



Baseline Update for U.S. Farm Income and Government Costs

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The projections reported here are based on the market outlook reported in the *Baseline Update for U.S. Agricultural Markets*, FAPRI-MU Report #03-23.

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Summary

High commodity prices led to record levels of net farm income in 2022, despite a large increase in production expenses. In 2023 and 2024, lower prices for many commodities contribute to projected declines in net farm income. However, farm income remains high by historical standards, even after correcting for inflation.

This report utilizes commodity supply, demand and price projections from the FAPRI-MU August 2023 baseline update (FAPRI-MU Report #03-23, available at www.fapri.missouri.edu). Historical data are from USDA and include the revision to farm income accounts released by the Economic Research Service (ERS) on August 31, 2023. ERS reduced its previous estimates of 2022 farm expenses and raised its estimates of farm receipts, resulting in the revised estimate that net farm income reached a record \$183 billion in 2022.

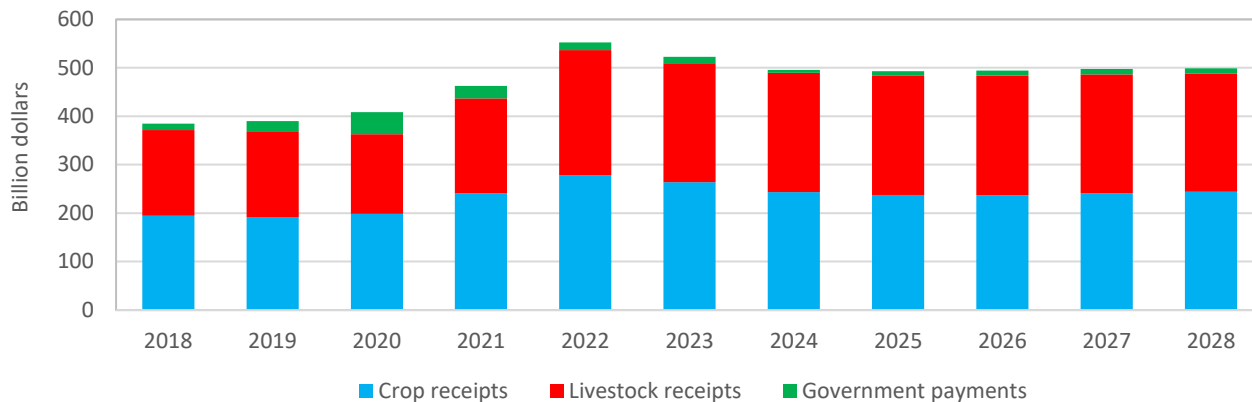
These baseline estimates reflect policies in place in late August 2023. Provisions of the 2018 farm bill are assumed to be extended when they would otherwise expire in the months ahead.

Given the assumptions of the analysis, here are a few highlights of the results:

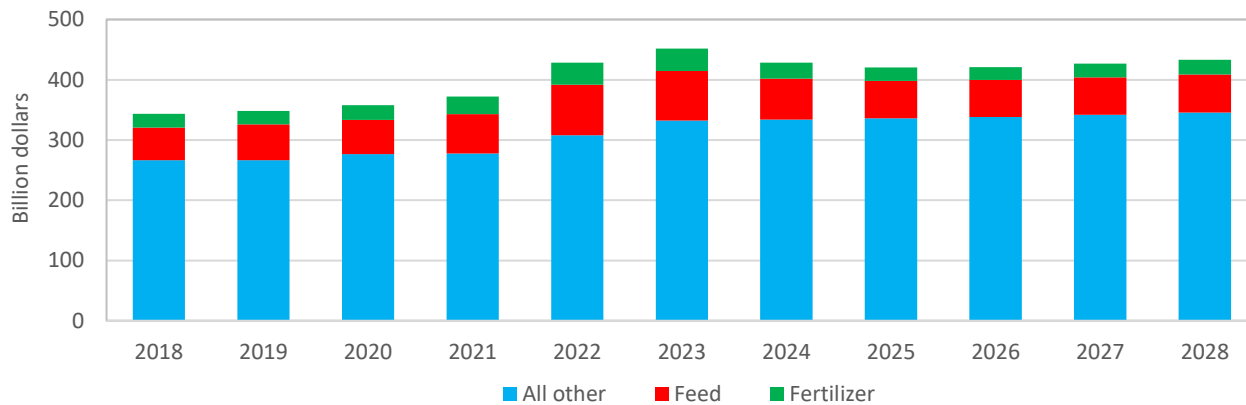
- Projected net farm income in 2023 is \$143 billion, a sharp reduction from the 2022 record but slightly above the 2021 level in nominal terms. After correcting for inflation, real net farm income in 2023 is below the 2021 level, but above the levels of every year between 2014 and 2020.
- Crop and livestock receipts both decline in 2023 because of lower prices for a range of agricultural commodities. An important exception is cattle, where drought has resulted in reduced inventories and sharply higher prices for fed and feeder cattle.
- After increasing 15% in 2022, farm production expenses increase by 5% in 2023. Higher interest expenses and higher costs for purchased livestock account for most of the increase in 2023 expenses.
- Government payments decline again in 2023 and are less than a third of what they were in the record year of 2020.
- The projected decline in net farm income is smaller in 2023 than the expected drop in net cash income. The latter is a cash flow measure, which considers current receipts and expenses, but excludes depreciation and changes in the value of inventories.
- The projections of 2023 net farm income are similar to those by ERS in its August report. However, FAPRI and ERS estimates of several line items differ. For example, FAPRI projects lower 2023 feed costs than USDA, but higher purchased livestock expenses.
- In 2024, further reductions in crop prices result in lower projected crop and total cash receipts. Lower costs for feed and fertilizer outweigh increases in several other categories of production costs, so total farm production expenses also decline in 2024. The net result of these and other changes is a modest decline in net farm income.
- Projected net farm income is relatively stable in nominal terms from 2024 through 2027, as small changes in receipts and expenses largely offset each other. However, given the effects of inflation, real net farm income declines each year.
- Higher land values contribute to a 6% increase in farm asset values in 2023. Slower projected growth in land values results in relatively flat projected farm asset values for the next several years. Farm debt increases at a modest pace, resulting in a slight uptick in the farm debt-to-asset ratio, from 12.9% in 2022 to 13.7% in 2028.

In contrast to the 2023 FAPRI baseline prepared earlier this year, these estimates do not consider market uncertainty. Small proportional changes in market receipts or production expenses can dramatically change the outlook for net income.

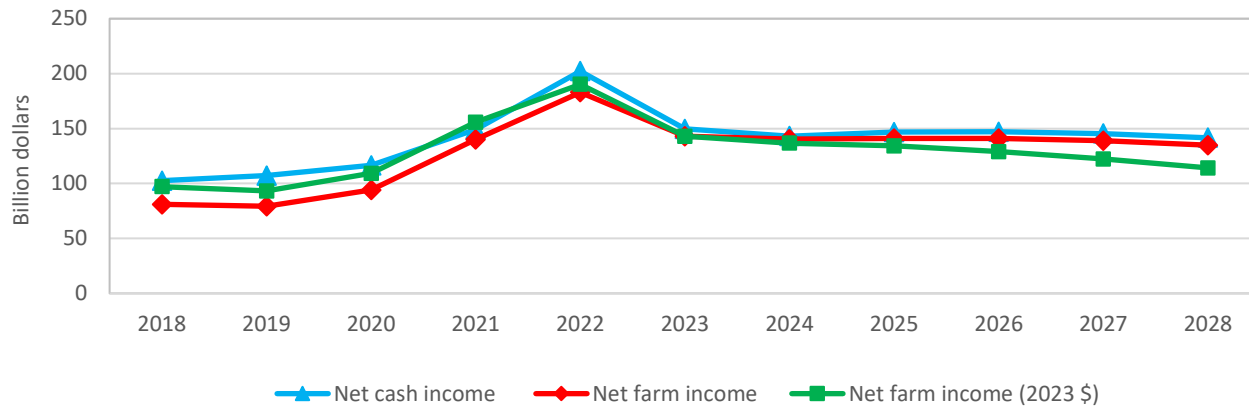
Farm receipts and government payments



Farm production expenses



Net farm and net cash income



U.S. government outlays

Fiscal year	2021	2022	2023	2024	2025	2026	2027	2028
Commodity Credit Corporation								
	(Million dollars)							
Farm bill commodity programs	6,648	2,139	1,477	814	780	3,091	4,317	4,790
Corn	1,386	-13	69	45	335	1,784	2,062	2,191
Wheat	1,664	868	46	59	119	167	334	719
Soybeans	647	-17	26	35	76	533	1,101	1,064
Upland cotton and seed cotton	944	489	71	154	101	181	113	55
Rice	414	244	53	7	36	164	168	176
Other major crops & dairy	1,593	568	1,212	514	114	263	539	585
Other CCC-funded programs	3,900	4,508	5,123	4,286	4,294	4,228	4,247	4,253
Market facilitation program	239	0	0	0	0	0	0	0
Conservation reserve	2,090	1,808	1,880	1,877	1,941	1,921	1,934	1,937
Disaster and all other	1,571	2,700	3,242	2,408	2,353	2,307	2,313	2,316
Total CCC programs	10,548	6,647	6,600	5,100	5,074	7,319	8,564	9,043
Non-CCC programs								
Crop insurance	6,742	10,867	15,998	14,817	11,733	10,990	10,889	10,985
Pandemic-related (CFAP, PAP*)	15,403	5,795	350	0	0	0	0	0
Paycheck protection program	8,600	0	0	0	0	0	0	0
NRCS conservation	3,190	3,159	3,346	3,878	4,680	5,682	6,672	6,587
Non-CCC disaster and all other	1,386	10,165	6,600	0	0	0	0	0
Total non-CCC programs	35,321	29,986	26,293	18,694	16,412	16,672	17,561	17,572
Total, CCC & non-CCC	45,869	36,633	32,893	23,794	21,486	23,991	26,126	26,615

Note: Fiscal years begin on Oct. 1 (FY 2023: Oct. 1, 2022 to Sep. 30, 2023).

* Coronavirus Food Assistance Program (CFAP) and Pandemic Assistance for Producers (PAP) initiative.

U.S. government payments (farm income accounts)

Calendar year	2021	2022	2023	2024	2025	2026	2027	2028
	(Million dollars)							
Price loss coverage	2,099	267	37	36	468	556	1,009	871
Agriculture risk coverage	117	105	187	499	2,462	3,594	3,604	3,409
Market facilitation program	18	1	0	0	0	0	0	0
Pandemic-related (CFAP, PAP)	7,488	182	350	0	0	0	0	0
Paycheck protection program	8,600	0	0	0	0	0	0	0
Conservation programs	3,533	3,540	3,833	4,234	4,716	5,309	5,909	5,860
Emergency and disaster	2,929	11,330	7,414	785	766	755	761	761
Dairy and all other	1,157	135	1,069	501	147	129	160	177
Total direct payments	25,942	15,561	12,891	6,055	8,559	10,342	11,444	11,078

U.S. farm cash receipts

Calendar year	2021	2022	2023	2024	2025	2026	2027	2028
	(Billion dollars)							
Feed grains	83.62	101.37	91.60	78.90	76.23	75.43	75.66	76.68
Food grains	15.28	16.92	16.31	15.10	14.42	14.20	14.32	14.49
Oilseeds	52.05	65.84	60.21	53.48	49.69	50.37	52.50	54.12
Cotton	7.21	8.91	7.22	6.73	6.77	7.18	7.37	7.45
Sugar	3.24	3.53	3.66	3.76	3.81	3.69	3.72	3.77
Other crops	79.24	81.58	85.08	85.70	86.41	86.01	87.36	87.68
Cattle	72.68	86.06	102.31	107.69	109.20	107.63	104.48	100.94
Hogs	28.11	30.58	26.10	26.31	26.47	27.28	27.36	27.33
Dairy products	41.76	57.25	44.91	45.40	47.24	47.45	47.78	48.56
Poultry, eggs	46.14	76.97	64.26	58.73	56.12	56.28	57.46	58.70
Other livestock	7.19	7.59	7.66	7.82	7.95	8.05	8.12	8.18
Total cash receipts	436.54	536.60	509.32	489.61	484.32	483.58	486.12	487.91

U.S. farm production expenses

Calendar year	2021	2022	2023	2024	2025	2026	2027	2028
	(Billion dollars)							
Feed	65.25	83.66	82.24	68.08	62.58	61.61	62.21	63.23
Purchased livestock	30.68	34.64	43.24	48.03	48.99	47.92	46.00	43.89
Seed	22.32	24.92	25.66	25.55	25.70	25.66	25.70	25.86
Fertilizer	29.54	36.85	37.11	26.42	22.07	21.42	22.99	24.61
Pesticides	17.82	21.32	22.71	22.38	22.35	22.54	22.87	23.21
Fuels and electricity	20.31	24.86	22.51	20.01	20.35	21.20	22.04	22.76
Interest	19.46	24.09	31.17	32.25	31.81	31.44	31.78	32.17
Contract and hired labor	36.67	41.16	43.27	44.81	46.07	47.11	48.52	49.74
Capital consumption	24.58	22.82	22.66	22.82	23.16	23.44	23.76	24.15
Rent to landlords	18.47	16.10	16.98	17.38	17.00	16.90	17.05	17.33
All other	87.27	98.15	104.44	100.84	100.48	101.98	104.27	106.52
Total production expenses	372.36	428.57	451.99	428.56	420.55	421.22	427.20	433.46

U.S. farm income

Calendar year	2021	2022	2023	2024	2025	2026	2027	2028
	(Billion dollars)							
Farm receipts	468.8	588.9	562.5	538.6	531.1	530.2	533.2	535.8
Crops	240.6	278.1	264.1	243.7	237.3	236.9	240.9	244.2
Livestock	195.9	258.5	245.2	245.9	247.0	246.7	245.2	243.7
Farm-related	32.2	52.3	53.1	49.0	46.8	46.6	47.1	47.9
Direct government payments	25.9	15.6	12.9	6.1	8.6	10.3	11.4	11.1
Gross cash income	494.7	604.4	575.3	544.6	539.7	540.6	544.7	546.9
Nonmoney income	20.8	23.5	24.0	23.5	22.9	22.6	22.4	22.3
Value of inventory change	-3.1	-16.4	-4.4	0.8	-1.1	-1.0	-1.0	-1.0
Gross farm income	512.4	611.6	595.0	568.9	561.6	562.1	566.1	568.2
Cash expenses	345.4	402.2	425.6	401.4	393.0	393.5	399.3	405.2
Total expenses	372.4	428.6	452.0	428.6	420.5	421.2	427.2	433.5
Net cash income	149.3	202.2	149.7	143.2	146.7	147.1	145.4	141.7
Net farm income	140.1	183.0	143.0	140.4	141.0	140.9	138.9	134.8
Deflated (2023 \$)	155.8	190.3	143.0	136.7	134.2	129.0	122.4	114.2

U.S. farm balance sheet

Calendar year	2021	2022	2023	2024	2025	2026	2027	2028
	(Billion dollars)							
Farm assets								
Real estate	2,896	3,175	3,401	3,432	3,435	3,465	3,505	3,550
All other	602	662	669	631	610	605	611	616
Total assets	3,498	3,837	4,070	4,063	4,045	4,071	4,116	4,166
Farm debt								
Real estate	324	335	356	374	386	393	398	403
All other	150	161	176	170	166	164	165	167
Total debt	474	496	532	544	552	557	564	571
Debt/asset ratio	13.6%	12.9%	13.1%	13.4%	13.6%	13.7%	13.7%	13.7%