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# 2021 Iowa Farm Costs and Returns

The farm record data utilized in this report were obtained from the Iowa Farm Business Association. The average of all farms in each table represents a weighted average of the values for each size group listed. Weighting factors are based on the number of farms in each size group in the state, as computed from the most recent Census of Agriculture. Only farms with sales of \$100,000 or more were counted in making the weighting. Thus, overall averages should be representative of mid-size to large, commercial Iowa farms.

All records were kept on the accrual, or inventory, basis. On rented farms, only operator income and expenses were recorded. Data for ending assets and liabilities represent those of the operator only, and do not include the value of rented land.

## Definition of Terms Used

**Net farm income, cash**—total sales and other cash income minus cash expenses, including purchases of livestock and feed. Does not include principal borrowed or repaid, sales and purchases of capital assets, or nonfarm income and expenses.

**Net farm income, accrual**—cash net income adjusted for inventory changes and accrued expenses. Represents a return to unpaid labor, net worth (equity), management, and profit.

**Value of farm production**—value of crops produced (at market price), livestock production (net of feed and purchased livestock), inventory value gain or loss, and miscellaneous income. This measures the total production per farm.

**Management return**—accrual net farm income less 4% interest on value of equity (net worth) and wages for operator and family labor. The wage rate used for operator labor was \$2,500 per month.

**Inventory value gain or loss**—change in value of crops or livestock sold due to differences in opening inventory price and final sale price.

**Livestock returns per \$100 feed fed**—value of livestock production minus livestock purchases, divided by value of feed fed, multiplied by 100.

**Machinery cost per crop acre**—total of machinery repairs, fuel, custom machine hire, utilities, machinery depreciation, and auto expense, less 75% of all custom hire income received, divided by crop acres. Depreciation is estimated at 10% of current value of the machinery. Interest is not included.

**Return on assets**—net farm income, plus interest expense, minus value of operator and family labor, divided by total farm assets owned.

**Return on equity**—net farm income minus value of operator and family labor, divided by net worth.

**Operating profit margin ratio**—net farm income, plus interest expense, minus value of operator and family labor, divided by value of farm production.

**Working capital**—current assets minus current liabilities.

The data for this report were collected by Iowa Farm Business Association consultants and compiled by Iowa State University Extension and Outreach.



## Iowa Farm Costs and Returns 2017-2021

The following summary is intended to provide a general picture of costs and returns to well-managed, full-time Iowa farms. The values presented are averages; however, results vary widely from one farm to the next. The average number of crop acres per farm decreased by 48 acres to 599 acres in 2021, the lowest mark since 2012.

The average value of farm net worth increased by \$96,467 (5%), driven by an increase in total farm assets of \$80,106 (3%). The average accrual net farm income peaked at \$341,834 in 2021, a value \$209,495 (158%) higher than in 2020, and \$98,762 (41%) above the previous peak in 2012. Livestock returns per \$100 feed fed increased by 51% to \$184 in 2021. The average sale price for corn increased by 46% to \$5.01 and the average corn yield increased by 15% to 218 bushels per acre. The average debt-to-asset ratio declined slightly to 0.23 in 2021, its lowest level since 2016. The average current asset-to-debt ratio, a relative measure of liquidity, increased to 4.62 in 2021, its highest level since 2013 and substantially above its long-term average.

**Table 1. Comparison by Years**

	2021	2020	2019	2018	2017 <sup>1/</sup>
<b>Financial Returns</b>					
Net farm income, accrual	\$341,834	\$132,339	\$77,946	\$58,832	\$55,266
Return to management	232,912	25,327	-31,252	-45,358	-53,925
Net farm income, cash	153,383	134,119	85,097	86,480	55,029
<b>Resources Used</b>					
Acres in crops	599	647	674	668	689
Labor months	20	20	21	19	20
Livestock, feed, supplies	\$746,988	\$579,074	\$600,110	\$583,011	\$611,903
Machinery and equipment	429,761	446,602	472,898	461,390	499,514
Land and improvements	1,426,445	1,497,413	1,470,496	1,350,870	1,431,324
Total farm assets	\$2,603,195	\$2,523,089	\$2,543,504	\$2,395,270	\$2,542,741
Farm net worth	\$1,899,545	\$1,803,078	\$1,791,128	\$1,711,990	\$1,833,866
<b>Value of Farm Production</b>					
Livestock income less feed, purchases for resale	\$72,602	\$34,389	\$64,130	\$34,904	\$75,306
Crop production	491,399	418,614	427,857	430,542	434,481
Miscellaneous	121,544	193,776	127,320	110,925	87,556
Crop inventory gain or loss	179,911	9,954	15,247	-4,432	-2,122
Value of farm production	\$865,456	\$656,733	\$634,555	\$571,939	\$595,220
<b>Cash Expenses</b>					
Operating	\$279,820	\$279,869	\$301,941	\$273,441	\$284,059
Fixed	243,802	244,525	254,668	239,665	255,895
<b>Efficiency</b>					
Corn yield (bushels per acre)	218	189	199	201	214
Average sale price for corn, per bushel	\$5.01	\$3.44	\$3.68	\$3.40	\$3.28
Crop value per acre	\$777	\$605	\$606	\$617	\$604
Machinery cost per crop acre	\$172	\$149	\$145	\$137	\$136
Livestock returns per \$100 feed fed	\$184	\$122	\$158	\$161	\$179
Gross revenue per person	\$540,232	\$435,641	\$416,983	\$418,186	\$421,783
Gross revenue per \$1 expense	\$1.59	\$1.21	\$1.13	\$1.12	\$1.08
Gross revenue per \$1 assets	\$0.34	\$0.28	\$0.28	\$0.27	\$0.27
Return on assets (ROA)	11.5%	4.5%	2.7%	2.2%	1.5%
Return on equity (ROE)	14.2%	4.6%	2.1%	1.4%	0.8%
<b>Financial</b>					
Debt-to-asset ratio	0.23	0.25	0.25	0.24	0.24
Current asset-to-debt ratio	4.62	3.06	2.69	3.14	2.77
Farm net worth per acre farmed	\$3,777	\$3,192	\$2,961	\$2,870	\$2,918

<sup>1/</sup> Revised with weights from the 2017 Census of Agriculture.

## Assets and Liabilities

A breakdown of farm assets and liabilities by value of gross sales per farm is shown in Table 2. Total assets, total liabilities, and the total debt-to-asset ratio indicate that larger farms tend to utilize relatively more credit and be more leveraged than smaller farms. Total liabilities in 2021 were lower than in 2020 for all groups but the largest one. Total assets for all groups but the second one (\$200,000-\$399,999 in gross sales) increased in 2021. As a result, net worth increased for all groups but the second one. A major challenge in comparing Table 2 results across years is that the farms included in each of the groups vary through time. Liquidity measures suggest that all groups were well-positioned to cover short-term liabilities with short-term assets in December 2021. Working capital increased for all groups between 44% (second group) and 59% (fourth group), marking the third consecutive annual increase since 2012.

**Table 2. Assets and Liabilities by Size of Farm, End of Year Values**

	Average	Total Value of Gross Sales			
		\$100,000 to \$199,999	\$200,000 to \$399,999	\$400,000 to \$799,999	\$800,000 and above
<b>Farm Assets</b>					
Feeding livestock	\$113,047	\$3,082	\$18,648	\$27,153	\$360,973
Crop inventory	491,093	132,647	288,591	474,994	967,630
Cash	48,032	25,659	29,025	53,892	77,742
Supplies, prepaid expenses, other <sup>1/</sup>	94,816	18,944	54,788	88,775	195,327
Total short-term assets	\$746,988	\$180,332	\$391,053	\$644,814	\$1,601,672
Breeding livestock	\$30,963	\$9,547	\$8,006	\$12,706	\$84,910
Machinery, equipment	394,186	114,075	182,506	345,683	848,631
Other intermediate assets <sup>2/</sup>	4,612	13,713	315	2,220	3,883
Total intermediate assets	429,761	\$137,335	\$190,828	\$360,608	\$937,424
Land and improvements	\$1,426,445	\$772,586	\$1,004,577	\$1,273,199	\$2,454,309
Total assets	\$2,603,195	\$1,090,253	\$1,586,457	\$2,278,621	\$4,993,406
<b>Farm Liabilities</b>					
Operating notes, accounts payable	\$190,621	\$37,784	\$72,956	\$114,626	\$484,234
Intermediate and long-term due	3,942	841	1,059	4,335	8,663
Other short term debt <sup>3/</sup>	28	0	0	0	101
Total short-term debt	\$194,591	\$38,625	\$74,015	\$118,962	\$492,998
Intermediate-term debt	\$308,730	\$59,668	\$83,938	\$199,475	\$805,541
Long-term debt	\$200,328	\$84,177	\$107,528	\$184,214	\$389,989
Total liabilities	\$703,650	\$182,470	\$265,480	\$502,651	\$1,688,528
<b>Farm Net Worth</b>					
Net worth change from last year	\$96,467	\$62,859	-\$248,241	\$209,084	\$348,024
Working capital	\$552,397	\$141,707	\$317,038	\$525,853	\$1,108,675
Current asset-to-debt ratio	4.62	4.67	5.28	5.42	3.25
Working capital per \$1 of gross revenue	\$0.62	\$0.67	\$0.73	\$0.68	\$0.42
Total debt-to-asset ratio	0.23	0.17	0.17	0.22	0.34
Total crop acres farmed	599	157	334	596	1,188
Months of labor used	20	9	12	15	42
Farm net worth per acre farmed	\$3,777	\$5,789	\$3,960	\$2,982	\$2,781

<sup>1/</sup> Purchased feed, accounts receivable, hedging accounts, sealed grain, investment in growing crops, short-term loans.

<sup>2/</sup> Capital leases, investment in cooperatives.

<sup>3/</sup> Labor related liabilities, accrued interest, taxes payable, and other current liabilities.

## Income and Expenses

A summary of operating and fixed cash expenses by value of gross sales is shown in Table 3. Crop expenses include seed, fertilizer, pesticides, and other expenses related to crop production. The average farm generated a net farm cash flow of \$154,008 for replacement of capital assets, expansion, savings, living expenses, and income taxes. Such amount was 43% or \$46,297 higher than in the previous year, driven mainly by higher corn and livestock sales, that more than offset a substantial decline in government payments. Soybean sales were smaller in 2021 than in 2020 across all groups, except for the one with the largest value of gross sales. However, the increase for the latter group was enough to push the overall average up. Average loans repaid exceeded loans received in 2020, and average interest expense declined by \$8,618 (-24%) in 2021.

**Table 3. Summary of Cash Income and Expenses by Size of Farm**

	Average	Total Value of Gross Sales			
		\$100,000 to \$199,999	\$200,000 to \$399,999	\$400,000 to \$799,999	\$800,000 and above
<b>Income</b>					
Livestock sales	\$269,937	\$6,165	\$15,611	\$23,361	\$926,653
Corn sales	273,299	65,146	145,015	277,139	548,505
Soybean sales	154,729	39,982	85,853	160,011	301,914
Other crop sales	12,327	7,030	4,935	11,461	24,074
Other cash income	127,329	41,519	57,186	96,815	285,327
<b>Total Cash Income</b>	<b>\$837,622</b>	<b>\$159,842</b>	<b>\$308,601</b>	<b>\$568,787</b>	<b>\$2,086,472</b>
<b>Expenses</b>					
Machinery and equipment repairs	\$28,499	\$7,006	\$16,049	\$28,549	\$56,469
Fuel and oil	17,463	3,236	7,155	14,802	40,300
Machine hire	16,392	5,055	11,321	12,283	33,375
Auto and truck expense	5,680	2,581	2,877	5,130	11,155
Utilities	9,539	3,773	4,846	6,800	20,743
Labor hired	19,669	319	3,838	6,689	60,681
Livestock expense	33,626	2,895	1,424	4,141	113,230
Crop expense	144,193	37,377	82,023	139,974	287,411
Miscellaneous	4,760	1,416	1,419	4,593	10,589
Total cash operating expense	\$279,820	\$63,658	\$130,953	\$222,961	\$633,953
Cash rent	\$94,979	\$14,137	\$38,424	\$88,838	\$214,936
Property taxes	8,752	4,193	6,294	8,516	14,730
Insurance	25,805	7,780	13,911	23,536	52,666
Building repairs	9,340	4,055	4,761	8,165	18,696
Interest	27,455	5,181	11,870	20,537	65,111
Other overhead expenses	16,510	3,485	7,589	11,451	39,239
Total cash fixed expense	\$182,841	\$38,830	\$82,849	\$161,043	\$405,378
Feed purchased	\$135,187	\$3,818	\$10,624	\$19,843	\$453,706
Livestock purchased	86,390	1,110	9,448	20,151	281,859
<b>Total Cash Expenses</b>	<b>\$684,239</b>	<b>\$107,417</b>	<b>\$233,873</b>	<b>\$423,997</b>	<b>\$1,774,895</b>
<b>Cash Net Farm Income</b>	<b>\$153,383</b>	<b>\$52,425</b>	<b>\$74,727</b>	<b>\$144,789</b>	<b>\$311,577</b>
Loans received minus loans repaid	\$626	-\$55,542	-\$18,822	\$31,797	\$34,040
<b>Net Farm Cash Flow</b>	<b>\$154,008</b>	<b>-\$3,117</b>	<b>\$55,905</b>	<b>\$176,587</b>	<b>\$345,617</b>

A more accurate measure of net farm income is achieved by netting out changes in the values of beginning and ending inventories, subtracting a depreciation charge for farm assets and including accrued income and expenses. A summary of income and expenses using accrual accounting is shown in Table 4. The 2021 accrual net farm income ranged from an average of \$86,858 among the smallest farms to an average of \$726,294 among the largest farms, and averaged \$341,834 across all farms. The latter was the highest average accrual net farm income on record, and it was driven by changes in crop inventory values (\$179,911). Return to management, obtained after subtracting a return to unpaid labor and equity capital invested, was positive for all groups and averaged \$232,912 across all farms in 2021. This was the second year of positive economic returns since 2012, with the largest return on record. The operating expense ratio for the average Iowa farm decreased by 16 percentage points in 2021 to 54%, and the net farm income ratio increased by 18 percentage points to 37% (Table 5).

**Table 4. Summary of Accrual Income and Expenses by Size of Farm<sup>1/</sup>**

	Average	Total Value of Gross Sales			
		\$100,000 to \$199,999	\$200,000 to \$399,999	\$400,000 to \$799,999	\$800,000 and above
<b>Income</b>					
Total cash income	\$837,622	\$159,842	\$308,601	\$568,787	\$2,086,472
Change in crop inventory	179,911	49,588	118,199	183,082	333,980
Change in livestock inventory	18,057	1,345	4,139	16,759	44,981
Feed credits, change in other inventories	51,444	1,612	4,740	8,895	170,693
<b>Total accrual income (gross revenue)</b>	<b>\$1,087,034</b>	<b>\$212,387</b>	<b>\$435,679</b>	<b>\$777,523</b>	<b>\$2,636,127</b>
Total cash expenses	\$684,239	\$107,417	\$233,873	\$423,997	\$1,774,895
Depreciation	60,961	18,112	25,887	51,362	134,938
<b>Total accrual expenses</b>	<b>\$745,199</b>	<b>\$125,529</b>	<b>\$259,760</b>	<b>\$475,359</b>	<b>\$1,909,833</b>
<b>Accrual net farm income</b>	<b>\$341,834</b>	<b>\$86,858</b>	<b>\$175,919</b>	<b>\$302,164</b>	<b>\$726,294</b>
Charge for unpaid labor	27,692	19,432	24,952	30,026	34,475
Charge for equity capital (4%)	81,230	40,392	63,797	74,510	134,503
<b>Return to Management</b>	<b>\$232,912</b>	<b>\$27,035</b>	<b>\$87,171</b>	<b>\$197,627</b>	<b>\$557,316</b>
<b>Allocation of Gross Revenue</b>					
Operating expense	54%	48%	51%	52%	65%
Interest expense	3%	2%	3%	3%	2%
Depreciation expense	6%	9%	6%	7%	5%
Net farm income	37%	41%	40%	39%	28%
	100%	100%	100%	100%	100%

The value of all crops and livestock produced on the farm is shown in Table 5. The value of farm production increased by 32% or \$208,823, in 2021, driven mainly by increases in crop inventory change, followed by the value of crop production, and the net value of livestock production, to average \$865,456.

**Table 5. Value of Farm Production by Size of Farm<sup>2/</sup>**

	Average	Total Value of Gross Sales			
		\$100,000 to \$199,999	\$200,000 to \$399,999	\$400,000 to \$799,999	\$800,000 and above
Value of livestock production	\$294,179	\$8,705	\$23,011	\$43,050	\$987,222
Less purchase for resale	86,390	1,110	9,448	20,151	281,859
Less purchased feed fed	135,187	3,818	10,624	19,843	453,706
Net value of livestock production	72,602	3,777	2,940	3,056	251,658
Value of crop production (incl. feed credits)	491,399	113,770	240,544	457,216	1,044,005
Miscellaneous income	121,544	40,324	53,924	94,175	270,919
Crop inventory change	179,911	49,588	118,199	183,082	333,980
<b>Value of Farm Production</b>	<b>\$865,456</b>	<b>\$207,458</b>	<b>\$415,608</b>	<b>\$737,529</b>	<b>\$1,900,562</b>

<sup>1/</sup> Accrual net farm income = value of farm production - total cash fixed expense - total cash operating expense - depreciation

<sup>2/</sup> Value of farm production = gross revenue - livestock purchase for resale - purchased feed fed

## Efficiency Factors

Selected efficiency factors are shown in Table 6 for the four farm size groups. Gross revenue per person and per dollar of assets increase with farm size, while machinery cost per acre declines with farm size. The rates of return on equity and assets averaged 14.2% and 11.5% across all farm groups, respectively, and marked the highest returns since 2007. The average interest rate on debt across all farms was 3.9% in 2021, 0.9% lower than in 2020.

**Table 6. Overall Efficiency Factors by Size of Farm**

	Average	Total Value of Gross Sales			
		\$100,000 to \$199,999	\$200,000 to \$399,999	\$400,000 to \$799,999	\$800,000 and above
<b>Crops</b>					
Acres in crops	599	157	334	596	1,188
Crop value per acre	\$777	\$725	\$721	\$768	\$879
Crop acres per person	346	221	331	481	337
Machinery cost per crop acre	\$172	\$204	\$165	\$163	\$161
Machinery investment per crop acre	\$556	\$655	\$493	\$561	\$536
<b>Livestock</b>					
Livestock returns per \$100 feed fed	\$184	\$269	\$203	\$127	\$152
<b>Financial</b>					
Gross revenue per person	\$540,232	\$299,840	\$432,216	\$627,745	\$747,037
Gross revenue per \$1 expense	\$1.59	\$1.69	\$1.68	\$1.64	\$1.38
Gross revenue per \$1 assets	\$0.34	\$0.19	\$0.27	\$0.34	\$0.53
Value of farm production per \$1 assets	\$0.30	\$0.19	\$0.26	\$0.32	\$0.38
Return on assets (ROA)	11.5%	6.7%	10.3%	12.8%	15.2%
Return on equity (ROE)	14.2%	7.4%	11.4%	15.3%	20.9%
Operating profit margin ratio (as % of gross revenue) <sup>1/</sup>	34.3%	34.2%	37.4%	37.6%	28.7%
Operating profit margin ratio (as % of value of farm production)	38.6%	35.0%	39.2%	39.7%	39.8%
Average interest rate on debt	3.9%	2.8%	4.5%	4.1%	3.9%

<sup>1/</sup>(Accrual net farm income + interest - unpaid labor) / gross revenue

## High-, Middle-, and Low-profit Farms

Profits vary greatly among farms. In Table 7, farms were ranked by return to management and sorted into three groups of similar sizes. The high-third group was the one with the lowest machinery costs per acre and the highest income from livestock sales, crop sales, other income and inventory, and feed credits, and its return to management averaged \$705,079 in 2021. This group also had the lowest net worth per acre farmed across the three groups and the largest area in crops.

The middle-third group had the smallest livestock returns per \$100 feed fed, and the largest number of crop acres per person, and its return to management averaged \$224,531. The lowest third group had the smallest area in crops, the lowest crop acres per person, the highest machinery cost per crop acre, and the highest machinery investment per crop acre, and its return to management averaged \$36,449. However, their net worth per acre was the highest among the three groups, and their debt-to-asset ratio was the lowest.

## High-, Middle-, and Low-profit Farms

**Table 7. Comparison of High-, Middle-, and Low-profit Farms, Ranked by Return to Management <sup>1/</sup>**

	High Third	Middle Third	Low Third	Your Farm
<b>Farm Income</b>				
Crop sales	\$920,757	\$530,356	\$268,089	_____
Livestock sales	1,039,519	124,721	126,211	_____
Other income and inventory	716,728	329,481	198,523	_____
Feed credits	171,200	38,188	27,194	_____
Gross revenue	\$2,848,204	\$1,022,746	\$620,017	_____
Operating expenses	\$640,078	\$299,913	\$190,843	_____
Fixed expenses (incl. depreciation)	552,125	267,251	163,789	_____
Feed purchased	491,380	64,504	73,757	_____
Livestock purchased	293,720	52,239	53,923	_____
Total expenses	\$1,977,303	\$683,906	\$482,312	_____
Accrual net farm income	\$870,901	\$338,840	\$137,705	_____
Operator and family labor charge	\$34,948	\$30,071	\$25,902	_____
Charge for equity capital	130,874	84,238	75,354	_____
Return to management	\$705,079	\$224,531	\$36,449	_____
<b>Crops</b>				
Acres in crops	1,265	702	364	_____
Crop value per acre	\$863	\$809	\$812	_____
Crop acres per person	336	465	292	_____
Machinery cost per crop acre	\$145	\$162	\$192	_____
Machinery investment per crop acre	\$504	\$496	\$642	_____
<b>Livestock</b>				
Livestock returns per \$100 feed fed	\$161	\$127	\$171	_____
<b>Value of Farm Production</b>	\$2,063,104	\$906,004	\$492,337	_____
<b>Financial</b>				
Gross revenue per person	\$756,639	\$677,217	\$497,724	_____
Gross revenue per \$1 expense	\$1.44	\$1.50	\$1.29	_____
Gross revenue per \$1 assets	\$0.59	\$0.36	\$0.29	_____
Value of farm production per \$1 assets	\$0.42	\$0.32	\$0.23	_____
Return on assets (ROA)	18.5%	11.9%	6.2%	_____
Return on equity (ROE)	25.5%	15.1%	7.0%	_____
Operating profit margin ratio (as % of gross revenue) <sup>1/</sup>	0.32	0.33	0.21	_____
Operating profit margin ratio (as % of value of farm production)	0.44	0.38	0.27	_____
Debt-to-asset ratio	0.33	0.28	0.24	_____
Net worth per acre farmed	\$2,590	\$2,920	\$4,419	_____
<b>Allocation of Value of Gross Revenue</b>				
Operating expense	63%	57%	67%	_____
Interest expense	2%	3%	3%	_____
Depreciation expense	5%	7%	7%	_____
Net farm income	31%	33%	22%	_____

<sup>1/</sup> Values have not been adjusted for size of business.

## Crop Production

Details of crop production income and expenses per acre are summarized in Table 8. Some expenses, such as cash rent, did not occur on all farms or on all acres, but are shown as the average cost over all acres. Total economic costs include a 4% opportunity cost charge for the farm equity, a depreciation charge, and a charge for operator and family labor. The numbers presented in Table 8 refer to simple, unweighted averages across all farms included in the Iowa Farm Business Association Summary Report. The selling price exceeded the total economic cost per bushel for corn and soybeans by \$0.59 and \$0.31 per bushel, respectively. Each bushel of corn and soybeans contributed, on average, \$1.78 and \$4.01 to the net cash flow of the operation.

**Table 8. Crop Production**

	All Corn	Soybean
Total operator acres per crop	459	360
Yield, bushels per acre	218	67
Selling price per bushel	\$5.01	\$11.93
Crop value per acre	\$1,090	\$795
<b>Crop Expenses per Acre</b>		
Seed	\$110.07	\$57.37
Fertilizer and lime	126.94	31.24
Herbicide	41.89	53.00
Insecticide	10.85	8.97
Drying and storage	12.83	2.06
Machinery, fuel, repairs, machine hire	102.27	93.49
Utilities	11.04	9.36
Insurance	38.35	36.52
Hired labor	13.33	11.36
Interest	36.51	33.27
Cash rent	150.83	146.91
Property taxes and building repairs	23.63	23.27
Other crop expenses	24.88	20.68
Total cash crop expenses per acre	\$703.41	\$527.50
Machinery depreciation	\$64.78	\$61.46
Building depreciation	17.89	16.12
Charge for equity capital	128.90	124.35
Unpaid labor value	46.54	44.88
Total economic cost per acre	\$961.52	\$774.32
Total economic cost per bushel	\$4.42	\$11.62
Total cash flow needed per acre	\$703.41	\$527.50
Total cash flow needed per bushel	\$3.23	\$7.92



## Trends

Table 9 illustrates trends in production and financial efficiency over the past 10 years. Livestock income per \$100 feed fed shows a cyclical pattern, and in 2021 it was 21% higher than its 10-year average. The average corn yield of 218 bushels was 15% higher than in 2020 and 15% higher than the 10-year average. The rate of return to owned assets averaged 11.5% in 2021, or 7.5 percentage points above its 10-year average.

**Table 9. Trends in Production and Financial Efficiency on Iowa Farms**

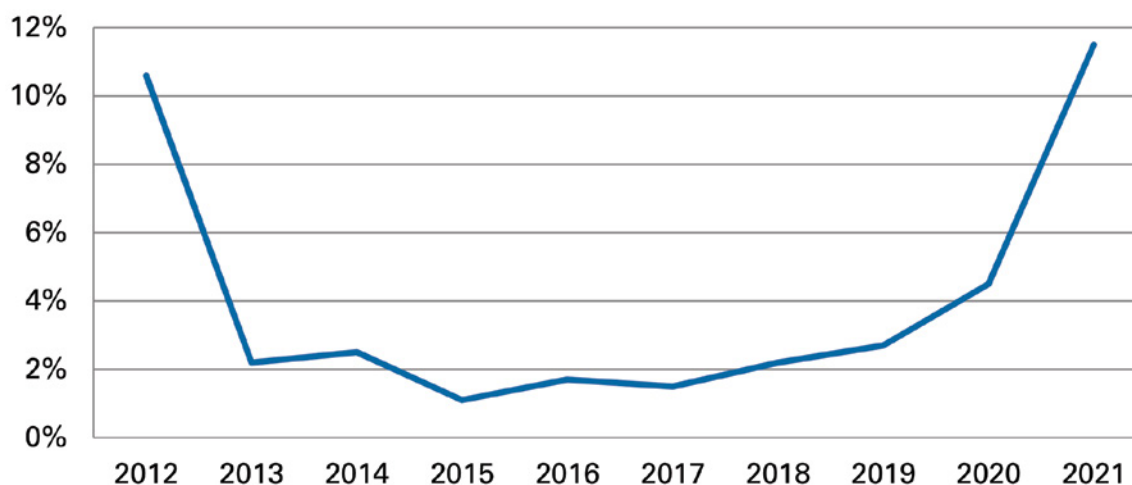
Year	Livestock Income per \$100 Feed Fed	Corn Yield Bushels per Acre	Value of Farm Production per \$1 Expense	Crop Value per Acre	Percent Return to Owned Assets
2012 <sup>1/</sup>	\$102	149	\$1.68	\$882	10.6%
2013	145	169	1.19	821	2.2%
2014	223	184	1.20	667	2.5%
2015 <sup>2/</sup>	133	200	1.09	588	1.1%
2016	117	209	1.12	635	1.7%
2017 <sup>3/</sup>	179	214	1.08	604	1.5%
2018	161	201	1.12	617	2.2%
2019	158	199	1.13	606	2.7%
2020	122	189	1.21	605	4.5%
2021	184	218	1.59	777	11.5%
10-year average	\$152	193	\$1.24	\$680	4.1%

<sup>1/</sup> Revised using weights from the 2012 Census of Agriculture.

<sup>2/</sup> Revised with additional farm data.

<sup>3/</sup> Revised using weights from the 2017 Census of Agriculture.

### Percent Return to Owned Assets



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