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# 2022 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 2018-2022

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 75 acres to 524 acres in 2022, the lowest mark since 2012. The average value of farm net worth decreased by \$51,549 (-3%), driven by a reduction in total farm assets of \$243,284 (-9%). However, the farm net worth per acre farmed increased by 21% to \$3,847.

The average accrual net farm income dropped by 22% from the \$341,834 peak in 2021, to \$265,013 in 2022. However, that 2022 value was \$21,941 (9%) higher than the previous peak in 2012. Livestock returns per \$100 feed fed declined by 16% to \$155 in 2022. The average sale price for corn increased by 28% to \$6.42 in 2022, and the average corn yield was 210 bushels per acre (4% lower than in 2021). The average debt-to-asset ratio declined substantially to 0.19 in 2022, its lowest level since 2014. The average current asset-to-debt ratio, a relative measure of liquidity, increased to 6.87 in 2022, its highest level since 2013 and substantially above its long-term average.

**Table 1. Comparison by Years**

	2022	2021	2020	2019	2018
<b>Financial Returns</b>					
Net farm income, accrual	\$265,013	\$341,834	\$132,339	\$77,946	\$58,832
Return to management	158,336	232,912	25,327	-31,252	-45,358
Net farm income, cash	190,433	153,383	134,119	85,097	86,480
<b>Resources Used</b>					
Acres in crops	524	599	647	674	668
Labor months	18	20	20	21	19
Livestock, feed, supplies	\$746,486	\$746,988	\$579,074	\$600,110	\$583,011
Machinery and equipment	398,840	429,761	446,602	472,898	461,390
Land and improvements	1,214,586	1,426,445	1,497,413	1,470,496	1,350,870
Total farm assets	\$2,359,911	\$2,603,195	\$2,523,089	\$2,543,504	\$2,395,270
Farm net worth	\$1,847,996	\$1,899,545	\$1,803,078	\$1,791,128	\$1,711,990
<b>Value of Farm Production</b>					
Livestock income less feed, purchases for resale	\$49,245	\$72,602	\$34,389	\$64,130	\$34,904
Crop production	577,039	491,399	418,614	427,857	430,542
Miscellaneous	84,491	121,544	193,776	127,320	110,925
Crop inventory gain or loss	65,691	179,911	9,954	15,247	-4,432
Value of farm production	\$776,467	\$865,456	\$656,733	\$634,555	\$571,939
<b>Cash Expenses</b>					
Operating	\$292,085	\$279,820	\$279,869	\$301,941	\$273,441
Fixed	219,369	243,802	244,525	254,668	239,665
<b>Efficiency</b>					
Corn yield (bushels per acre)	210	218	189	199	201
Average sale price for corn, per bushel	\$6.42	\$5.01	\$3.44	\$3.68	\$3.40
Crop value per acre	\$1,072	\$777	\$605	\$606	\$617
Machinery cost per crop acre	\$197	\$172	\$149	\$145	\$137
Livestock returns per \$100 feed fed	\$155	\$184	\$122	\$158	\$161
Gross revenue per person	\$534,683	\$540,232	\$435,641	\$416,983	\$418,186
Gross revenue per \$1 expense	\$1.46	\$1.59	\$1.21	\$1.13	\$1.12
Gross revenue per \$1 assets	\$0.34	\$0.34	\$0.28	\$0.28	\$0.27
Return on assets (ROA)	9.3%	11.5%	4.5%	2.7%	2.2%
Return on equity (ROE)	10.8%	14.2%	4.6%	2.1%	1.4%
<b>Financial</b>					
Debt-to-asset ratio	0.19	0.23	0.25	0.25	0.24
Current asset-to-debt ratio	6.87	4.62	3.06	2.69	3.14
Farm net worth per acre farmed	\$3,847	\$3,777	\$3,192	\$2,961	\$2,870

## 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 2022 were lower than in 2021 for all groups of farms. Total assets for all groups but the third one (\$400,000-\$799,999 in gross sales) declined in 2022. As a result, net worth increased for the third and fourth group of farms, and declined for the two groups of farms with the smallest gross revenues. A major challenge in comparing Table 2 results across years is that the farm 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 2022. Working capital increased for farms in the two groups with the largest values of gross sales (3% for the third group and 19% for the fourth group), and declined in the other two groups (-15% for the first group, and -9% for the second group).

**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	\$93,032	\$4,697	\$5,143	\$23,408	\$304,122
Crop inventory	485,628	105,965	238,890	435,439	1,049,981
Cash	64,843	13,730	38,214	82,338	113,250
Supplies, prepaid expenses, other <sup>1/</sup>	102,982	20,839	35,872	100,048	231,059
Total short-term assets	\$746,486	\$145,231	\$318,119	\$641,233	\$1,698,413
Breeding livestock	\$22,930	\$4,675	\$6,861	\$14,228	\$59,572
Machinery, equipment	365,682	85,659	134,311	328,011	829,104
Other intermediate assets <sup>2/</sup>	10,227	0	14,671	9,665	14,269
Total intermediate assets	398,840	\$90,334	\$155,843	\$351,904	\$902,944
Land and improvements	\$1,214,586	\$383,147	\$806,220	\$1,289,842	\$2,162,915
Total assets	\$2,359,911	\$618,711	\$1,280,182	\$2,282,979	\$4,764,272
<b>Farm Liabilities</b>					
Operating notes, accounts payable	\$140,206	\$24,803	\$29,422	\$93,788	\$372,954
Intermediate and long-term due	3,124	223	769	2,853	7,779
Other short term debt <sup>3/</sup>	438	0	0	731	927
Total short-term debt	\$143,768	\$25,027	\$30,191	\$97,371	\$381,660
Intermediate-term debt	\$219,083	\$31,598	\$51,339	\$143,474	\$585,831
Long-term debt	\$149,065	\$69,844	\$49,731	\$162,604	\$290,832
Total liabilities	\$511,915	\$126,469	\$131,260	\$403,450	\$1,258,323
<b>Farm Net Worth</b>					
Net worth change from last year	-\$51,549	-\$415,542	-\$172,056	\$103,559	\$201,070
Working capital	\$602,718	\$120,204	\$287,928	\$543,862	\$1,316,753
Current asset-to-debt ratio	6.87	5.80	10.54	6.59	4.45
Working capital per \$1 of gross revenue	\$0.72	\$0.69	\$0.86	\$0.80	\$0.54
Total debt-to-asset ratio	0.19	0.20	0.10	0.18	0.26
Total crop acres farmed	524	128	251	485	1,115
Months of labor used	18	9	10	13	36
Farm net worth per acre farmed	\$3,847	\$3,835	\$4,575	\$3,876	\$3,145

<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 per farm 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 \$192,433 for replacement of capital assets, expansion, savings, living expenses and income taxes. Such amount was 24% or \$37,051 higher than in the previous year, driven mainly by 20% and 21% higher corn and soybean sales, respectively, and despite an 18% decline in livestock sales, and a substantial continued decline in pandemic related government payments. Average loans repaid exceeded loans received in 2022 for farms in the fourth group with the largest gross revenues, but for the other three groups the average values of loans received were higher than the values of loans repaid. Average interest expense declined by \$7,761 (-28%) in 2022.

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

	Average	\$100,000 to \$199,999	\$200,000 to \$399,999	\$400,000 to \$799,999	\$800,000 and above
<b>Income</b>					
Livestock sales	\$222,377	\$12,609	\$5,764	\$31,382	\$753,698
Corn sales	328,470	83,959	168,695	302,906	686,794
Soybean sales	186,635	44,199	91,608	181,238	388,855
Other crop sales	17,415	622	7,783	10,813	45,027
Other cash income	88,582	12,018	29,141	66,945	221,669
<b>Total Cash Income</b>	<b>\$843,480</b>	<b>\$153,407</b>	<b>\$302,990</b>	<b>\$593,284</b>	<b>\$2,096,044</b>
<b>Expenses</b>					
Machinery and equipment repairs	\$28,571	\$7,955	\$11,635	\$27,536	\$61,065
Fuel and oil	22,596	4,944	9,212	17,493	53,077
Machine hire	14,723	7,900	5,677	12,750	30,162
Auto and truck expense	5,507	2,201	3,001	5,639	10,257
Utilities	8,119	2,459	3,760	6,518	17,926
Labor hired	16,055	20	749	6,852	50,736
Livestock expense	23,781	906	695	4,373	79,966
Crop expense	167,538	43,704	84,857	151,700	353,221
Miscellaneous	5,196	795	1,783	3,931	12,859
Total cash operating expense	\$292,085	\$70,884	\$121,369	\$236,793	\$669,268
Cash rent	\$88,159	\$14,793	\$32,341	\$66,213	\$215,679
Property taxes	8,470	3,187	5,916	9,446	14,018
Insurance	26,877	7,082	12,008	23,705	58,682
Building repairs	8,277	3,964	2,763	7,372	17,541
Interest	19,695	5,397	4,177	14,814	49,456
Other overhead expenses	13,643	2,476	5,536	10,324	32,666
Total cash fixed expense	\$165,120	\$36,898	\$62,741	\$131,873	\$388,042
Feed purchased	\$122,161	\$2,569	\$4,414	\$21,438	\$412,463
Livestock purchased	73,680	360	707	13,069	251,393
<b>Total Cash Expenses</b>	<b>\$653,046</b>	<b>\$110,711</b>	<b>\$189,231</b>	<b>\$403,173</b>	<b>\$1,721,166</b>
<b>Cash Net Farm Income</b>	<b>\$190,433</b>	<b>\$42,696</b>	<b>\$113,759</b>	<b>\$190,111</b>	<b>\$374,878</b>
Loans received minus loans repaid	\$2,012	-\$5,425	-\$4,905	-\$3,737	\$19,230
<b>Net Farm Cash Flow</b>	<b>\$192,446</b>	<b>\$37,271</b>	<b>\$108,855</b>	<b>\$186,374</b>	<b>\$394,108</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 2022 accrual net farm income ranged from an average of \$50,310 among the smallest farms to an average of \$591,938 among the largest farms, and averaged \$265,013 across all farms. The latter was 22% lower than in 2021, driven by a 63% drop in crop inventory values (-\$114,219). Return to management, obtained after subtracting a return to unpaid labor and equity capital invested, was positive for all groups and averaged \$158,336 across all farms in 2022. It was the third year of positive economic returns since 2012. The operating expense ratio for the average Iowa farm increased by 7 percentage points in 2022 to 61%, and the net farm income ratio decreased by 5 percentage points to 31% (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	\$843,480	\$153,407	\$302,990	\$593,284	\$2,096,044
Change in crop inventory	65,691	21,652	27,594	65,158	135,440
Change in livestock inventory	18,527	-1,510	1,905	5,950	60,448
Feed credits, change in other inventories	44,610	711	2,715	11,626	146,407
<b>Total accrual income (gross revenue)</b>	<b>\$972,307</b>	<b>\$174,260</b>	<b>\$335,204</b>	<b>\$676,019</b>	<b>\$2,438,339</b>
Total cash expenses	\$653,046	\$110,711	\$189,231	\$403,173	\$1,721,166
Depreciation	54,248	13,239	19,331	46,295	125,235
<b>Total accrual expenses</b>	<b>\$707,294</b>	<b>\$123,950</b>	<b>\$208,562</b>	<b>\$449,469</b>	<b>\$1,846,401</b>
<b>Accrual net farm income</b>	<b>\$265,013</b>	<b>\$50,310</b>	<b>\$126,642</b>	<b>\$226,550</b>	<b>\$591,938</b>
Charge for unpaid labor	26,723	19,091	22,931	28,056	34,905
Charge for equity capital (4%)	79,953	20,246	56,732	82,480	144,827
<b>Return to Management</b>	<b>\$158,336</b>	<b>\$10,973</b>	<b>\$46,979</b>	<b>\$116,015</b>	<b>\$412,206</b>
<b>Allocation of Gross Revenue</b>					
Operating expense	61%	60%	55%	57%	69%
Interest expense	2%	3%	1%	2%	2%
Depreciation expense	6%	8%	6%	7%	5%
Net farm income	31%	29%	38%	34%	24%
	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 decreased by 10% or \$88,989, driven mainly by changes in crop inventory values, followed by a lower value of livestock, and lower pandemic related government payments, to an average of \$776,467 in 2022.

**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	\$245,086	\$11,768	\$8,063	\$40,177	\$825,740
Less purchase for resale	73,680	360	707	13,069	251,393
Less purchased feed fed	122,161	2,569	4,414	21,438	412,463
Net value of livestock production	49,245	8,839	2,942	5,670	161,884
Value of crop production (incl. feed credits)	577,039	129,491	271,350	506,367	1,266,429
Miscellaneous income	84,491	11,349	28,198	64,317	210,730
Crop inventory change	65,691	21,652	27,594	65,158	135,440
<b>Value of Farm Production</b>	<b>\$776,467</b>	<b>\$171,331</b>	<b>\$330,083</b>	<b>\$641,512</b>	<b>\$1,774,483</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 tend to increase with farm size, while machinery cost per acre tends to decline with farm size. The rates of return on equity and assets averaged 10.8% and 9.3%, respectively, across all farm groups and marked the second-highest returns since 2007. The average interest rate on debt across all farms was 3.7% in 2022, 0.2% lower than in 2021.

**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	524	128	251	485	1,115
Crop value per acre	\$1,072	\$1,009	\$1,081	\$1,044	\$1,136
Crop acres per person	329	171	309	442	369
Machinery cost per crop acre	\$197	\$223	\$183	\$198	\$189
Machinery investment per crop acre	\$569	\$552	\$507	\$631	\$585
<b>Livestock</b>					
Livestock returns per \$100 feed fed	\$155	\$0	\$268	\$175	\$149
<b>Financial</b>					
Gross revenue per person	\$534,683	\$232,347	\$412,195	\$615,908	\$807,563
Gross revenue per \$1 expense	\$1.46	\$1.41	\$1.61	\$1.50	\$1.32
Gross revenue per \$1 assets	\$0.34	\$0.28	\$0.26	\$0.30	\$0.51
Value of farm production per \$1 assets	\$0.30	\$0.28	\$0.26	\$0.28	\$0.37
Return on assets (ROA)	9.3%	5.9%	8.4%	9.3%	12.7%
Return on equity (ROE)	10.8%	6.3%	9.0%	10.6%	15.9%
Operating profit margin ratio (as % of gross revenue) <sup>1/</sup>	27.6%	21.0%	32.2%	31.6%	24.9%
Operating profit margin ratio (as % of value of farm production)	30.9%	21.4%	32.7%	33.3%	34.2%
Average interest rate on debt	3.7%	4.3%	3.2%	3.7%	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 largest area in crop production, the lowest machinery costs per acre, the lowest livestock returns per \$100 feed fed, and the lowest machinery investment per crop acre, and its return to management averaged \$603,966 in 2022. 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 highest gross revenue per dollar of expense, and the highest net farm income ratio, the highest crop acres per person, and its return to management averaged \$195,709. 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 \$12,577. 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	\$1,296,564	\$728,134	\$401,274	_____
Livestock sales	972,149	193,938	168,410	_____
Other income and inventory	526,697	184,002	118,392	_____
Feed credits	193,065	33,962	31,556	_____
Gross revenue	\$2,988,475	\$1,140,037	\$719,632	_____
Operating expenses	\$769,004	\$370,166	\$248,628	_____
Fixed expenses (incl. depreciation)	589,574	286,625	181,603	_____
Feed purchased	525,256	107,953	88,016	_____
Livestock purchased	305,623	56,969	77,069	_____
Total expenses	\$2,189,457	\$821,713	\$595,316	_____
Accrual net farm income	\$799,017	\$318,324	\$124,316	_____
Operator and family labor charge	\$36,492	\$30,584	\$25,894	_____
Charge for equity capital	158,559	92,031	85,845	_____
Return to management	\$603,966	\$195,709	\$12,577	_____
<b>Crops</b>				
Acres in crops	1,315	699	389	_____
Crop value per acre	\$1,133	\$1,090	\$1,112	_____
Crop acres per person	368	464	289	_____
Machinery cost per crop acre	\$167	\$194	\$218	_____
Machinery investment per crop acre	\$514	\$585	\$675	_____
<b>Livestock</b>				
Livestock returns per \$100 feed fed	\$146	\$165	\$170	_____
<b>Value of Farm Production</b>	<b>\$2,157,596</b>	<b>\$975,114</b>	<b>\$554,547</b>	_____
<b>Financial</b>				
Gross revenue per person	\$835,370	\$757,374	\$534,563	_____
Gross revenue per \$1 expense	\$1.36	\$1.39	\$1.21	_____
Gross revenue per \$1 assets	\$0.55	\$0.40	\$0.31	_____
Value of farm production per \$1 assets	\$0.40	\$0.34	\$0.24	_____
Return on assets (ROA)	15.1%	11.1%	5.0%	_____
Return on equity (ROE)	19.4%	13.2%	5.3%	_____
Operating profit margin ratio (as % of gross revenue) <sup>1/</sup>	0.27	0.27	0.16	_____
Operating profit margin ratio (as % of value of farm production)	0.38	0.32	0.21	_____
Debt-to-asset ratio	0.27	0.23	0.19	_____
Net worth per acre farmed	\$2,994	\$3,126	\$4,797	_____
<b>Allocation of Value of Gross Revenue</b>				
Operating expense	67%	64%	74%	_____
Interest expense	2%	2%	2%	_____
Depreciation expense	5%	6%	7%	_____
Net farm income	27%	28%	17%	_____

<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 net worth capital, 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 for corn exceeded its total economic cost by \$0.96 per bushel, but the selling price for soybeans was lower than its total economic cost by \$0.34 per bushel. Each bushel of corn and soybeans contributed, on average, \$2.31 and \$4.00 to the net cash flow of the operation.

**Table 8. Crop Production**

	All Corn	Soybean
Total operator acres per crop	465	373
Yield, bushels per acre	210	63
Selling price per bushel	\$6.42	\$13.68
Crop value per acre	\$1,348	\$859
<b>Crop Expenses per Acre</b>		
Seed	\$117.50	\$60.94
Fertilizer and lime	210.61	47.93
Herbicide	59.68	69.26
Insecticide	11.05	10.15
Drying and storage	17.39	2.20
Machinery, fuel, repairs, machine hire	125.68	115.63
Utilities	12.06	10.17
Insurance	46.68	43.37
Hired labor	14.58	12.66
Interest	31.79	31.65
Cash rent	160.11	153.83
Property taxes and building repairs	28.39	27.22
Other crop expenses	27.91	22.76
Total cash crop expenses per acre	\$863.44	\$607.77
Machinery depreciation	\$71.81	\$69.49
Building depreciation	18.31	17.45
Charge for equity capital	142.91	138.60
Unpaid labor value	49.11	47.47
Total economic cost per acre	\$1,145.59	\$880.77
Total economic cost per bushel	\$5.46	\$14.02
Total cash flow needed per acre	\$863.44	\$607.77
Total cash flow needed per bushel	\$4.11	\$9.68



## 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 2022 it was 2% lower than its 10-year average. The average corn yield of 210 bushels was 4% lower than in 2021 and 5% higher than the 10-year average. The rate of return to owned assets averaged 9.3% in 2022, or 3.9 percentage points above the 10-year average.

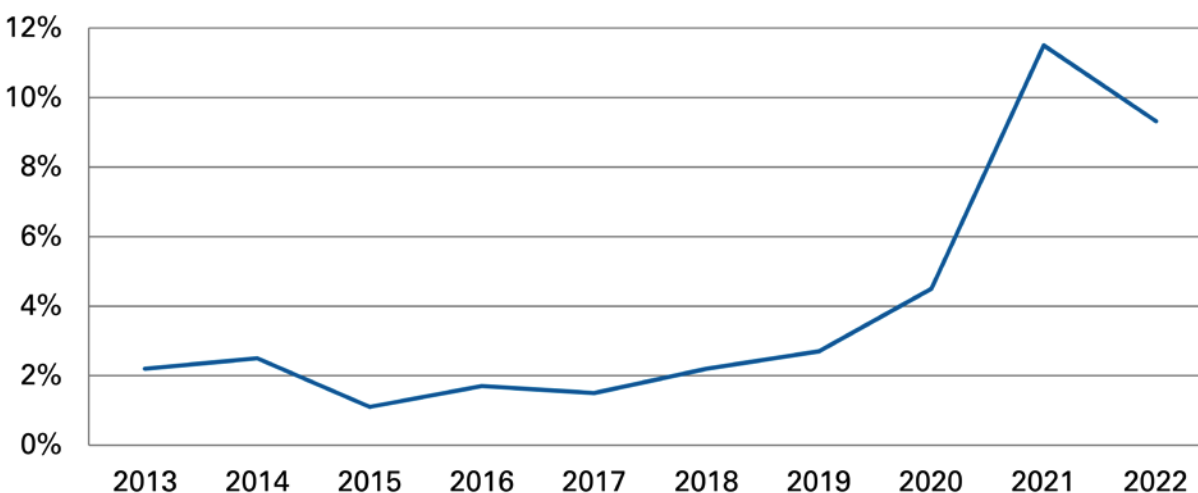
**Table 9. Trends in Production and Financial Efficiency on Iowa Farms**

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
2013	\$145	169	\$1.19	\$821	2.2%
2014	223	184	1.20	667	2.5%
2015 <sup>1/</sup>	133	200	1.09	588	1.1%
2016	117	209	1.12	635	1.7%
2017 <sup>2/</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%
2022	155	210	1.46	1072	9.3%
10-year average	\$158	199	\$1.22	\$699	3.9%

<sup>1/</sup> Revised with additional farm data.

<sup>2/</sup> Revised using weights from the 2017 Census of Agriculture.

### Percent Return to Owned Assets



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Prepared by Alejandro Plastina  
extension economist,  
[plastina@iastate.edu](mailto:plastina@iastate.edu)  
[extension.iastate.edu/agdm](http://extension.iastate.edu/agdm)  
[store.extension.iastate.edu](http://store.extension.iastate.edu)