

Baseline Update for U.S. Farm Income and the Farm Balance Sheet

Large crops and trade disputes put downward pressure on U.S. farm commodity prices and farm income. Even considering the initial round of market facilitation program (MFP) payments, U.S. net farm income is projected to decline slightly in 2018 and again in 2019.

This report utilizes commodity supply, demand and price projections from the FAPRI-MU baseline update released in August 2018 (FAPRI-MU Report #03-18, available at www.fapri.missouri.edu). These projections of farm income and the farm balance sheet also differ from previous FAPRI-MU projections because they incorporate recent large revisions in 2017 USDA farm income estimates.

The farm income projections incorporate the initial round of MFP payments, announced on August 27, 2018, that provide compensation for losses incurred because of trade disputes. We assume \$4.0 billion in MFP payments will be made in calendar year 2018 and another \$0.7 billion in 2019. No additional MFP payments are assumed, even though it is possible that a second round will be announced later this year.

Two important caveats: First, these estimates do not reflect any commodity market developments since August 2018, such as changes in the estimated size of the 2018 crop. Second, while MFP payments are included in these farm income estimates, they were not considered in the commodity market projections which were prepared before the payments were announced. In future baseline projections, we will consider possible commodity supply and price effects of MFP payments.

Some highlights from the projections:

- Cash receipts are up slightly in 2018, as higher receipts for feed grains and poultry products more than offset lower receipts for oilseeds, hogs and dairy products.
- Higher costs for fuel, feed and labor contribute to a \$10 billion increase in projected farm production expenses in 2018.
- The MFP payments help push 2018 direct government payments to the highest levels since 2006. With no additional MFP payments assumed, total payments decline sharply in 2019.
- Net farm income declines by \$3 billion in 2018, as the effect of higher production costs more than offsets the increases in cash receipts and payments.
- In 2019, net farm income declines by another \$3 billion, in part because of lower livestock prices and government payments. Net farm

Summary:

Net farm income is projected to decline in 2018 and 2019 before recovering in later years. The farm debt/asset ratio continues to increase.

For more on this topic, see these FAPRI-MU publications:

Report #03-18
2018 August Baseline Update for
U.S. Agricultural Markets

Report #01-18
Baseline Update for U.S. Agricultural
Markets

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income increases in nominal terms in subsequent years, but after correcting for inflation, real net farm income is about the same in 2023 as in 2017.

- Farm real estate values are projected to decline slightly between 2018 and 2021 because of relatively flat returns and rising interest rates. This contributes to a similar modest decline in farm asset values.
- Farm debt continues to increase, and the debt/asset ratio for the farm sector increases from 13.1% in 2017 to 14.6% in 2023.

Farm cash receipts

Calendar year	2016	2017	2018	2019	2020	2021	2022	2023
	(Billion dollars)							
Feed grains	55.47	55.57	59.14	61.84	63.67	64.86	65.59	65.77
Food grains	11.27	11.02	12.37	12.62	12.72	12.65	12.58	12.60
Oilseeds	44.04	43.01	41.19	40.08	40.65	41.32	41.30	41.11
Cotton	5.50	7.78	7.50	7.67	7.65	7.62	7.57	7.59
Sugar	2.52	2.46	2.60	2.56	2.67	2.81	2.91	2.98
Other crops	76.22	78.47	78.11	78.81	80.13	81.62	83.35	85.26
Cattle	63.67	67.35	67.07	64.48	63.86	64.98	67.58	70.79
Hogs	19.04	21.07	19.27	18.65	20.29	22.07	23.83	24.56
Dairy products	34.54	37.94	34.90	36.18	37.85	39.63	41.09	42.07
Poultry, eggs	38.72	42.67	47.44	45.41	45.62	47.11	48.47	49.78
Other livestock	6.86	7.00	7.23	7.23	7.40	7.63	7.90	8.13
Total cash receipts	357.86	374.34	376.82	375.54	382.49	392.30	402.18	410.64

Farm production expenses

Calendar year	2016	2017	2018	2019	2020	2021	2022	2023
	(Billion dollars)							
Feed	55.64	55.24	59.14	59.80	61.43	62.27	62.58	62.44
Purchased livestock	22.06	28.38	28.35	26.60	25.85	26.19	27.24	28.53
Seed	21.82	22.22	21.98	22.05	22.61	23.07	23.51	23.89
Fertilizer and chemicals	38.77	37.57	37.11	38.04	38.16	38.49	38.92	39.18
Fuels and electricity	17.74	18.68	20.72	20.93	20.85	20.90	21.21	21.67
Interest	17.34	18.69	20.60	21.96	23.06	23.84	24.46	24.92
Contract and hired labor	33.93	34.91	36.13	37.00	38.08	39.28	40.60	42.01
Capital consumption	44.65	37.20	36.69	36.51	36.40	36.36	36.41	36.53
Rent to landlords	19.46	18.38	18.88	19.10	19.02	19.02	19.12	19.21
All other	78.72	82.82	84.82	86.85	88.67	90.34	92.04	93.74
Total production expenses	350.14	354.09	364.43	368.84	374.12	379.74	386.09	392.13

Farm income statistics

Calendar year	2016	2017	2018	2019	2020	2021	2022	2023
				(Billion dollars)				
1. Farm receipts	385.75	407.22	409.65	411.88	420.56	431.30	441.94	451.08
Crops	195.03	198.31	200.92	203.58	207.47	210.86	213.31	215.30
Livestock	162.83	176.03	175.91	171.95	175.02	181.43	188.87	195.33
Farm-related	27.89	32.87	32.83	36.34	38.07	39.01	39.77	40.44
2. Government payments	12.98	11.53	13.97	7.99	7.17	7.01	6.91	7.08
(of which, market facilitation)	0.00	0.00	4.00	0.70	0.00	0.00	0.00	0.00
3. Gross cash income (1 + 2)	398.72	418.75	423.62	419.86	427.73	438.31	448.85	458.17
4. Nonmoney income	17.15	18.59	19.80	20.46	20.81	21.08	21.29	21.44
5. Value of inventory Change	-4.11	-7.76	-6.68	-1.99	0.42	-0.20	-0.13	-0.02
6. Gross farm income (3 + 4 + 5)	411.76	429.57	436.74	438.33	448.96	459.20	470.01	479.59
7. Cash expenses	303.79	314.79	325.55	329.80	334.91	340.42	346.63	352.48
8. Total expenses	350.14	354.09	364.43	368.84	374.12	379.74	386.09	392.13
9. Net cash income (3 - 7)	94.94	103.96	98.07	90.07	92.82	97.89	102.22	105.68
10. Net farm income (6 - 8)	61.62	75.48	72.32	69.49	74.84	79.45	83.92	87.46
Deflated (2017 \$)	62.41	75.48	71.04	66.77	70.05	72.38	74.54	75.84

Land rental rates and real estate values

Year	2016	2017	2018	2019	2020	2021	2022	2023	
Rental rates									
				(Dollars per acre)					
Cropland	136.00	136.00	138.00	139.63	139.50	139.77	140.53	141.05	
Pasture	13.00	12.50	12.50	12.36	11.92	11.65	11.61	11.70	
Value of farm real estate	3,010	3,080	3,140	3,124	3,078	3,053	3,061	3,073	

Balance sheet of the farm sector

Year	2016	2017	2018	2019	2020	2021	2022	2023	
				(Billion dollars)					
Farm assets	2,957	2,993	3,049	3,035	3,005	2,990	2,999	3,010	
Real estate	2,443	2,469	2,514	2,502	2,468	2,449	2,455	2,464	
Non-real estate	513	524	535	533	537	540	544	546	
Farm debt	374	393	407	418	427	432	437	440	
Real estate	226	238	247	255	259	261	262	263	
Non-real estate	148	155	160	164	168	171	175	177	
Debt/asset ratio	12.7%	13.1%	13.4%	13.8%	14.2%	14.5%	14.6%	14.6%	

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