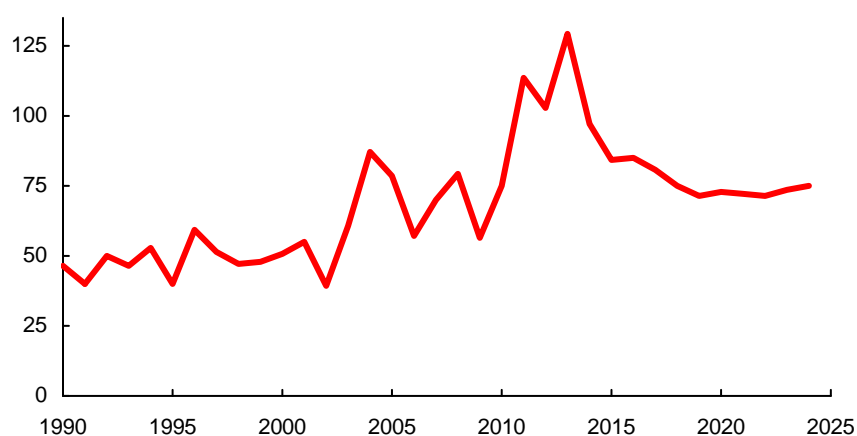


U.S. Farm Income and Agricultural Trade Value

Projected reductions in prices for most major crops result in declines in export values in 2015 and farm cash receipts in 2015-16. Export values and cash receipts then grow over the rest of the projection period as steady domestic and international economic growth, continued weakness of the U.S. dollar, and production of biofuels support longer term demand for U.S. agricultural products. Farm production expenses also increase after 2016 and direct Government payments fall from 2016 to 2019, so net farm income declines from recent record highs.

U.S. net farm income

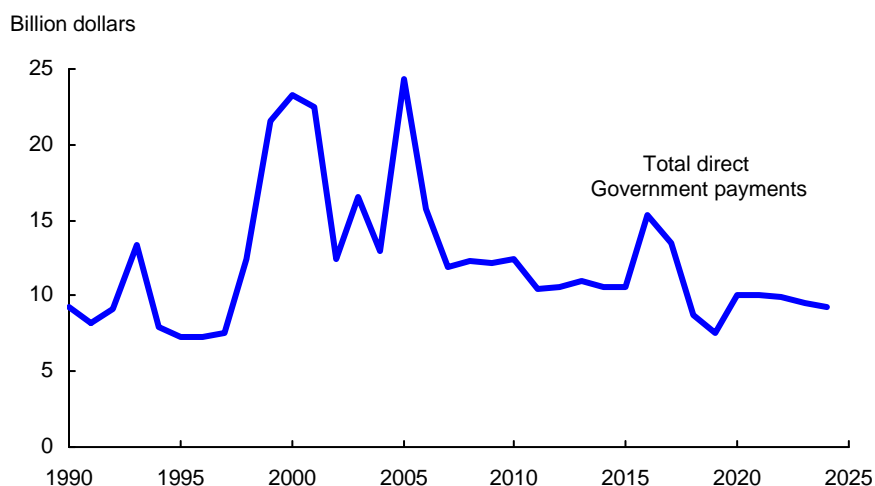
Billion dollars



Net farm income reached a record high in 2013, largely reflecting a runup in prices for many agricultural commodities. While net farm income is projected to fall from that record, it remains above the average of the 2001-10 decade.

- Strengthening global food demand, weakness of the dollar, and world biofuel feedstock demand are major factors underlying projections of rising cash receipts after 2016.
- Total direct Government payments are projected to rise sharply in 2016, largely reflecting lower crop prices that push up payments under the Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs of the Agricultural Act of 2014. Government payments then fall for several years as commodity prices begin to rise, before averaging close to \$10 billion annually during 2020-24.
- Farm production expenses fall in the first two projection years as lower prices for crops and crude oil along with reduced acreage lead to declines in expenses for farm-origin inputs and manufactured inputs. Expenses increase after 2016 as prices for grains, oilseeds, and crude oil rise.

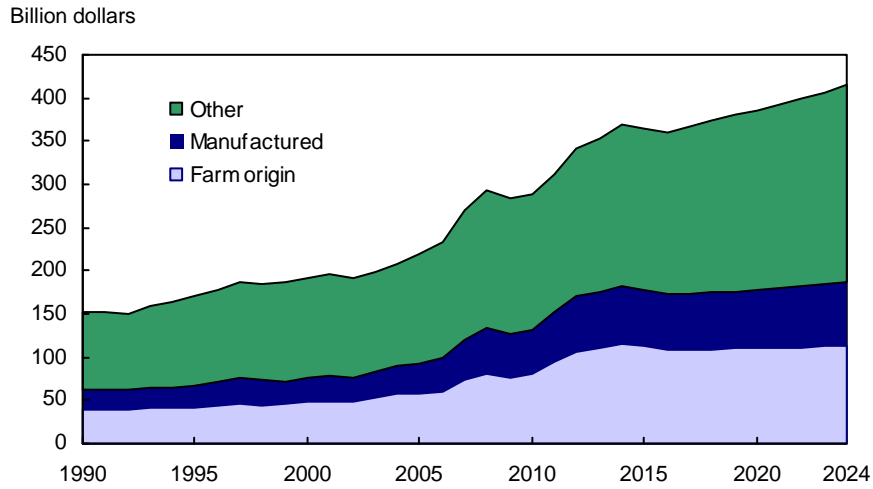
Direct Government payments



Direct Government payments to farmers rise sharply in 2016, mostly due to ARC and PLC payments under the Agricultural Act of 2014. After falling through 2019, direct Government payments average almost \$10 billion per year over 2020-24, compared to an annual average of over \$15 billion in 2001-10. The Conservation Reserve Program (CRP), ARC, and PLC are the largest Government payments to the agricultural sector over the projection period.

- Acreage enrolled in the CRP is assumed to decline to less than its legislative maximum of 24 million acres under the Agricultural Act of 2014. As crop prices begin to rise again, average rental rates for land in the CRP will also increase. As a result, CRP payments are projected to increase from about \$1.8 billion in 2014 to \$2.4 billion in 2024.
- Payments under the ARC and PLC programs rise sharply in 2016, reflecting reductions in crop prices from relatively high levels of recent years. These payments then fall for several years as commodity prices begin to rise, but then jump again in 2020 as some producers are assumed to shift to PLC. (The initial producer election of ARC or PLC under the Agricultural Act of 2014 covers 2014-18 crops. For projections beyond those years, another enrollment election is assumed to be available for 2019-24 crops.)

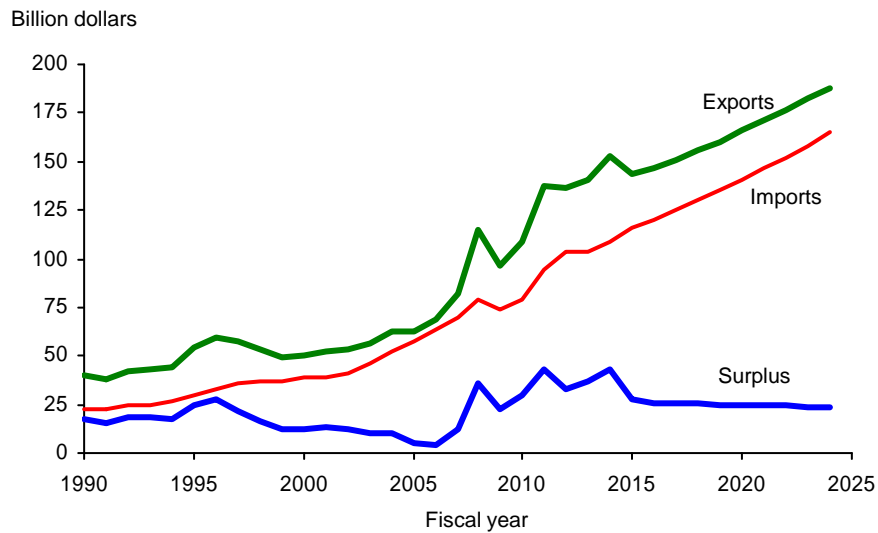
U.S. farm production expenses



Total farm production expenses are projected to fall in 2015 and 2016 as declining agricultural commodity prices lower farm-origin costs, while lower planted acreage and crude oil prices reduce manufactured input expenses. Beyond 2016, production expenses rise less rapidly than the overall rate of inflation through 2024. While interest expenses rise faster than the general inflation rate during these years, expenses for farm-origin inputs and manufactured input costs are up less than the general inflation rate. Aggregate expenses for other nonfarm-origin inputs increase at rates near the overall level of inflation.

- Interest costs rise faster than the general inflation rate over the projection period, reflecting rising farm debt levels as well as increasing interest rates due largely to tightening monetary policy.
- Production expenses for fuel and oil also rise faster than the general inflation rate after 2016, largely reflecting increases in crude oil prices. Reductions in planted acreage in 2015-16 combine with anticipated higher domestic nitrogen fertilizer production capacity and relatively low natural gas prices to lower fertilizer expenses in this period, with these costs rising more slowly than inflation later in the projection period.

U.S. agricultural trade value



The value of U.S. agricultural exports declines in 2015 from the record high of 2014, as prices for major field crops fall from recent highs. Agricultural exports then rise through the remainder of the projections because of sustained global economic growth, strengthening agricultural demand, and a continuing low-valued U.S. dollar. Domestic economic growth boosts demand for U.S. agricultural imports.

- Prices for many crops are projected to initially fall, reducing the value of U.S. agricultural exports in 2015. Agricultural export values are then projected to grow over the rest of the decade and surpass the 2014 record. World economic growth, particularly sustained relatively high growth in developing countries, provides a foundation for increases in global food demand, trade, and U.S. agricultural exports. Continued global demand for biofuel feedstocks also contributes to rising commodity prices and the projected gains in export values. Furthermore, although the U.S. dollar is projected to strengthen somewhat, its continued low value after the depreciation of 2002-11 remains an important factor underlying longer term gains in U.S. export values.
- Exports of high-value products (HVP) are projected to grow to nearly 73 percent of the value of total U.S. agricultural exports by 2024. Much of the growth in HVP exports is for animal products and horticultural products.
- U.S. agricultural import values rise throughout the projection period to almost \$165 billion by 2024, up from \$116 in 2015. These increases are boosted by gains in U.S. consumer incomes and demand for a large variety of foods. Strong growth in horticultural imports is assumed to continue, contributing about half of the overall increase in agricultural imports in the projection period.
- With the value of U.S. exports initially falling, the agricultural trade balance is expected to decline from 2014's record high of \$43.3 billion to \$27.5 billion in 2015. The agricultural trade surplus then falls marginally over the rest of the projection period to \$23.5 billion in 2024.

Table 36. Farm receipts, expenses, and income, long-term projections

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|----------------------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | <i>Billion dollars</i> | | | | | | | | | | | |
| Cash receipts: | | | | | | | | | | | | |
| Crops | 218.5 | 193.5 | 185.4 | 179.1 | 181.3 | 184.6 | 188.0 | 191.2 | 194.1 | 197.5 | 200.9 | 204.4 |
| Livestock and products | 182.8 | 208.7 | 202.4 | 198.1 | 196.1 | 196.7 | 195.8 | 196.4 | 198.5 | 201.0 | 206.1 | 211.0 |
| All commodities | 401.3 | 402.2 | 387.8 | 377.2 | 377.4 | 381.3 | 383.8 | 387.5 | 392.6 | 398.5 | 407.0 | 415.5 |
| Farm-related income | 31.5 | 26.2 | 27.7 | 27.7 | 28.1 | 28.7 | 29.2 | 29.7 | 30.1 | 30.6 | 31.1 | 31.6 |
| Government payments | 11.0 | 10.6 | 10.6 | 15.3 | 13.5 | 8.7 | 7.6 | 10.1 | 10.1 | 9.9 | 9.5 | 9.2 |
| Gross cash income | 443.9 | 438.9 | 426.1 | 420.2 | 419.0 | 418.6 | 420.6 | 427.4 | 432.8 | 439.0 | 447.6 | 456.2 |
| Cash expenses | 312.7 | 330.7 | 323.4 | 320.1 | 323.7 | 330.3 | 335.8 | 341.2 | 346.6 | 352.6 | 359.3 | 366.2 |
| Net cash income | 131.1 | 108.2 | 102.7 | 100.1 | 95.3 | 88.3 | 84.8 | 86.2 | 86.2 | 86.4 | 88.4 | 90.1 |
| Value of inventory change | 13.7 | 4.3 | -3.3 | 0.5 | 1.1 | 2.8 | 2.5 | 3.1 | 2.0 | 1.2 | 1.4 | 1.1 |
| Non-money income | 23.4 | 24.1 | 25.0 | 25.5 | 26.2 | 27.1 | 27.8 | 28.6 | 29.5 | 30.4 | 31.3 | 32.2 |
| Gross farm income | 481.0 | 467.3 | 447.9 | 446.2 | 446.4 | 448.5 | 450.9 | 459.1 | 464.3 | 470.5 | 480.3 | 489.5 |
| Noncash expenses | 30.4 | 30.5 | 31.4 | 32.1 | 33.2 | 33.9 | 34.6 | 35.4 | 36.2 | 36.9 | 37.7 | 38.5 |
| Operator dwelling expenses | 8.8 | 8.8 | 8.8 | 8.9 | 9.0 | 9.1 | 9.2 | 9.3 | 9.5 | 9.6 | 9.7 | 9.8 |
| Total production expenses | 352.0 | 370.0 | 363.7 | 361.1 | 365.9 | 373.3 | 379.6 | 385.9 | 392.2 | 399.1 | 406.7 | 414.5 |
| Net farm income | 129.0 | 97.3 | 84.2 | 85.1 | 80.5 | 75.2 | 71.3 | 73.2 | 72.1 | 71.4 | 73.6 | 75.0 |

The projections were completed in December 2014.

Table 37. Summary of U.S. agricultural trade long-term projections, fiscal years

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <i>Billion dollars</i> | | | | | | | | | | | | |
| Agricultural exports (value): | | | | | | | | | | | | |
| Livestock, poultry, and dairy | 31.5 | 33.8 | 33.7 | 33.8 | 35.1 | 36.5 | 37.8 | 39.3 | 40.7 | 42.2 | 43.9 | 45.7 |
| Livestock products | 18.9 | 20.0 | 20.6 | 20.9 | 21.7 | 22.6 | 23.4 | 24.2 | 25.2 | 26.1 | 27.2 | 28.3 |
| Dairy products | 6.1 | 7.4 | 6.7 | 6.3 | 6.5 | 6.9 | 7.3 | 7.6 | 8.0 | 8.3 | 8.7 | 9.0 |
| Poultry products | 6.5 | 6.4 | 6.4 | 6.6 | 6.8 | 7.0 | 7.2 | 7.4 | 7.6 | 7.8 | 8.1 | 8.3 |
| Grains and feeds | 31.4 | 36.5 | 29.9 | 30.7 | 31.7 | 32.6 | 33.7 | 34.6 | 35.6 | 36.7 | 37.8 | 38.9 |
| Coarse grains | 6.2 | 12.5 | 9.5 | 10.2 | 10.6 | 10.9 | 11.4 | 11.8 | 12.2 | 12.6 | 13.0 | 13.4 |
| Feeds and fodder | 8.3 | 9.0 | 7.1 | 7.4 | 7.6 | 7.9 | 8.2 | 8.5 | 8.8 | 9.2 | 9.5 | 9.8 |
| Oilseeds and products | 31.9 | 35.1 | 29.7 | 29.7 | 30.2 | 30.5 | 30.9 | 31.5 | 32.1 | 32.6 | 33.2 | 33.8 |
| Soybeans and products | 27.4 | 30.8 | 25.3 | 25.3 | 25.7 | 26.0 | 26.3 | 26.8 | 27.3 | 27.8 | 28.2 | 28.8 |
| Horticultural products ¹ | 31.4 | 33.4 | 37.0 | 38.5 | 40.0 | 41.6 | 43.3 | 45.0 | 46.9 | 48.8 | 50.7 | 52.8 |
| Fruits and vegetables, fresh | 7.3 | 7.4 | 7.9 | 8.1 | 8.4 | 8.7 | 9.0 | 9.3 | 9.7 | 10.0 | 10.4 | 10.7 |
| Fruits and vegetables, processed | 7.1 | 7.6 | 8.1 | 8.4 | 8.8 | 9.1 | 9.5 | 9.9 | 10.3 | 10.8 | 11.2 | 11.7 |
| Tree nuts, whole and processed | 7.2 | 8.1 | 9.5 | 9.9 | 10.3 | 10.7 | 11.2 | 11.7 | 12.2 | 12.7 | 13.2 | 13.7 |
| Cotton | 5.6 | 4.6 | 3.7 | 3.8 | 4.0 | 4.1 | 4.3 | 4.4 | 4.6 | 4.7 | 4.8 | 4.9 |
| Sugar and tropical products | 6.3 | 6.3 | 6.7 | 6.9 | 7.1 | 7.3 | 7.5 | 7.8 | 8.0 | 8.3 | 8.5 | 8.8 |
| Other exports ² | 2.8 | 2.9 | 2.8 | 2.9 | 2.9 | 2.9 | 3.0 | 3.0 | 3.1 | 3.2 | 3.2 | 3.3 |
| Total agricultural exports | 141.0 | 152.5 | 143.5 | 146.3 | 150.9 | 155.6 | 160.5 | 165.7 | 171.0 | 176.4 | 182.1 | 188.1 |
| Major bulk products ³ | 46.1 | 52.8 | 42.9 | 43.3 | 44.3 | 45.1 | 46.0 | 47.0 | 48.1 | 49.1 | 50.0 | 51.1 |
| High-value product exports ⁴ | 94.9 | 99.7 | 100.6 | 103.1 | 106.7 | 110.5 | 114.5 | 118.6 | 122.9 | 127.3 | 132.1 | 137.0 |
| High-value product share | 67.3% | 65.4% | 70.1% | 70.4% | 70.7% | 71.0% | 71.3% | 71.6% | 71.9% | 72.2% | 72.5% | 72.8% |
| <i>Million metric tons</i> | | | | | | | | | | | | |
| Agricultural exports (volume): | | | | | | | | | | | | |
| Bulk commodity exports | 93.2 | 134.9 | 129.1 | 131.5 | 132.9 | 133.7 | 135.7 | 138.0 | 140.1 | 141.9 | 143.8 | 145.7 |
| <i>Billion dollars</i> | | | | | | | | | | | | |
| Agricultural imports (value): | | | | | | | | | | | | |
| Livestock and dairy products | 13.7 | 16.0 | 16.8 | 17.0 | 17.4 | 18.1 | 18.5 | 19.0 | 19.5 | 20.1 | 20.7 | 21.4 |
| Livestock and meats | 10.1 | 12.1 | 12.9 | 12.9 | 13.1 | 13.7 | 14.0 | 14.4 | 14.8 | 15.2 | 15.8 | 16.3 |
| Dairy products | 3.0 | 3.3 | 3.2 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 4.0 | 4.1 | 4.2 |
| Grains and feeds | 11.3 | 10.8 | 11.0 | 11.3 | 11.7 | 12.1 | 12.6 | 13.0 | 13.5 | 14.0 | 14.6 | 15.1 |
| Grain products | 6.2 | 6.5 | 6.8 | 7.1 | 7.4 | 7.7 | 8.0 | 8.3 | 8.6 | 9.0 | 9.3 | 9.7 |
| Oilseeds and products | 8.8 | 9.9 | 9.3 | 9.8 | 10.4 | 11.1 | 11.6 | 12.2 | 12.8 | 13.4 | 14.0 | 14.7 |
| Vegetable oils | 5.2 | 5.4 | 5.6 | 5.9 | 6.2 | 6.4 | 6.7 | 7.0 | 7.4 | 7.7 | 8.1 | 8.4 |
| Horticultural products | 44.1 | 47.0 | 50.9 | 53.1 | 55.4 | 57.8 | 60.4 | 63.0 | 65.8 | 68.7 | 71.8 | 75.0 |
| Fruits and vegetables, fresh | 14.9 | 16.1 | 17.4 | 18.3 | 19.2 | 20.2 | 21.2 | 22.3 | 23.4 | 24.6 | 25.9 | 27.2 |
| Fruits and vegetables, processed | 8.9 | 9.1 | 9.6 | 10.0 | 10.5 | 11.0 | 11.5 | 12.0 | 12.5 | 13.1 | 13.7 | 14.4 |
| Wine and beer | 8.9 | 9.6 | 10.3 | 10.6 | 10.9 | 11.2 | 11.5 | 11.9 | 12.2 | 12.5 | 12.9 | 13.3 |
| Sugar and tropical products | 23.5 | 23.2 | 25.3 | 26.6 | 27.6 | 28.5 | 29.5 | 30.5 | 31.6 | 32.7 | 33.9 | 35.1 |
| Sugar and related products | 4.6 | 4.7 | 4.5 | 5.0 | 5.1 | 5.2 | 5.3 | 5.3 | 5.4 | 5.5 | 5.6 | 5.7 |
| Cocoa, coffee, and products | 10.1 | 10.7 | 11.6 | 12.0 | 12.5 | 13.0 | 13.5 | 14.0 | 14.5 | 15.1 | 15.7 | 16.3 |
| Other imports ⁵ | 2.4 | 2.2 | 2.5 | 2.6 | 2.7 | 2.8 | 2.8 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 |
| Total agricultural imports | 103.9 | 109.2 | 116.0 | 120.4 | 125.2 | 130.4 | 135.4 | 140.7 | 146.3 | 152.1 | 158.2 | 164.7 |
| Net agricultural trade balance | 37.1 | 43.3 | 27.5 | 26.0 | 25.7 | 25.2 | 25.1 | 24.9 | 24.7 | 24.3 | 23.9 | 23.5 |

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

U.S. trade value projections were completed in December 2014. For updates of the nearby year forecasts, see USDA's *Outlook for U.S. Agricultural Trade* report, published in February, May, August, and December.¹Includes wine, beer, essential oils, nursery crops, hops, and mint.²Includes planting seeds, unmanufactured tobacco, and cotton linters.³Includes bulk grains, soybeans, cotton, and tobacco.⁴The category "high-value product exports" is calculated as total exports less bulk commodities. The category includes semiprocessed and processed grains and oilseeds, animals and animal products, horticultural products, and sugar and tropical products.⁵Includes planting seeds, unmanufactured tobacco, and cotton.