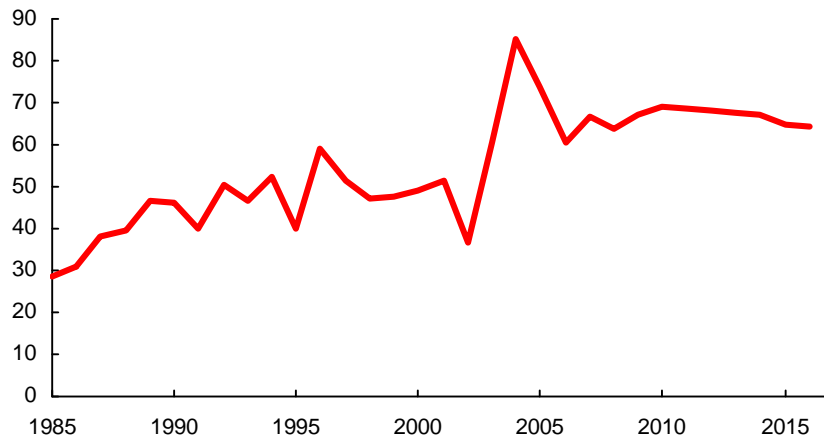


U.S. Agricultural Sector Aggregate Indicators Farm Income, Food Prices and Expenditures, and U.S. Trade Value

Large increases in corn-based ethanol production affect production, use, and prices of farm commodities throughout the sector. Steady domestic and international economic growth supports gains in consumption, trade, and prices. These factors combine to result in higher market prices and cash receipts. Rising production expenses and lower government payments offset some of the gains in cash receipts and other sources of farm income, although net farm income remains strong through the projections. U.S. agricultural export values rise through the projections. On average, consumer food prices are projected to rise more slowly than the general rate of inflation over the next decade, although increases in meat prices push food prices up faster in some years.

Net farm income

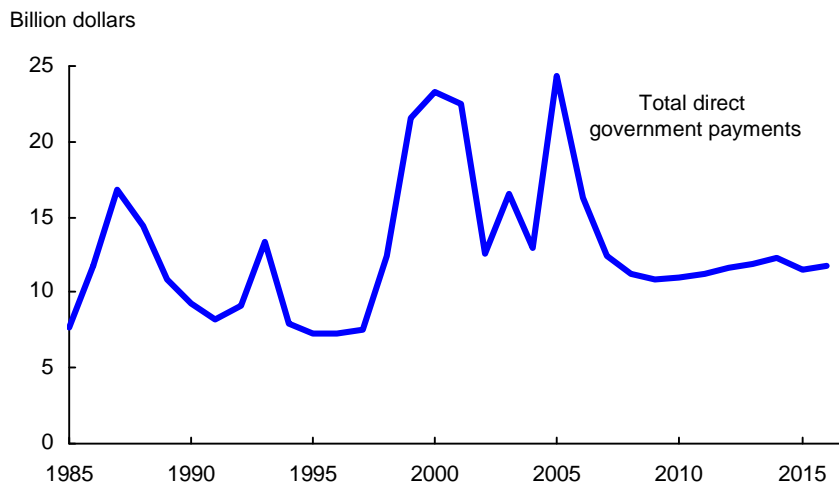
Billion dollars



Strong domestic use and export demand push U.S. net farm income from its 2006 level of \$60.6 billion to an average of \$66.7 billion annually over the next 10 years.

- Large increases in cash receipts over the next several years mostly result from expansion of corn-based ethanol production. Lower government payments, due to higher commodity prices, and rising farm production expenses offset gains in cash receipts in the later years of the projections, resulting in some reduction in net farm income after 2010. Nonetheless, net incomes remain historically high in the mid- to upper-\$60 billion range, well above the average in the 1990s of about \$48 billion.

Direct government payments

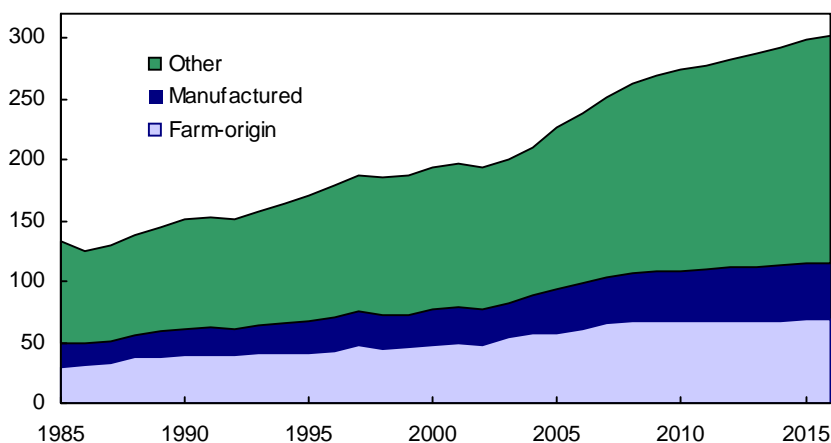


Direct government payments to farmers are projected to fall from \$16 billion in 2006 to an average of less than \$12 billion annually over the projection period, largely due to higher commodity prices and correspondingly lower price-dependent program benefits.

- To account for the possibility of both higher and lower prices than the deterministic (point estimate) prices, a stochastic estimation process is used to project expected direct government payments. This process captures potential variation in farm program benefits due to stochastic (random) shocks to yields.
- Strong demand for corn for ethanol production results in projected market prices for corn and other crops rising to levels that lower government payments significantly. For example, even with stochastic considerations, payments for price-sensitive marketing loan benefits and counter-cyclical payments for feed grains are minimal, totaling less than \$200 million over calendar years 2007-16 for the projections scenario in this report. In contrast, with higher crop prices, use of land for production is more valuable, so rental rates for land in the Conservation Reserve Program (CRP) rise and push overall annual CRP payments to more than \$3 billion toward the end of the projections. As a result, fixed direct payments under the 2002 Farm Act and conservation payments account for a larger share of total direct government payments.
- With lower government payments, the agriculture sector relies on the market for more of its income and the share of income provided by government payments falls. Government payments, which represented more than 8 percent of gross cash income in 2005, account for less than 4 percent during most of the projection period. Conversely, cash receipts plus farm-related income rises to over 96 percent of gross cash income.

Farm production expenses

Billion dollars

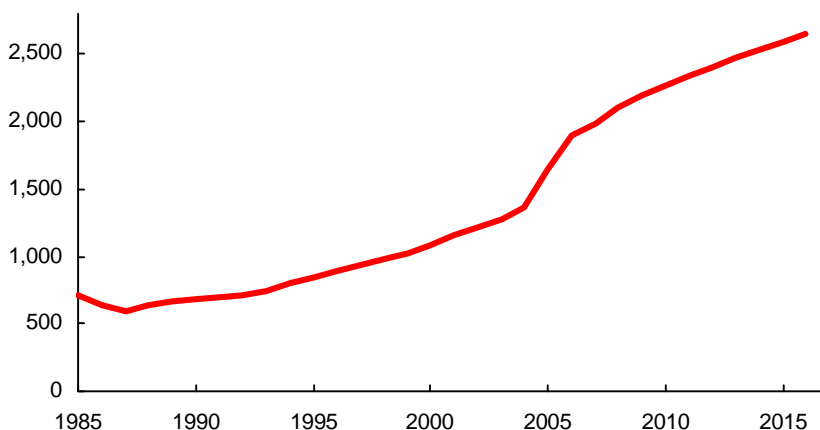


Total production expenses increase at near the general inflation rate from 2007-16. These expenses are divided into three categories in the chart above: farm-origin (seed, feed, and feeder livestock), manufactured (fuel, fertilizer, pesticides, and electricity), and other (labor, interest, net rent to nonoperator landlords, and other expenses).

- The largest percentage increase is for “other” expenses, reflecting increases in labor expenses and interest costs. Labor expenses rise as sector output increases and wage rates rise. Projected increases in interest costs reflect higher interest rates, as well as increased debt facilitated by higher income. Increases for net rent and other operating expenses reflect higher cash receipts and profitability as well as larger acreage and sector output.
- Projected manufactured-input expenses reflect high oil prices and larger crop production. After increases in 2004-06 that were mostly due to the rising oil prices, these expenses increase at about the general rate of inflation through the rest of the projections.
- Farm-origin expenses rise less than the general inflation rate. Feed expenses rise the most as demand for corn for use in the production of ethanol competes with feed demand and pushes corn prices higher.
- Cash operating margins tighten over the projections period as expenses rise while decreases in government payments slow gains in gross cash incomes. By 2016, cash expenses represent about 80 percent of gross cash income, compared with an average of 73 percent in 2000-05.

Farmland value

Dollars per acre

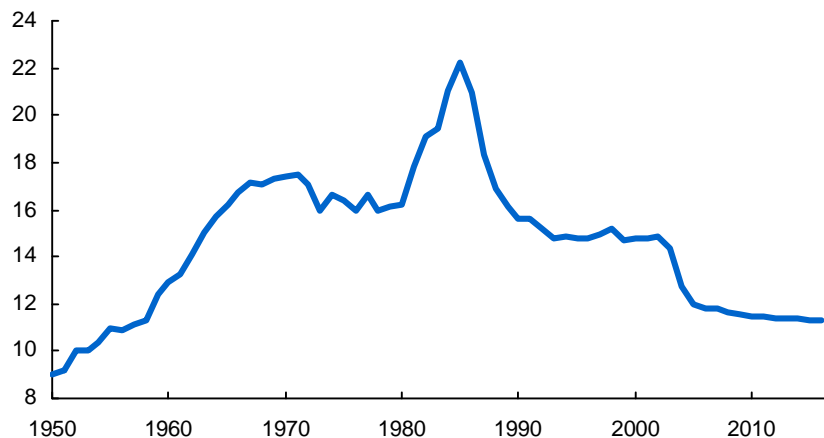


Strong and stable net farm income assists in asset accumulation and debt management.

- Gains in farmland values and real estate assets (representing about 80 percent of total farm assets) reflect increases in agricultural revenues, particularly in the first several years of the projections. Additionally, as the general economy continues to expand, demand for land for nonagricultural uses, such as housing and recreation, contributes to rising farmland values.

Debt-to-asset ratios

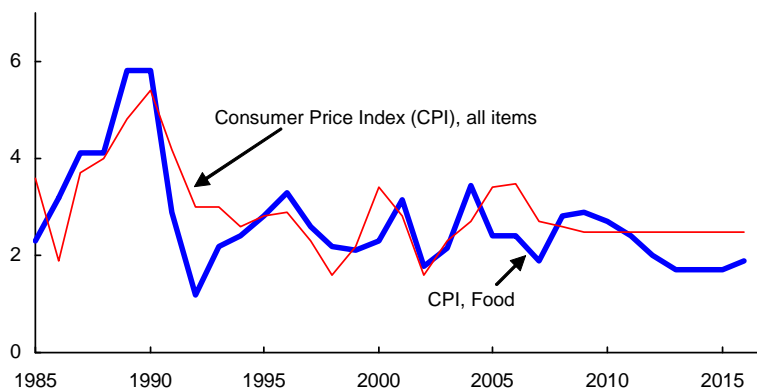
Percent



- Higher incomes facilitate increases in farm debt in the projections. Nonetheless, debt moves up less rapidly than farm asset values, resulting in gains in overall farm sector equity. The debt-to-asset ratio declines moderately from 11.8 percent in 2006 to about 11.3 percent at the end of the projections, continuing a decline from over 20 percent in the mid-1980s.

Food inflation

Percent change

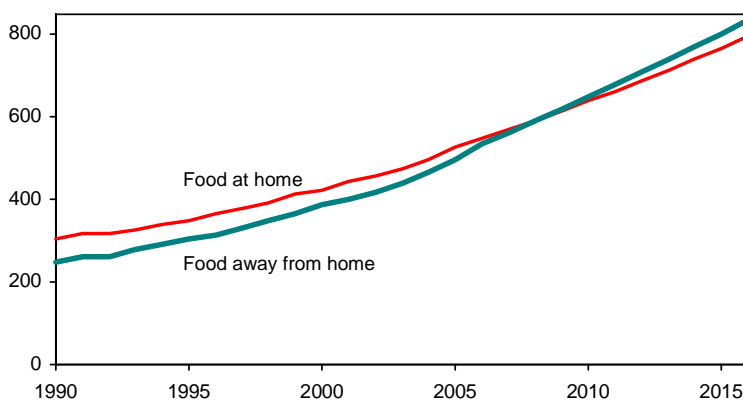


On average over the next 10 years, retail food prices are projected to increase less than the general inflation rate, although food price increases are somewhat larger than general inflation in some years.

- Consumer prices for red meats, poultry, and eggs exceed the general inflation rate in 2008-10 as the livestock sector adjusts to higher feed costs due to the expansion in corn-based ethanol production. As a result, overall retail food prices rise faster than the general inflation rate in those years.
- Among foods purchased for consumption at home, projected price increases are generally strongest for more highly processed foods such as cereals and bakery products and fats and oils. Prices for these foods are related more to processing and marketing costs than to farm-level prices and, therefore, rise at a rate near the general inflation rate.
- Prices for food away from home reflect the overall inflation rate as well as some effect of price movements for retail meat and poultry. Competition in the fast-food and food service industries tend to moderate price increases for food away from home.

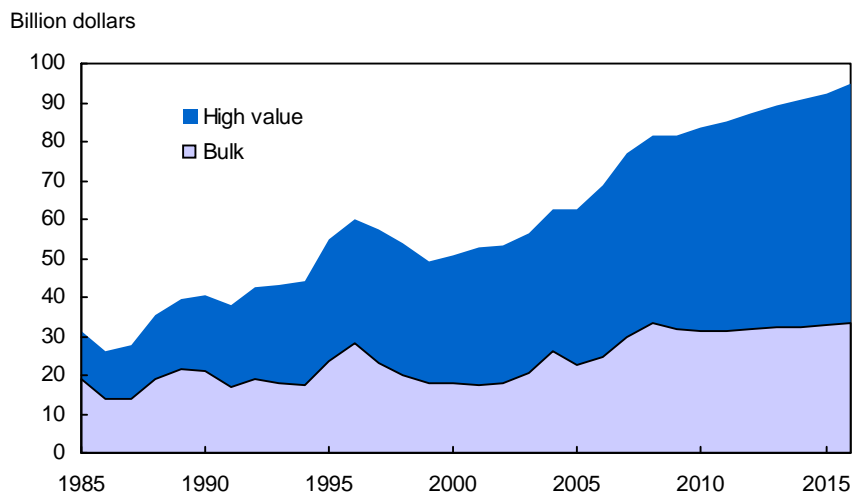
Food expenditures

Billion dollars



- Expenditures for meals prepared away from home account for a growing share of food spending, reaching about 51 percent of total food expenditures by 2016.

U.S. agricultural export value: Bulk and high value 1/



1/ Bulk commodities include wheat, rice, feed grains, soybeans, cotton, and tobacco. High-value products include semi-processed and processed grains and oilseeds, animals and animal products, horticultural products, and sugar and tropical products.

The value of U.S. agricultural exports rises in the projections due to increases in both export volumes and prices. Strong domestic economic growth and consumer demand boost agricultural imports.

- Steady world economic growth, particularly in developing countries, provides a foundation for gains in trade and U.S. agricultural exports. However, competition in global markets remains strong. Higher commodity prices due to expansion of global biofuel demand also contribute to the gains in export values. Overall, the value of U.S. agricultural exports is projected to grow from \$77 billion in fiscal year 2007 to nearly \$95 billion in 2016.
- The initial increases in bulk commodity prices strengthen bulk export values, pushing the share of exports accounted for by high-value products (HVP) down over the next few years. In the longer run, HVP export values again grow in importance, representing about 65 percent of the value of U.S. exports by the end of the projection period. Much of the growth in HVP exports is for animal products and horticultural products. Most of the growth in the value of bulk commodity exports (grains, oilseeds, cotton, and tobacco) reflects expected price increases and gains in volume for grains.
- U.S. agricultural import values rise to about \$93 billion in 2016, boosted by gains in consumer income and demand for a large variety of foods. Strong growth in horticultural imports is assumed to continue, contributing over half of the overall agricultural import increase.
- Overall, the U.S. agricultural trade surplus rises to over \$10 billion in the initial years of the projections, largely due to the gains in bulk commodity prices and bulk export values. The agricultural trade balance then narrows through the remainder of the projections as bulk export growth slows and imports continue steady gains.

Table 29. Farm receipts, expenses, and incomes in nominal dollars

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	<i>Billion dollars</i>											
Cash receipts:												
Crops	114.0	121.6	133.5	141.5	145.7	148.1	149.1	150.8	152.7	154.6	156.7	158.8
Livestock and products	125.0	121.2	125.2	128.9	134.3	137.1	139.6	140.7	141.1	142.1	142.9	144.2
All commodities	238.9	242.7	258.7	270.4	280.1	285.2	288.7	291.5	293.8	296.7	299.7	303.0
Farm-related income	17.6	18.0	18.7	19.2	19.6	20.1	20.5	21.0	21.5	21.9	22.4	22.9
Government payments	24.3	16.3	12.4	11.2	10.8	11.0	11.3	11.6	11.9	12.3	11.5	11.7
Gross cash income	280.9	277.1	289.8	300.8	310.5	316.3	320.5	324.1	327.2	330.9	333.6	337.6
Cash expenses	199.7	210.4	222.6	233.1	239.2	243.9	248.3	252.8	257.4	262.0	266.7	271.1
Net cash income	81.2	66.7	67.2	67.7	71.3	72.4	72.3	71.3	69.8	69.0	66.9	66.6
Value of inventory change	0.4	-0.8	4.3	1.7	0.3	0.8	0.6	1.0	1.8	1.9	1.7	1.3
Non-money income	18.5	22.2	23.8	23.4	24.8	25.3	25.7	26.2	26.6	27.0	27.5	27.9
Gross farm income	299.8	298.4	318.0	325.9	335.6	342.3	346.9	351.2	355.6	359.9	362.8	366.8
Noncash expenses	18.0	18.9	19.6	19.7	19.8	20.0	20.3	20.5	20.8	21.0	21.2	21.5
Operator dwelling expenses	8.3	8.6	9.1	9.2	9.3	9.5	9.6	9.7	9.8	9.9	10.0	10.1
Total production expenses	226.0	237.8	251.3	262.0	268.4	273.3	278.1	283.0	288.0	292.9	297.9	302.7
Net farm income	73.8	60.6	66.6	64.0	67.2	69.0	68.8	68.2	67.6	67.0	64.8	64.1
Farm assets	1,805.3	1,919.4	1,994.3	2,090.8	2,180.8	2,251.2	2,314.7	2,369.8	2,426.0	2,481.5	2,536.8	2,586.7
Farm debt	215.5	226.2	235.3	243.5	252.0	258.9	265.3	270.6	276.1	281.6	287.2	292.0
Farm equity	1,589.8	1,693.2	1,759.0	1,847.3	1,928.9	1,992.4	2,049.3	2,099.1	2,150.0	2,199.9	2,249.6	2,294.7
	<i>Percent</i>											
Debt/equity ratio	13.6	13.4	13.4	13.2	13.1	13.0	12.9	12.9	12.8	12.8	12.8	12.7
Debt/assets ratio	11.9	11.8	11.8	11.6	11.6	11.5	11.5	11.4	11.4	11.3	11.3	11.3

Table 30. Farm receipts, expenses, and incomes in 1996 dollars

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	<i>Billion 1996 dollars¹</i>											
Cash receipts:												
Crops	94.9	98.2	105.3	109.1	109.9	109.3	107.6	106.6	105.5	104.6	103.7	102.9
Livestock and products	104.0	97.9	98.7	99.3	101.4	101.2	100.8	99.4	97.5	96.2	94.6	93.4
All commodities	198.9	196.0	204.0	208.4	211.3	210.5	208.4	206.0	203.0	200.8	198.3	196.2
Farm-related income	14.7	14.6	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.9	14.9
Government payments	20.3	13.2	9.8	8.7	8.2	8.1	8.2	8.2	8.2	8.3	7.6	7.6
Gross cash income	233.9	223.8	228.6	231.8	234.3	233.4	231.4	229.0	226.1	223.9	220.8	218.7
Cash expenses	166.2	169.9	175.6	179.6	180.5	179.9	179.2	178.6	177.9	177.3	176.5	175.6
Net cash income	67.6	53.9	53.0	52.2	53.8	53.4	52.2	50.4	48.2	46.7	44.3	43.1
Value of inventory change	0.3	-0.6	3.4	1.3	0.2	0.6	0.5	0.7	1.3	1.3	1.1	0.8
Non-money income	15.4	17.9	18.8	18.0	18.7	18.6	18.6	18.5	18.4	18.3	18.2	18.1
Gross farm income	249.6	241.0	250.8	251.1	253.2	252.6	250.4	248.2	245.7	243.5	240.1	237.6
Noncash expenses	15.0	15.2	15.5	15.1	14.9	14.8	14.6	14.5	14.3	14.2	14.0	13.9
Operator dwelling expenses	6.9	6.9	7.2	7.1	7.1	7.0	6.9	6.8	6.8	6.7	6.6	6.6
Total production expenses	188.1	192.1	198.2	201.9	202.5	201.7	200.8	200.0	199.0	198.2	197.2	196.1
Net farm income	61.5	48.9	52.6	49.3	50.7	50.9	49.6	48.2	46.7	45.3	42.9	41.5
Farm assets	1,502.8	1,550.3	1,572.9	1,611.1	1,645.3	1,661.0	1,671.1	1,674.8	1,676.6	1,679.1	1,679.0	1,675.4
Farm debt	179.4	182.7	185.6	187.6	190.1	191.0	191.6	191.3	190.8	190.5	190.1	189.1
Farm equity	1,323.4	1,367.6	1,387.3	1,423.4	1,455.2	1,470.0	1,479.5	1,483.5	1,485.9	1,488.6	1,488.9	1,486.3

1/ Nominal dollar values divided by the GDP chain-type price index.

Table 31. Consumer food price indexes and food expenditures, long-term projections

CPI category	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<i>1982-84=100</i>												
Consumer price indexes:												
All food	190.7	195.2	198.9	204.4	210.3	216.0	221.2	225.6	229.5	233.3	237.2	241.6
Food away from home	193.4	199.4	205.0	210.7	217.0	223.1	228.9	234.4	239.6	244.9	250.3	256.1
Food at home	189.8	193.1	195.9	201.4	207.1	212.7	217.5	221.3	224.3	227.4	230.4	233.9
Meats	187.5	188.8	186.6	193.3	201.5	208.7	213.9	216.8	217.9	218.4	219.0	220.7
Beef and veal	200.4	202.1	201.0	207.5	217.8	226.5	233.1	235.4	235.5	235.6	235.9	237.3
Pork	177.7	177.3	174.0	182.7	190.1	196.8	200.9	204.6	206.3	206.3	206.4	207.8
Other meats	177.5	180.7	177.0	181.5	185.6	189.6	192.9	196.1	198.9	201.2	203.6	206.4
Poultry	185.3	182.0	184.0	191.0	202.9	214.7	224.4	228.8	229.8	228.8	228.8	230.5
Fish and seafood	200.1	209.5	216.8	223.3	228.9	234.6	240.5	246.5	252.7	259.0	265.5	272.1
Eggs	144.1	151.2	162.0	182.5	201.4	213.0	218.3	221.4	224.5	227.7	230.9	234.0
Dairy products	182.4	181.4	185.5	191.5	196.5	201.0	205.0	206.0	206.0	206.5	206.5	207.0
Fats and oils	167.7	168.0	172.3	177.1	181.6	186.0	190.4	194.0	197.3	200.9	204.3	208.0
Fruits and vegetables	241.4	252.9	255.5	260.5	265.4	270.5	275.7	281.0	286.4	292.0	297.6	303.4
Sugar and sweets	165.2	171.5	174.5	177.0	179.5	184.0	188.1	192.1	195.9	199.8	203.7	207.8
Cereals and bakery products	209.0	212.8	218.7	223.8	228.6	234.0	239.7	245.5	251.3	257.4	263.4	269.6
Nonalcoholic beverages	144.4	147.4	150.5	153.7	156.9	160.2	163.6	167.0	170.5	174.1	177.8	181.5
Other foods	182.5	185.0	188.0	191.0	193.8	196.7	199.7	202.8	205.8	209.0	212.1	215.3
Food expenditures:	<i>Billion dollars</i>											
All food	1,023.2	1,088.1	1,135.9	1,184.1	1,235.9	1,288.9	1,342.9	1,397.6	1,453.5	1,511.4	1,571.8	1,635.5
Food at home	527.0	550.2	572.2	593.4	615.8	638.9	663.0	687.8	713.7	740.5	768.5	797.5
Food away from home	496.2	537.9	563.7	590.7	620.1	650.0	679.9	709.8	739.8	770.9	803.3	838.0

Table 32. Changes in consumer food prices, long-term projections

CPI category	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<i>Percent</i>												
All food	2.4	2.4	1.9	2.8	2.9	2.7	2.4	2.0	1.7	1.7	1.7	1.9
Food away from home	3.1	3.1	2.8	2.8	3.0	2.8	2.6	2.4	2.2	2.2	2.2	2.3
Food at home	1.9	1.7	1.5	2.8	2.8	2.7	2.3	1.7	1.4	1.4	1.3	1.5
Meats	2.3	0.7	-1.2	3.6	4.2	3.6	2.5	1.4	0.5	0.2	0.3	0.8
Beef and veal	2.6	0.8	-0.5	3.2	5.0	4.0	2.9	1.0	0.0	0.0	0.1	0.6
Pork	2.0	-0.2	-1.9	5.0	4.1	3.5	2.1	1.8	0.8	0.0	0.0	0.7
Other meats	2.4	1.8	-2.0	2.5	2.3	2.2	1.7	1.7	1.4	1.2	1.2	1.4
Poultry	2.0	-1.8	1.1	3.8	6.2	5.8	4.5	2.0	0.4	-0.4	0.0	0.7
Fish and seafood	3.0	4.7	3.5	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Eggs	-13.7	4.9	7.1	12.7	10.4	5.8	2.5	1.4	1.4	1.4	1.4	1.3
Dairy products	1.2	-0.5	2.3	3.2	2.6	2.3	2.0	0.5	0.0	0.2	0.0	0.2
Fats and oils	-0.1	0.2	2.6	2.8	2.5	2.4	2.4	1.9	1.7	1.8	1.7	1.8
Fruits and vegetables	3.7	4.8	1.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9
Sugar and sweets	1.2	3.8	1.7	1.4	1.4	2.5	2.2	2.1	2.0	2.0	2.0	2.0
Cereals and bakery products	1.5	1.8	2.8	2.3	2.1	2.4	2.4	2.4	2.4	2.4	2.3	2.4
Nonalcoholic beverages	2.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Other foods	1.6	1.4	1.6	1.6	1.5	1.5	1.5	1.6	1.5	1.6	1.5	1.5

Table 33. Summary of U.S. agricultural trade long-term projections, fiscal years

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	<i>Billion dollars</i>											
Agricultural exports (value):												
Livestock, poultry, and dairy	12.2	13.4	14.2	14.8	15.6	16.3	17.0	17.4	17.8	18.2	18.5	19.0
Livestock, poultry, and products	10.5	11.6	12.4	12.9	13.6	14.2	14.8	15.3	15.6	16.0	16.3	16.8
Dairy products	1.7	1.8	1.8	1.9	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Grain and feeds	16.0	18.3	22.1	22.9	22.7	23.3	23.5	24.1	24.6	25.1	25.6	26.2
Coarse grains	5.3	6.8	9.6	10.2	10.1	10.5	10.3	10.5	10.6	10.7	10.7	11.0
Oilseeds and products	11.0	10.7	12.4	14.2	12.4	12.5	12.1	12.3	12.3	12.4	12.5	12.8
Soybeans and products	8.8	8.3	9.9	11.7	9.8	9.7	9.3	9.3	9.2	9.2	9.3	9.3
Horticultural products	14.9	16.7	18.4	18.9	19.5	20.1	20.6	21.2	21.9	22.5	23.2	23.9
Fruits and vegetables, fresh	4.1	4.5	4.7	4.8	4.9	5.1	5.2	5.3	5.5	5.6	5.8	5.9
Fruits and vegetables, processed	3.5	3.9	4.1	4.2	4.3	4.4	4.4	4.5	4.6	4.7	4.8	4.9
Tobacco, unmanufactured	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
Cotton and linters	3.9	4.7	5.0	5.9	6.0	6.1	6.2	6.3	6.4	6.4	6.5	6.5
Other exports	3.6	3.9	3.8	3.8	3.9	4.1	4.3	4.5	4.6	4.7	4.8	4.9
Total agricultural exports	62.5	68.7	77.0	81.7	81.3	83.7	85.1	87.2	88.9	90.7	92.5	94.8
Bulk commodity exports	22.7	24.6	29.7	33.2	31.9	31.4	31.3	31.8	32.2	32.5	32.9	33.5
High-value product exports	39.9	44.1	47.3	48.5	49.5	52.2	53.8	55.4	56.8	58.2	59.6	61.3
High-value product share	63.8%	64.3%	61.4%	59.4%	60.8%	62.4%	63.2%	63.5%	63.8%	64.1%	64.4%	64.7%
	<i>Million metric tons</i>											
Agricultural exports (volume):												
Bulk commodity exports	114.3	121.1	124.9	118.8	112.0	108.5	111.2	114.0	116.1	118.4	120.7	122.8
Agricultural imports (value):												
Livestock, poultry, and dairy	11.1	11.5	12.0	12.4	12.8	13.2	13.6	13.9	14.1	14.3	14.6	14.8
Livestock, poultry, and products	8.2	8.5	9.0	9.3	9.7	10.0	10.3	10.6	10.7	10.8	11.0	11.2
Dairy products	2.5	2.6	2.6	2.7	2.7	2.8	2.9	2.9	3.0	3.1	3.1	3.2
Grain and feeds	4.3	4.9	5.2	5.4	5.6	5.9	6.0	6.2	6.5	6.7	6.9	7.2
Grain products	3.2	3.4	3.6	3.7	3.9	4.0	4.2	4.4	4.6	4.7	4.9	5.1
Oilseeds and products	3.0	3.5	3.6	3.7	3.8	4.0	4.1	4.3	4.4	4.5	4.7	4.9
Vegetable oils	2.0	2.4	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.5	3.6
Horticultural products	26.9	29.2	31.2	32.4	33.6	34.9	36.2	37.6	39.0	40.5	42.0	43.6
Fruits and vegetables, fresh	7.7	8.7	9.3	9.6	10.0	10.4	10.8	11.2	11.6	12.0	12.4	12.9
Fruits and vegetables, processed	5.0	5.4	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.4	7.6
Wine and beer	6.7	7.4	7.9	8.2	8.6	8.9	9.3	9.7	10.1	10.5	10.9	11.4
Sugar and tropical products	11.4	13.6	15.4	15.8	16.3	16.9	17.4	18.0	18.6	19.2	19.9	20.5
Sugar and related products	2.5	3.3	3.9	4.0	4.1	4.3	4.4	4.5	4.7	4.8	4.9	5.1
Cocoa, coffee, and products	5.4	5.8	6.1	6.3	6.5	6.7	6.9	7.2	7.4	7.7	7.9	8.2
Other imports	1.2	1.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7
Total agricultural imports	57.7	64.0	69.0	71.3	73.9	76.5	79.0	81.6	84.2	86.9	89.7	92.7
Net agricultural trade balance	4.8	4.7	8.0	10.4	7.5	7.2	6.1	5.6	4.7	3.8	2.7	2.1

Sources: U.S. Department of Agriculture and Bureau of Census, U.S. Department of Commerce.

Notes: The projections were completed in November 2006 based on policy decisions and other information known at that time. For updates of the nearby year forecasts, see USDA's *Outlook for U.S. Agricultural Trade* report, published in March, May, and November. Other exports includes seeds, sugar and tropical products, and beverages and preparations. Bulk commodity exports covers wheat, rice, feed grains, soybeans, cotton, and tobacco. High-value product (HVP) exports is calculated as total exports less the bulk commodities. HVP's include semiprocessed and processed grains and oilseeds, animals and animal products, horticultural products, and sugar and tropical products. Other imports include cotton, tobacco, and planting seeds.