

# Shrinking profitability of organic farming

Low organic commodity prices are shrinking net returns for farmers. Despite improved crop yields and generally lower operating costs for organic corn, soybean and wheat producers over the 2023-24 marketing year (MY), the average net return for the three crops combined was the lowest on record at \$42/acre, *Argus* estimates, owing to declining crop prices. The outlook for 2024-25 prices is unknown at the start of the MY, but the risk of another year of low organic farm net returns is significant. To provide perspective on this risk, *Argus* proposes a framework for evaluating organic farm net returns based on possible outcomes for commodity prices and production costs for the year ahead.

To estimate farmer net returns, organic crop cost of production data from the national farm financial database (FINBIN) are used in combination with *Argus* organic commodity price assessments and organic yield estimates. As production costs, commodity prices and yields for any crop do not necessarily move in the same direction or amount from year to year, this analysis is based on an assumed representative organic farm with a three-crop rotation — corn, soybeans and wheat — located in the US

Corn Belt\* region. Organic commodity prices are based on MY averages of *Argus*-assessed Corn Belt delivered prices for organic corn, soybeans and wheat<sup>†</sup>. Operating costs are calculated from data provided by FINBIN for organic corn, soybeans and wheat, combining average crop year direct costs (seed, herbicides, insecticides, manure and insurance), as well as machinery, harvest, labor and land costs for each commodity<sup>‡</sup>.

While organic farm net returns have historically displayed some volatility, for the five marketing years prior to 2021-22, they averaged \$305/acre and remained within the range of \$214-436/acre, according to *Argus* estimates. Starting with the 2020 global outbreak of Covid-19, an onslaught of policy and market factors created unprecedented gains in organic commodity prices over the next two years.

As a result, organic farm net returns reached a record \$1,153/acre in the 2021-22 MY, nearly three times higher than the average of the prior five years. Farm input costs began to increase in 2022, with an 18pc rise in organic soybean production costs the smallest gain across the three crops. But organic commodity prices remained relatively high,

## US organic farm profitability

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2019/20 through 2022/23	2023/24	2024/25 possibilities			Breakeven
										August prices	Cost trends	Prices recover	
Prices* \$/bushel													
feed-grade corn	8.76	9.76	9.78	8.81	8.18	10.10	10.73	9.52	7.78	6.68	6.68	9.52	7.20
feed-grade soybeans	18.42	18.71	19.23	19.64	22.01	34.18	27.83	24.58	20.07	19.89	19.89	24.58	17.26
feed-grade wheat†	8.27	9.26	9.34	8.78	8.43	9.75	8.23	8.91	8.76	6.00	6.00	8.91	12.23
Operating cost per-acre													
Organic corn	763	792	764	731	753	791	1,049	817	918	918	952	918	918
Organic soybeans	546	648	561	447	516	547	646	544	649	649	668	649	649
Organic spring wheat‡	476	574	432	542	432	424	705	507	482	482	492	482	482
Yields bushel per acre													
Organic corn	122	124	119	113	119	127	128	121	127	127	127	127	127
Organic soybeans	38	36	37	36	38	39	38	37	38	38	38	38	38
Organic spring wheat	36	38	33	30	28	31	39	32	39	39	39	39	39
Farm net-revenue per-acre													
Organic corn	305	417	400	267	219	490	328	341	73	-66	-101	296	0
Organic soybeans	162	23	155	251	328	780	399	382	106	99	80	275	0
Organic spring wheat	-180	-225	-120	-282	-194	-117	-385	-220	-137	-245	-256	-131	0
<b>Total</b>	<b>288</b>	<b>214</b>	<b>436</b>	<b>236</b>	<b>353</b>	<b>1,153</b>	<b>343</b>	<b>504</b>	<b>42</b>	<b>-213</b>	<b>-277</b>	<b>440</b>	<b>0</b>

— *Argus Media, FINBIN*

\*Sep-Aug MY average delivered to US Corn Belt elevators

†Wheat prices 2016-22 from organic feed-grade prices, 2023-24 from organic 9pc protein SRW prices

‡*Argus* estimates based on FINBIN data. Wheat estimates for 2017/18 are based on trends from corn and soybeans

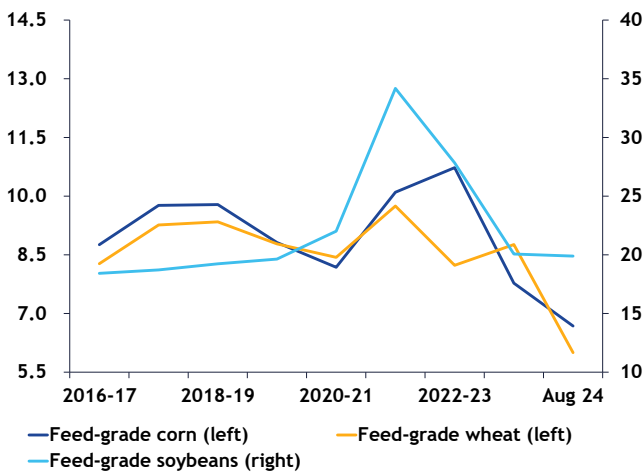
allowing organic farm net returns to average \$343/acre in 2022-23, up by 12pc from the five years prior to 2021-22.

Since reaching their peak in 2022, prices for feed-grade organic corn and soybeans have trended back towards their pre-2022 levels. In 2023-24, the average price for organic feed-grade corn fell by \$2.95/bu from the prior MY to the lowest marketing year average on record at \$7.78/bu. While organic feed-grade soybean prices remained above pre-Covid levels, the 2023-24 MY average price still fell by \$7.77/bu to a three-year low of \$20.07/bu.

Following drought conditions in key organic wheat producing states in 2022 and 2023, average organic wheat prices were higher during the 2023-24 MY at \$8.76/bu, up by \$0.53/bu from a year earlier. But improvements to growing conditions in 2024 have driven down prices. As of August 2024, organic soft red wheat was priced at \$6.00/bu, down by \$2.76/bu from the prior MY average. Similarly, the delivered Corn Belt price for organic corn was assessed at \$6.68/bu over August, a decrease of \$1.10/bu from the 2023-24 MY average, and organic soybeans were assessed at \$19.89/bu, down by \$0.18/bu.

### Organic commodity prices

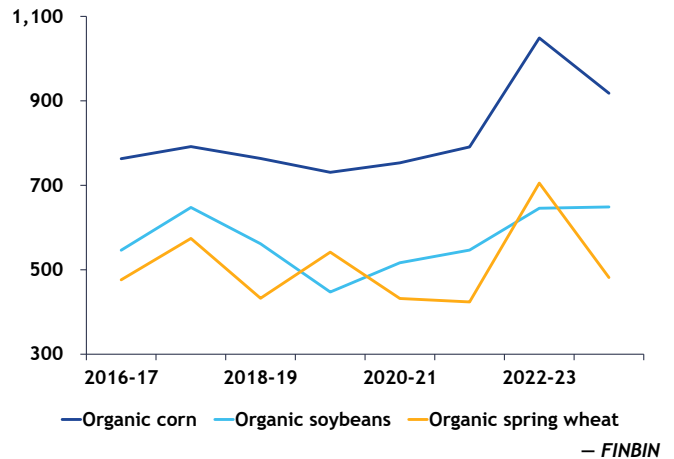
\$/bushel



The organic farm cost of production was also generally lower for the 2023-24 MY, but the extent of the decline was much lower than that of commodity prices. The operating cost per acre of organic corn and wheat fell by 12pc and 32pc, respectively, pulled down primarily by declining fertilizer prices. Organic soybeans, which do not have the fertilizer requirements of corn and wheat, saw production costs increase slightly, by less than 1pc from the prior year to \$649/acre. As a result, Argus calculates that organic farm net returns declined to the lowest on record over 2023-24, at \$42/acre.

### Operating costs

\$/acre



Given that the 2024-25 MY has begun with lower prices than the prior year, which yielded record-low organic farm net returns, the outlook for farm net returns over the year ahead is a significant point of risk. At August price levels, with operating costs and yield holding constant with 2023-24, organic corn would produce a negative return of -\$66/acre. Similarly, organic soybean values would produce the second-lowest return on record at \$99/acre. Combined with wheat at -\$245/acre, the three crops would produce a total net return of -\$213/acre.

Assuming a scenario in which organic commodity prices reach a level that allows for breakeven net returns, organic corn would need to average \$7.20/bu over the 2024-25 MY, and organic wheat would need to reach an MY average of \$12.23/bu. While \$12.23/bu seems unlikely for organic feed grade wheat, organic corn has historically remained above this level. To reach this level over 2024-25, the MY average corn price would need to increase by \$0.52/bu, or 8pc, from the August 2024 level.

Organic soybeans could decline further to \$17.26/bu before reaching breakeven net returns, because of their lower production cost relative to corn and price premium relative to wheat. It is likely that organic corn and soybean prices will need to see relatively significant gains over the MY, if they are to offset the negative returns likely to be generated by organic wheat.

Assuming that production costs will be flat year on year for the 2024-25 crop may be too optimistic to reflect actual conditions. Assuming that total input costs grow at a compound annual growth rate (CAGR) of the prior five years combined with August 2024 prices, organic farmers would see net returns of -\$277/acre. But organic profitability could

return if prices revert to their pre-2021-22 averages, reaching \$127/acre for the three crops combined.

The possibility of negative returns on organic commodities raises questions about organic farmer retention. Organic seed sellers noted an increase in organic alfalfa seed purchases ahead of 2024 crop planting, with some market participants speculating that a small number of organic corn and soybean farmers may switch their rotations to more profitable organic crops or even exit organic growing altogether to produce conventional crops. Most farmers seem reluctant to switch to conventional crops owing to the initial lengthy organic certification process that they have undergone. But if low and/or negative net returns persist, they may cut their losses and switch their planting intentions to remain profitable. A substantial loss of organic farmers would be a concern for organic purchasers in terms of how they obtain their product.

Argus estimates that the number of organic farmers has decreased by almost 5pc in 2024 from a year earlier, dropping from an estimated 18,530 to 17,633. The loss of organic farmers was more significant from 2023 to 2024 compared with a year earlier, when there was a loss of only 0.2pc in organic farmers from 2022 to 2023. If more farmers choose to surrender their organic certification, the reduction in crop supply could reduce bearish price pressures.

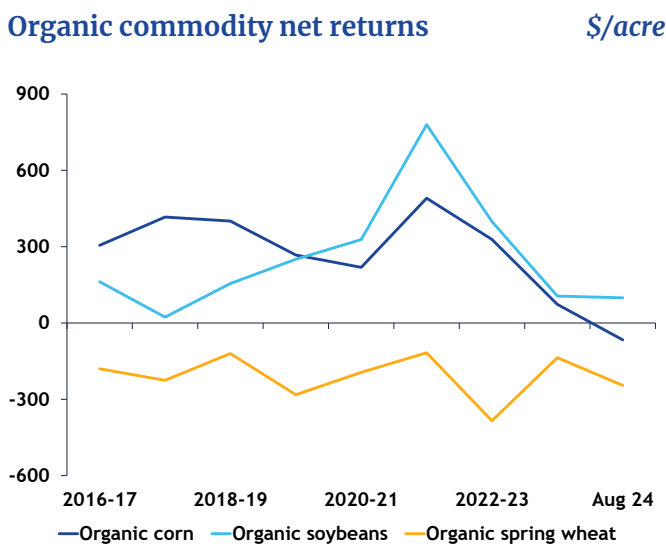
Organic corn and soybean yields are expected to be high for the 2024-25 crop year on account of good growing conditions, which carries the potential for low prices being sustained if supply is plentiful and not matched by demand. A successful organic winter wheat harvest in most states and a projected average spring wheat harvest may also sustain low wheat prices owing to plentiful supply.

Low prices for organic corn, soybeans and wheat combined with high operating costs pose a threat to organic farmer retention in the future. It is uncertain if organic commodity prices have reached a floor or if current prices are sustainable for the market in the long term, but potential negative returns would probably cause organic farmers to switch rotations.

*\*US Corn Belt includes the states Minnesota, Iowa, Missouri, Wisconsin, Illinois, Michigan, Indiana and Ohio.*

*<sup>1</sup>Due to changes in assessment methodology, the Argus assessed Corn Belt delivered prices for organic feed grade wheat are used for the interval 2016 through May 2023 and the Corn Belt fob farm 9pc protein organic soft red winter wheat price is used for June 2023 through May 2024.*

*\*Organic wheat cost of production data for the 2017-18 MY are not provided by FINBIN. As a result, production costs for the MY are estimated based on year-over-year changes in the production costs for organic corn and soybeans.*



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