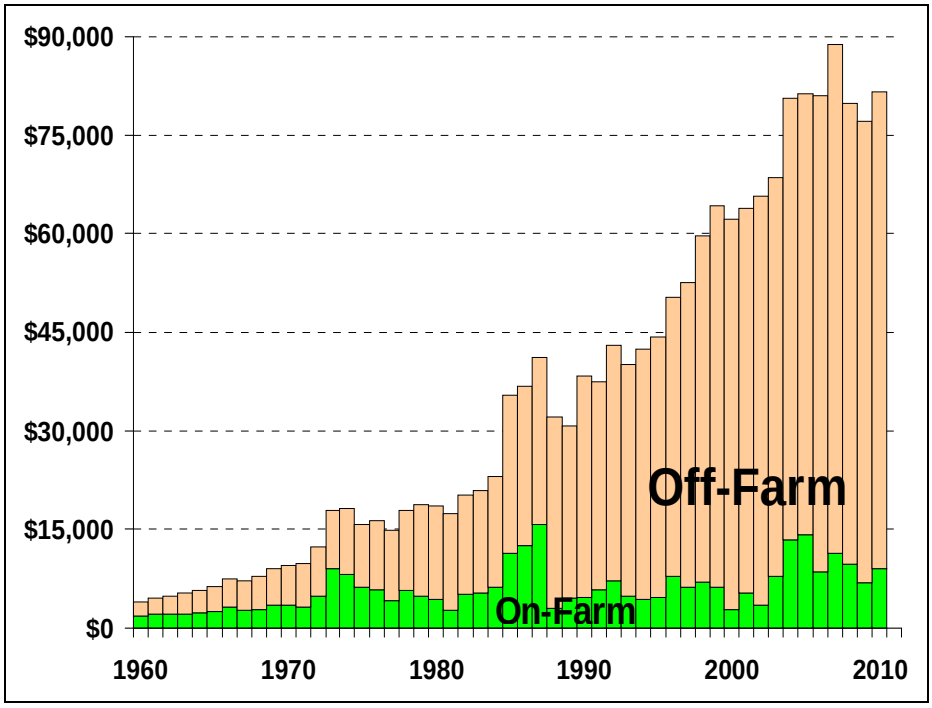
After two years of declines in 2008 and 2009, average farm household income is forecast up nearly 6% at $81,670 in 2010. The share of farm income derived from off-farm sources has increased steadily in recent decades and appears to have peaked at about 95% in 2000. In 2010, off-farm income sources are forecast to account for about 89% of the national average farm household income, compared with about 11% from farming activities (**Figure 15**).

The share of income from farming increases with farm size as measured by gross sales (**Table 1**). "Large" commercial farm households (farms with annual sales greater than $250,000) obtained nearly 70% of household income on-farm and accounted for 80% of the value of total U.S. agricultural production in 2009, while representing only about 10% of farm households.[13]

Intermediate family farms (farms with annual sales in excess of $10,000 but less than $250,000) obtained about 4% of household income from on-farm sources, accounted for about 18% of the value of total U.S. agricultural production, and represented about 30% of family farms.

[13] 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.

Figure 15. U.S. Average Farm Household Income, by On- and Off-Farm Sources, Since 1960



Source: USDA, Economic Research Service, Briefing Room: Farm Household Economics and Well-Being: Historic Data On Farm Operator Household Income, August 31, 2010, at http://www.ers.usda.gov/Briefing/WellBeing/Gallery/historic.htm.

Notes: 2009 is preliminary, 2010 is forecast.

Table 1. Distribution of Farms and Value of Production by Farm Size, 2009

Value of Gross Sales	Family Farms		Total U.S. Production	Total HH Income		
	Number	Share	Share	On-farm Share	Off-farm Share	Total Value
< $10,000	1,281,788	60.1%	1.5%	-13%	113%	$66,832
$10,000 to $249,999	639,270	30.0%	18.4%	4%	96%	$96,177
≥ $250,000	209,949	9.9%	80.1%	70%	30%	$164,609
All	2,131,007	100.0%	100.0%	9%	91%	$77,168

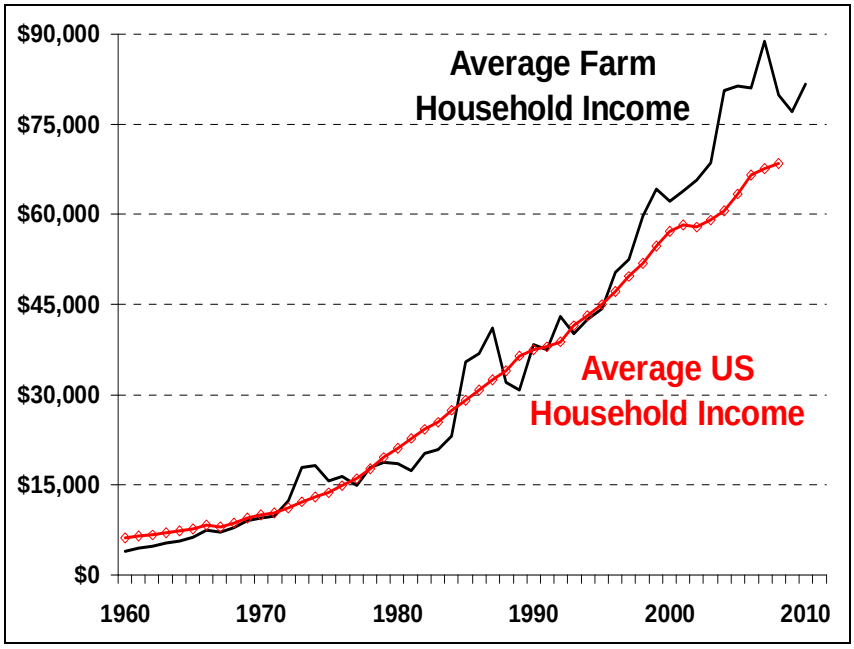
Source: USDA, ERS, 2009 USDA Agricultural Resource Management Survey.

"Small" farm households (annual sales less than $10,000) actually lost revenue from farming operations (-13% of household income) and accounted for less than 2% of the value of total U.S. agricultural production in 2009, while representing over 60% of farm households. A substantial number of these small farms are classified as rural residence farms and either receive little or no income from farm sources or have a total income level that qualifies them as limited-resource farms.

Over the past decade, farm household incomes have surged ahead of average U.S. household incomes (**Figure 16** and **Figure 17**). In 2008 (the last year for which comparable data were

available), the average farm household income of $79,796 was about 17% higher than the average U.S. household income of $68,424 (**Table 5**).

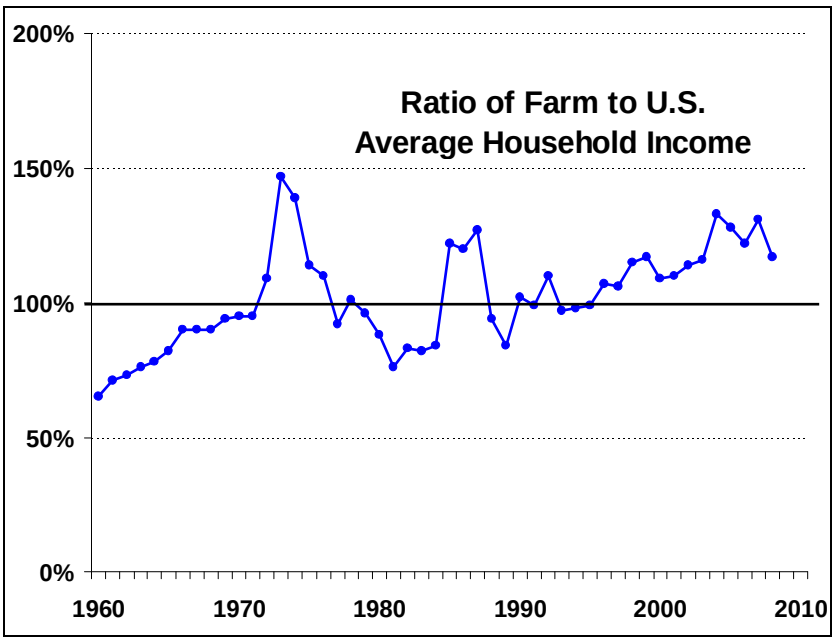
Figure 16. Comparison of Farm to U.S. Average Household Income Since 1960



Source: USDA, Economic Research Service, "2010 Farm Income Forecast," August 31, 2010, at http://www.ers.usda.gov/Briefing/FarmIncome/.

Note: 2009 is preliminary, 2010 is forecast.

Figure 17. Ratio of Farm to U.S. Average Household Income Since 1960



Source: See above source note. 2008 is the last year with comparable data.

Table 2. U.S. Crop and Livestock Revenue ($ Billions) by Source, 2005-2010F

Item	2005	2006	2007	2008	2009	2010[a]	Change (%)
Field crops	**57.9**	**62.6**	**86.9**	**111.6**	**100.0**	**98.8**	**-1.1%**
Food grains	**8.6**	**9.1**	**13.6**	**18.7**	**14.4**	**13.2**	**-8.1%**
Wheat	7.0	7.3	11.4	15.5	11.3	10.3	-9.2%
Rice	1.6	1.8	2.1	3.2	3.0	2.9	-4.1%
Feed crops	**24.6**	**29.4**	**42.3**	**58.9**	**50.2**	**48.0**	**-4.3%**
Corn	18.5	22.9	34.1	48.6	42.0	40.3	-4.1%
Other Grains	1.4	1.3	2.2	2.7	2.3	2.0	-10.7%
Hay	4.7	5.1	6.0	7.5	5.7	5.6	-1.3%
Oil Crops	**18.4**	**18.5**	**24.6**	**28.7**	**31.9**	**32.3**	**1.2%**
Soybeans	16.9	17.3	23.1	26.4	30.1	30.5	1.3%
Peanuts	0.8	0.6	0.8	1.2	0.8	0.8	0.0%
Cotton (lint & seed)	**6.3**	**5.5**	**6.5**	**5.2**	**3.5**	**5.3**	**52.2%**
Other Crops	**58.2**	**59.6**	**63.1**	**65.3**	**63.7**	**65.4**	**2.7%**
Fruits and nuts	17.2	17.3	18.7	19.3	19.0	18.5	-2.7%
Vegetables	17.2	18.0	19.3	21.0	20.6	21.4	3.9%
All other crops	23.8	24.2	25.2	25.0	24.1	25.6	6.0%
Total Crops	**116.1**	**122.1**	**150.1**	**176.8**	**163.7**	**164.3**	**0.4%**
Meat animals	**64.8**	**63.7**	**65.1**	**65.0**	**58.6**	**67.2**	**14.6%**
Cattle & calves	49.3	49.1	49.8	48.5	43.8	48.6	11.1%
Hogs	15.0	14.1	14.8	16.1	14.4	18.1	25.4%
Sheep & lambs	0.6	0.5	0.5	0.4	0.4	0.5	13.4%
Poultry and eggs	**28.8**	**26.6**	**33.1**	**36.8**	**32.5**	**35.2**	**8.4%**
Broilers	20.9	17.9	21.5	23.2	21.8	24.1	10.3%
Turkeys	3.0	3.5	3.9	4.5	3.6	4.1	14.3%
Eggs	4.0	4.5	6.7	8.2	6.2	6.1	-1.6%
All dairy	**26.7**	**23.4**	**35.5**	**34.8**	**24.3**	**30.7**	**26.2%**
Other livestock	**4.6**	**4.8**	**4.9**	**4.8**	**4.3**	**4.4**	**1.2%**
Total Livestock	**124.9**	**118.5**	**138.5**	**141.5**	**119.8**	**137.5**	**14.8%**
Government payments	**24.4**	**15.8**	**11.9**	**12.2**	**12.3**	**11.9**	**-2.7%**
Other farm income[b]	**14.4**	**16.8**	**17.6**	**21.5**	**22.0**	**22.9**	**4.6%**
Total Farm Revenue	**279.8**	**273.2**	**318.0**	**352.0**	**317.6**	**336.6**	**6.0%**

Source: "Farm Income Briefing Room," Economic Research Service, USDA, August 31, 2010.

a. Forecast.. Change represents year-to-year change between 2009 and 2010.

b. Machine hire, custom work, forest products sales, insurance indemnities, and other farm income.

Table 3. U.S. Farm Production Expenses ($ Billions) by Source, 2005-2010F

Item	2005	2006	2007	2008	2009	2010[a]	Change (%)
Farm origin inputs[a]	**57.1**	**61.1**	**73.4**	**79.8**	**77.0**	**76.5**	**-07%**
Feed	28.0	31.4	41.9	46.9	45.0	43.0	- 4.6%
Livestock	18.7	18.6	18.8	17.5	16.5	18.7	13.2%
Seed	10.4	11.0	12.6	15.1	15.5	14.9	-4.0%
Manufactured inputs[b]	**35.4**	**37.5**	**46.3**	**55.0**	**49.0**	**49.2**	**0.5%**
Fertilizer & lime	12.8	13.3	17.7	22.5	20.1	17.8	-11.8%
Fuels & oils	10.3	11.3	13.8	16.2	10.6	15.5	21.8%
Electricity	3.5	3.8	4.3	4.5	4.6	4.7	2.0%
Pesticides	8.8	9.0	10.5	11.7	11.5	11.3	-2.3%
Total interest charges	**11.9**	**14.4**	**15.1**	**15.4**	**15.2**	**13.9**	**-8.1%**
Short-term interest	5.7	6.4	6.9	6.7	6.4	6.3	- 1.3%
Real-estate interest	6.2	8.0	8.3	8.8	8.7	7.6	-13.1%
Other operating exp.[c]	**71.1**	**76.9**	**89.5**	**93.7**	**89.5**	**93.3**	**4.2%**
Repair & maintenance	10.3	12.5	14.3	14.8	14.7	15.3	4.2%
Hired & contract labor	23.6	24.2	28.6	29.7	28.7	29.8	3.7%
Custom work	3.5	3.5	3.8	4.1	3.9	4.0	1.6%
Marketing, storage, etc.	8.9	9.1	10.3	10.1	10.3	10.7	4.0%
Miscellaneous	24.9	27.6	32.3	35.0	31.9	33.5	5.1%
Overhead expenses[d]	**41.8**	**42.9**	**44.9**	**49.0**	**50.4**	**51.2**	**1.6%**
Capital consumption	24.9	26.2	27.0	28.7	30.1	30.4	0.9%
Property taxes	8.0	9.0	10.3	10.7	10.4	10.6	1.6%
Non-operator net rent	8.9	7.6	7.6	9.3	9.8	10.2	3.6%
Total Production Exp.	**217.4**	**232.7**	**269.2**	**293.0**	**281.0**	**284.0**	**1.1%**

Source: "Farm Income Briefing Room," Economic Research Service, USDA, August 31, 2010.

a. Farm origin inputs include purchases of feed, livestock and poultry, and seed.

b. Manufactured inputs include fertilizers and lime, pesticides, petroleum fuel and oils, and electricity.

c. Other operating costs include repair and maintenance of capital items, machine hire and custom work, marketing storage, transportation expenses, and other miscellaneous expenses.

d. Overhead expenses include property taxes, net rent to a non-operator landlord, and capital consumption.

Table 4. Annual U.S. Farm Income Since 2003

($ billions)

Item	2003	2004	2005	2006	2007	2008	2009	2010[a]
1. Cash receipts	**216.1**	**237.9**	**241.0**	**240.6**	**288.5**	**318.3**	**283.4**	**301.8**
Crops[b]	110.5	114.4	116.1	122.1	150.1	176.8	163.7	164.3
Livestock	105.6	123.5	124.9	118.5	138.5	141.5	119.8	137.5
2. Government payments[c]	**16.5**	**13.0**	**24.4**	**15.8**	**11.9**	**12.2**	**12.3**	**11.9**
Fixed direct payments[d]	6.4	5.2	5.2	5.1	5.1	5.1	4.7	4.8
CCP[e]	2.3	1.1	4.1	4.0	1.1	0.7	1.2	0.2
Marketing Loan Benefits[f]	1.3	3.5	7.1	1.8	1.1	0.3	1.1	0.2
Conservation	2.2	2.3	2.8	3.0	3.1	3.2	2.8	3.1
Ad hoc and emergency	3.1	0.6	3.2	0.3	0.5	2.1	0.6	2.3
All other[g]	1.2	0.2	2.1	1.7	1.0	0.8	1.8	0.9
3. Farm-related income[h]	**14.1**	**15.7**	**14.4**	**16.8**	**17.6**	**21.5**	**22.0**	**22.9**
4. Gross cash income (1+2+3)	246.7	266.5	279.8	273.2	318.0	352.0	317.6	336.6
5. Cash expenses[i]	174.5	182.9	192.8	204.8	240.3	261.6	248.5	251.3
6. NET CASH INCOME	**72.3**	**83.7**	**87.0**	**68.4**	**77.7**	**90.4**	**69.1**	**85.3**
7. Total gross revenues[j]	258.6	294.9	298.6	290.2	339.5	379.6	343.2	361.1
8. Total production expenses[k]	197.7	207.5	219.8	232.7	269.2	293.0	281.0	284.0
9. NET FARM INCOME	**61.0**	**87.4**	**78.8**	**57.4**	**70.3**	**86.6**	**62.2**	**77.1**

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/Briefing/FarmIncome/; U.S. farm income data updated as of August 31, 2010.

a. Data for 2009 are preliminary, 2010 are USDA forecasts.
b. Includes Commodity Credit Corporation loans under the farm commodity support program.
c. Government payments reflect payments made directly to all recipients in the farm sector, including landlords. The non-operator landlords' share is offset by its inclusion in rental expenses paid to these landlords and thus is not reflected in net farm income or net cash income. For more information on U.S. farm commodity programs, see CRS Report RL34594, *Farm Commodity Programs in the 2008 Farm Bill*, by Jim Monke; for more information on conservation programs see CRS Report RL34557, *Conservation Provisions of the 2008 Farm Bill*, by Tadlock Cowan, Renée Johnson, and Megan Stubbs.
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 loan deficiency payments (LDP); marketing loan gains (MLG); 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, agri-tourism, forest product sales, and other farm sources.
i. Excludes depreciation and perquisites to hired labor.
j. Gross cash income plus inventory adjustments, the value of home consumption, and the imputed rental value of operator dwellings.
k. Cash expenses plus depreciation and perquisites to hired labor.

Table 5. Average Annual Income per U.S. Household, Farm versus All, 2003-2010F

($ per household)

	2003	2004	2005	2006	2007	2008	2009	2010F
Average U.S. Farm Income by Source								
On-Farm Income	$7,884	$13,325	$14,227	$8,541	$11,364	$9,764	$6,866	$9,043
Off-Farm income	$60,713	$67,279	$67,091	$72,502	$77,432	$70,032	$70,302	$72,627
Total Farm income	$68,597	$80,604	$81,318	$81,043	$88,796	$79,796	$77,168	$81,670
Average U.S. Household Income	$59,067	$60,466	$63,344	$66,570	$67,609	$68,424	na	na
Farm Household Income as Share of U.S. Avg. Household Income (%)	116%	133%	128%	122%	131%	117%	na	na

Source: USDA, ERS Briefing Room: Farm Household Economics and Well-Being: Historic Data On Farm Operator Household Income, at http://www.ers.usda.gov/Briefing/WellBeing/Gallery/historic.htm; as of August 31, 2010.

Note: Data for 2010 are USDA forecasts.

Table 6. Average Annual Farm Sector Debt-to-Asset Ratio, 2003-2010F

($ billions)

	2003	2004	2005	2006	2007	2008	2009P	2010F
Farm Assets	1,378.8	1,588.0	1,779.4	1,923.6	2,055.3	2,015.7	2,043.5	2,095.6
Farm Debt	175.1	181.9	196.4	203.6	214.1	242.7	245.4	235.0
Farm Equity	1,203.6	1,406.1	1,583.0	1,720.0	1,841.2	1,773.0	1,798.1	1,860.6
Debt-to-Asset Ratio (%)	**12.7%**	**11.5%**	**11.0%**	**10.6%**	**10.4%**	**12.0%**	**12.0%**	**11.2%**

Source: USDA, ERS Briefing Room: Farm Household Economics and Well-Being: Farm Business Balance Sheet,, at http://www.ers.usda.gov/data/FarmBalanceSheet/fbsdmu.htm; as of August 31, 2010.

Note: Data for 2009 are preliminary, 2010 are USDA forecasts.

Table 7. U.S. Prices and Support Rates for Selected Farm Commodities Since 2004

Commodity[a]	Unit	Year	2004/05	2005/06	2006/07	2007/08	2008/09F[b]	2009/10F[b]	% change from 2008/09[c]	2010/11F	% change from 2009/10[d]	2009 Loan rate[e]	2009 Target Price
Wheat	$/bu	Jun-May	3.40	3.42	4.26	6.48	6.78	4.87	-28.2%	4.70-5.50	4.7%	2.75	3.92
Corn	$/bu	Sep-Aug	2.06	2.00	3.04	4.20	4.06	3.50-3.60	-8.9%	3.50-4.10	7.0%	1.95	2.63
Sorghum	$/bu	Sep-Aug	1.79	1.86	3.29	4.08	3.20	3.10-3.20	-1.6%	3.20-3.80	11.1	1.95	2.57
Barley	$/bu	Jun-May	2.48	2.53	2.85	4.02	5.37	4.66	-13.2%	3.55-4.15	-17.4	1.85	2.44
Oats	$/bu	Jun-May	1.48	1.63	1.87	2.63	3.15	2.02	-35.9%	2.15-2.75	21.3	1.33	1.44
Rice	$/cwt	Aug-Jul	7.33	7.65	9.96	12.80	16.80	14.00	-16.7%	10.75-11.75	-19.6	6.50	10.50
Soybeans	$/bu	Sep-Aug	5.74	5.66	6.43	10.10	9.97	9.60	-3.7%	8.50-10.00	-3.6	5.00	5.80
Soybean oil	¢/lb	Oct-Sep	23.0	23.4	31.0	52.0	32.16	35.50	10.4%	36.5-40.5	8.5	—	—
Soybean meal	$/st	Oct-Sep	182.9	174.2	205.4	335.9	331.2	310	-6.4%	250-290	-12.9	—	—
Cotton, Upland	¢/lb	Aug-Jul	41.6	47.7	46.5	59.3	47.8	62.5	30.8%	61.0-75.0	8.8	52.00	71.25
Choice Steers	$/cwt	Jan-Dec	84.8	87.3	85.4	91.8	92.27	83.25	-9.8%	93-95	12.9%	—	—
Barrows/Gilts	$/cwt	Jan-Dec	52.5	50.1	47.3	47.1	47.84	41.24	-13.8%	54-55	32.2%	—	—
Broilers	¢/lb	Jan-Dec	74.1	70.8	64.4	76.4	79.7	77.60	-2.6%	82-84	7.0%	—	—
Eggs	¢/doz	Jan-Dec	82.2	65.5	71.8	114.4	128.3	103.0	-19.7%	99-101	-2.9%	—	—
Milk	$/cwt	Jan-Dec	16.05	15.14	12.90	19.13	18.29	12.84	-29.8%	15.90-16.10	24.6%	—	—

Source: Various USDA agency sources as described in the notes below.

a. Season average farm price for grains and oilseeds are 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) August 12, 2010;—= no value; and USDA's out-year 2010/2011 crop price forecasts will first appear in the May 2010 WASDE report. WASDE reports are available at http://www.usda.gov/oce/commodity/wasde/. Soybean and livestock product prices are from USDA, Agricultural Marketing Service (AMS): soybean oil—Decatur, IL, cash price, simple average crude; soybean meal—Decatur, IL, cash price, simple average 48% protein; 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.

b. Data for 2008/2009, 2009/2010, and 2010/2011 are USDA forecasts.

c. Percent change from 2008/2009, calculated using the difference from the midpoint of the range for 2008/2009 with the estimate for 2008/2009.

d. Percent change from 2009/2010, calculated using the difference from the midpoint of the range for 2010/2011 with the estimate for 2009/2010.

e. Loan rate and target prices are for the 2009/2010 crop year. For more information, see CRS Report RL34594, *Farm Commodity Programs in the 2008 Farm Bill*, by Jim Monke.

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