

The Mysterious Farm Economy

October 2026

Wes Davis

Partner and Chief Agricultural Economist, Meridian Agribusiness Advisors

In aggregate, the US farm economy looks sound. USDA forecasts 2026 net cash farm income at \$176.4 billion, the second highest on record. Beneath the headline, \$47.4 billion of income is federal payments and market income is down roughly 34 percent since peaking in 2022. When we look under the hood, several mysteries appear, ten of which we explore here.

In August, Richmond Fed President Tom Barkin delivered a speech on the US economy that has stuck with me ever since. He opened with the line: "If you too like a good mystery, then you like the US economy." What struck me is that the US farm economy fits the same description.

Since 1970, US farm income has moved in cycles of roughly six years of expansion and four years of correction, based on our analysis of USDA data (**Exhibit 1**). Expansions have come from demand shocks, such as the 1970s export boom and the biofuels buildout of the 2000s, and supply crunches like the 2012 drought. Corrections have come from higher prices driving supply growth to outpace demand and rebalance the market, or a fundamental slowdown

in demand. The current correction began after the 2022 peak of \$210.0 billion in net cash farm income and is now in its fourth year.

The aggregate data looks consistent with the orderly correction we would expect. Beneath it, several readings point in confusing, and sometimes even contradictory, directions. To name a few, land values are holding while rents fall. Input costs are at a record while crop prices are well below their peak. The beef cow herd has not expanded in line with prior cattle cycles. Farmer sentiment is moving unpredictably. New equipment prices have risen faster than crop prices. Seed and chemical companies are splitting up after a decade of mergers. Grocery prices keep rising as farm prices decline. This report works through ten of those mysteries, sets out the explanation we find most consistent with the data, and notes what we believe each could mean for lenders, investors, and agribusiness.

1. Why Are Land Values Holding When the Economics Likely Do Not Support Them?

To answer this question, we have to break it into two parts. The first is where land values stand today. The second is where demand will come from, which is likely to set prices today and in the future.

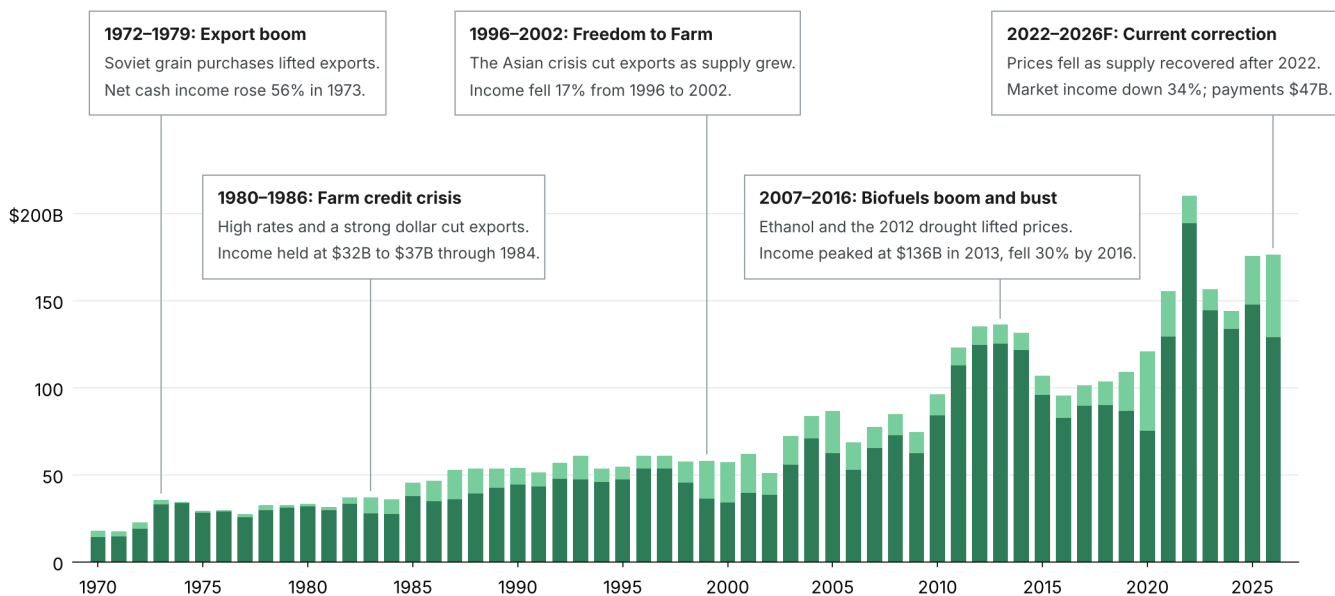
We look at where values stand through three lenses: lender surveys, transaction data, and underlying economics.

Lender surveys show values flat to slightly higher through the second quarter of 2026. In the Seventh District, values were flat year over year in the second quarter after a 3 percent gain in the first, according to the Federal Reserve Bank of Chicago.

Exhibit 1: Aggregate Farm Income Looks Strong, but Market Income Is Down a Third Since 2022

Net cash farm income, \$B

■ Market income ■ Direct government payments



Sources: USDA Economic Research Service (ERS), Farm Income and Wealth Statistics, Meridian Ag Advisors. Data as of October 18, 2026; USDA forecast of September 3, 2026. Nominal dollars. Market income is net cash farm income less direct government payments.

In the Tenth District, the Federal Reserve Bank of Kansas City reported values of nonirrigated cropland up about 1 percent, irrigated cropland up 4 percent, and ranchland up more than 7 percent. Additional lender survey data suggests land values are potentially peaking in the current cycle. In the first quarter, 56 percent of Chicago Fed survey respondents considered farmland overvalued and 1 percent considered it undervalued. Cash rents have also started to decline. In 2026, Seventh District cash rents declined 3 percent, a second consecutive annual decline, with Iowa down 4 percent, and in the Ninth District, nonirrigated rents fell more than 2 percent, according to the Federal Reserve Bank of Minneapolis.

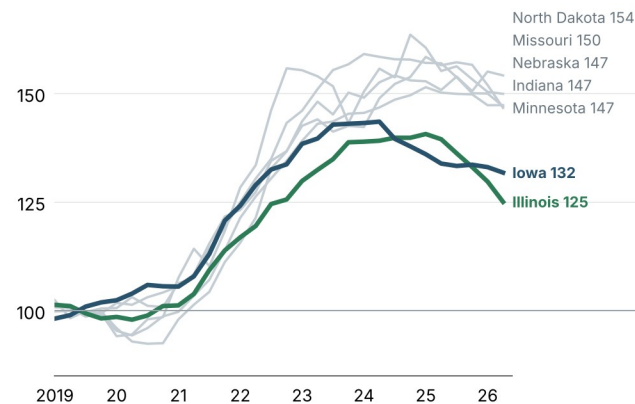
Transaction data shows more softness than the surveys. In the second quarter of 2026, the Acres.com farmland value index, built from courthouse sale records on a four-quarter trailing basis, was lower than a year earlier in six of the seven states in the Rural and Farm Finance Policy Analysis Center's fall 2026 leading indicators report. Measured from their recent peaks, sale prices are down 1 percent in North Dakota to 11 percent in Illinois, and in all seven states land values remain 25 to 54 percent above their 2019 level (**Exhibit 2**). Illinois and Iowa, the two largest corn and soybean land markets in the sample, have posted the smallest gains since 2019.

The underlying economics suggest values could be peaking. In 2025, average US cropland value was equal to 16.3 times corn operating return per acre and 17.1 times soybean operating return per acre,

compared to 1997 to 2025 averages of about 11 times, based on our analysis of USDA data (**Exhibit 3**).

Exhibit 2: Farmland Sale Prices Have Levelled Off Well Above Their 2019 Level

Farmland sale price index, 2019 = 100



Sources: Ifft, Parcell, and Roach, "RaFF's Leading Indicators of Farm Financial Stress: Fall 2026," RaFF Report EWS-2026-3, Oct. 10, 2026; Acres Farmland Value Index; Meridian Ag Advisors. Data as of October 18, 2026; latest quarter is second quarter 2026. Four-quarter trailing index, rebased to 2019 average = 100. Missouri is a nondisclosure state with limited transaction volume. Illinois and Iowa highlighted as the states with the smallest gains since 2019.

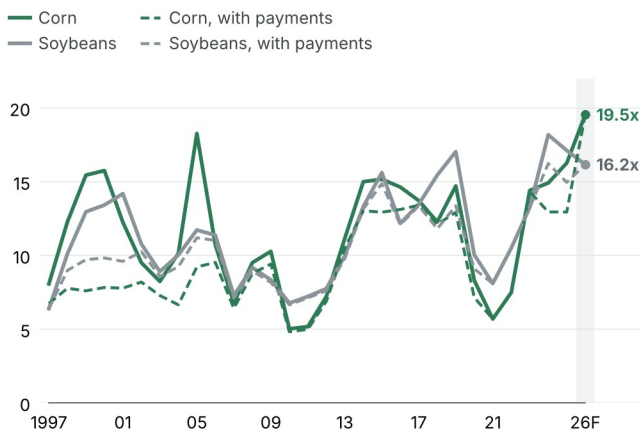
Said differently, at 2025 returns it would take about 16 years of corn operating returns or 17 years of soybean operating returns to pay for an acre of cropland. Including crop-specific government payments, which are partly our estimates, lowers the 2025 multiples to 12.9 times and 14.9 times, respectively. Based on USDA's October forecasts, the 2026 multiples rise to about 19.5 times for corn and 16.2 times for soybeans,

The information contained in this material is provided for informational purposes only and should not be construed as investment, lending, legal or tax advice, nor should it be relied on when making an investment or credit decision. It reflects the views of Meridian Agribusiness Advisors and is subject to change at any time without notice. Please see the end of this document for important disclosure information.

and USDA projects no Price Loss Coverage payments for either crop this year.

Exhibit 3: Cropland Is Priced Well Above Its Long-Run Multiple of Operating Return

Cropland value as a multiple of operating return per acre, Ratio



Sources: USDA ERS; USDA NASS; USDA FSA; CBO; GAO; CRS; farmdoc daily; Meridian Ag Advisors. Cropland value per acre divided by operating return per planted acre (ERS yield times marketing-year price, less ERS operating costs). Crop-specific payments are partly Meridian estimates; 2025 is preliminary. 2026 is a Meridian estimate from NASS 2026 land values, October 2026 WASDE prices and NASS production, ERS 2026 cost forecasts, and FSA's August 2026 projection of zero PLC payments; excludes ARC-CO and any new ad hoc aid. Data as of October 18, 2026.

The same gap shows up across the sector's balance sheet. USDA forecasts the farm sector's return on assets from current income at 3.0 percent in 2026, down from 4.1 percent in 2022. It forecasts the asset turnover ratio, or gross farm revenue per dollar of assets, at 0.15, near the series low of 0.14 set in 2016 to 2019 in USDA data back to 1960.

Our read is that actual values are somewhere between the three measures. Surveys record what lenders and appraisers expect land to bring in a sale and rely on recall. Acres.com records what sold, from a thin and uneven sample of land transactions. Returns point to values that are high relative to what the land earns. Values are likely flat to slightly lower, not rising, even as returns have fallen sharply.

Turning to demand, low transaction volume is partly holding prices up. Farm Credit Illinois's chief appraiser reported that transaction volume fell over the past year, and most parcels that trade come from estates and retirements rather than lender-driven sales. With few forced sellers, a small number of sales sets the price.

Farmers remain the largest buyers, according to Farmer Mac's Jackson Takach. On the best tracts of land, farmers who generated surplus cash in the 2020 to 2022 expansion compete with investors and developers. Non-farm demand adds to that bid in some

markets. In the first half of 2026, buyers spent about \$6 billion on land for data centers, up 79 percent from a year earlier, according to Avison Young. That figure covers all land, not only farmland, but the Chicago Fed credited data center and solar demand with supporting second-quarter farmland values in its district.

Where values depend on crop returns alone, they are softening. In 2026, Nebraska cropland values declined for a second year, with center pivot irrigated cropland down 2 percent statewide and 4 to 8 percent in four of the state's eight districts, according to the University of Nebraska-Lincoln. Nontillable grazing land rose 7 percent on higher cattle prices. Adjusted for inflation, Seventh District values fell 3.7 percent year over year in the second quarter, the largest real decline in a decade, according to the Chicago Fed.

For lenders, collateral risk is concentrated in cropland whose value rests on crop returns alone. Grazing land is supported by cattle income, and tracts near development by non-farm buyers. Fall and winter listing volume will show whether thin trading keeps holding values up.

2. Why Are Crop and Livestock Inputs So Persistently High?

For most of the last cycle, farm prices kept pace with input costs. Measured from January 2019, USDA's index of prices received for crops averaged 32 points above the index of prices paid by crop producers in 2022 (**Exhibit 4**). That cushion narrowed to 3 points in 2024 and turned negative in 2025, as crop prices fell and input costs held. Livestock producers kept their cushion longer on record cattle prices, with prices received 31 points above prices paid in 2025. So far in 2026, that gap has narrowed to 2 points, as prices received fell from their early 2025 peak and the cost of purchased livestock rose.

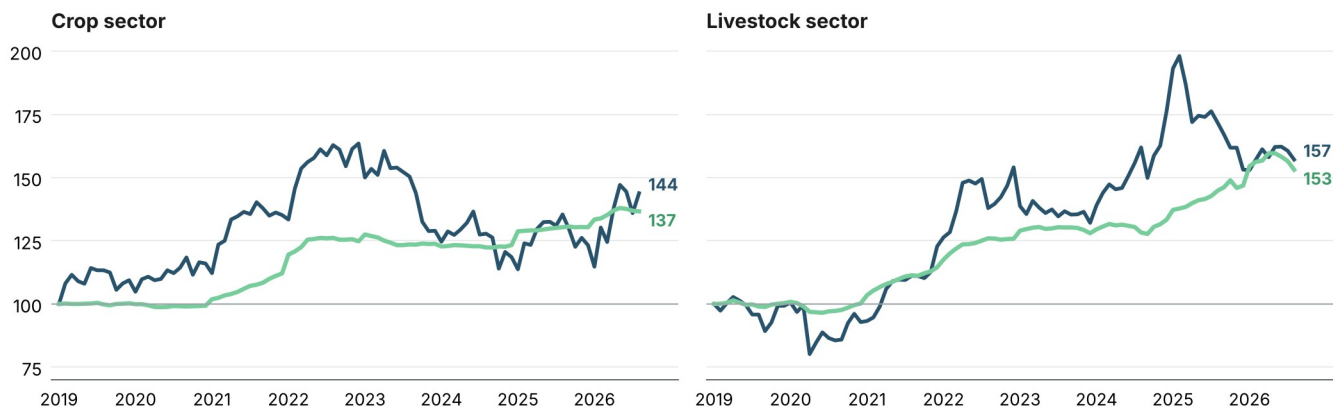
USDA's expense forecast shows where the costs are concentrated. On September 3, USDA raised its 2026 production expense forecast by \$15.1 billion to a record \$492.8 billion, up 4.5 percent from 2025. Fuel and oil expenses are projected to rise 28.8 percent, fertilizer 15.3 percent, and livestock and poultry purchases 11.4 percent. Pesticides, down 6.6 percent, and feed, down 2.1 percent, are the only major categories projected lower. Corn, meanwhile, traded near \$4.70 per bushel this spring, compared with more than \$7 in 2022.

Fertilizer shows the squeeze most clearly. In 2026, fertilizer is expected to absorb about 21 percent of budgeted corn revenue, compared with a 2010 to 2021 average of 17 percent.

Exhibit 4: Crop and Livestock Input Prices Have Kept Rising as Prices Received Declined

USDA prices paid and received by sector specialization, Jan 2019 = 100

— Prices received — Prices paid



Sources: USDA National Agricultural Statistics Service, Agricultural Prices, indexes of prices received and prices paid, Meridian Ag Advisors. Data as of October 18, 2026; monthly through August 2026, 2025 and 2026 values preliminary. Rebased to January 2019 = 100 from 2011 = 100.

In the fourth week of March, retail urea averaged \$826 per ton, up 46 percent from a year earlier, according to DTN. With corn near \$4.45, a ton of urea cost a record 185 bushels, according to National Corn Growers Association surveys, compared with about 125 bushels in April 2022.

We see two reasons input prices have stayed high. The first is tariffs and supply disruptions. North Dakota State University estimates tariffs on some crop chemicals rose to 12 to 18 percent, from 5 to 6 percent. After the strike on Iran disrupted traffic through the Strait of Hormuz, the route for about a fifth of the world's oil supply, energy prices jumped and farm-level urea prices rose 56 percent in eight weeks.

The second is the cost base of the input manufacturers themselves, which moved higher and has stayed there. For example, natural gas accounts for as much as 80 percent of the variable cost of producing ammonia and urea. Since early 2022, European nitrogen plants have run at roughly 75 percent of normal output because of gas costs, according to StoneX.

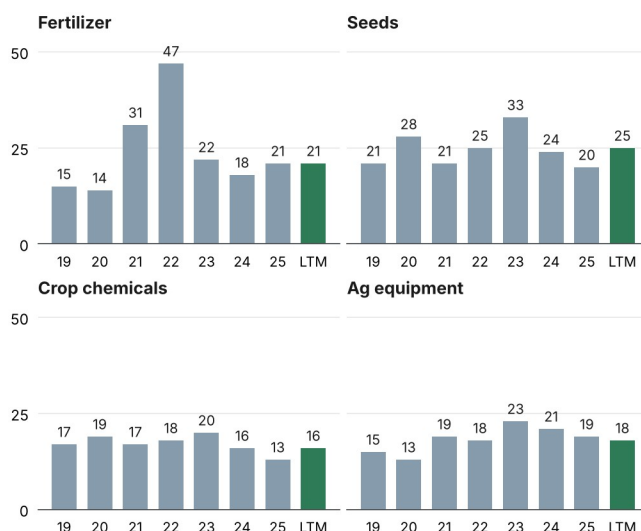
Supplier results suggest those higher costs have largely been passed through, rather than higher prices generating outsized margins (**Exhibit 5**). If suppliers were pricing well above their costs, margins would have widened and stayed wide. Fertilizer margins spiked from 15 percent in 2019 to 47 percent in 2022, when nitrogen prices tracked the gas shock, then returned to 21 percent in the 12 months to June 2026. Seed margins ranged from 20 to 33 percent and stood at 25 percent, compared with 21 percent in 2019. Crop chemical margins fell to 13 percent in 2025, the lowest in the series, before recovering to 16 percent, still below 2019's 17 percent. Equipment margins were 18 percent, compared with 15 percent in 2019.

Part of the margin suppliers have kept came from cost programs rather than price. Corteva cut its net royalty

expense by about \$90 million in 2025 by replacing licensed traits with its own, expects a further \$120 million improvement in 2026, and reported more than \$300 million of productivity and cost benefits in crop protection in 2025. Nutrien reported beating a \$200 million annual savings target in 2025, and Mosaic is targeting \$250 million of run-rate savings by the end of 2026.

Exhibit 5: Input Supplier Margins Rose and Fell With the Cycle, Ending Modestly Above 2019

EBITDA margin, Weighted percent



Sources: FactSet, AlphaSense, Meridian Ag Advisors. Data as of October 18, 2026. Selected public companies; calendar-year figures from quarterly reported actuals; LTM is the four quarters to June 30, 2026. Nominal.

From 2021 through 2025, every major input category except feed and seed rose faster than general inflation, according to Purdue University, and USDA's preliminary 2027 estimates show most rising again. Prices have held in fertilizer, where supply is concentrated and tariff-protected, and in seed, where traits are patented. They have weakened in crop chemicals, where generic competition limits pass-

The information contained in this material is provided for informational purposes only and should not be construed as investment, lending, legal or tax advice, nor should it be relied on when making an investment or credit decision. It reflects the views of Meridian Agribusiness Advisors and is subject to change at any time without notice. Please see the end of this document for important disclosure information.

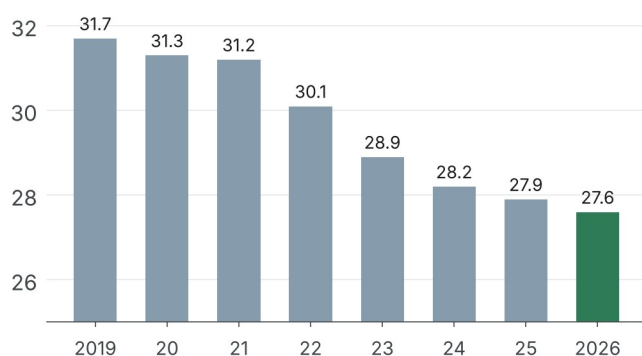
through. For growers, the evidence points to an input cost base that reflects suppliers' own higher costs and is unlikely to return to 2019 levels.

3. Why Is the Cattle Herd Not Being Rebuilt?

Cattle cycles have historically run 8 to 12 years from one herd low to the next, according to USDA ERS data. The last contraction ended on January 1, 2014, at 88.2 million head, and the herd peaked at 94.7 million head in 2019. On that timeline, rebuilding would be well underway. Instead, on January 1, 2026, the beef cow herd stood at 27.6 million head, the smallest since 1961 and the seventh consecutive annual decline, according to USDA (**Exhibit 6**).

Exhibit 6: The Beef Cow Herd Has Shrunk for Seven Straight Years

Beef cows on Jan. 1, million head



Sources: USDA National Agricultural Statistics Service, Cattle, Meridian Ag Advisors. Data as of October 18, 2026; inventory on January 1, 2026. Beef cows that have calved.

The lack of rebuilding stands out because the price signal has been the strongest on record. In May, live cattle futures exceeded \$250 per hundredweight, and Rabobank estimated 2025 cow-calf returns above \$1,000 per head. The supply response has been limited. In 2025, the implied culling rate fell to 8.4 percent, compared with a 9.8 percent average since 1986, according to Kenny Burdine of the University of Kentucky, and beef replacement heifers held for 2026 breeding rose just 0.9 percent to 4.71 million head.

We see four reasons the herd has not rebuilt. First, the industry needs fewer cows to produce the same beef. Average steer dressed weight reached a record 955 pounds in 2025, up from 872 pounds in 2014, according to USDA, so roughly 9 percent fewer steers produce the same volume of beef. Kansas State University's Glynn Tonsor notes that from 1996 to 2025, dressed weights rose 26 percent while commercial slaughter fell 19 percent and beef production still rose 2 percent.

Second, ranchers lack the forage to carry more cows. In April, roughly three-quarters of the US beef cow herd was in areas of drought, according to CattleFax data, and on September 29, 57 percent of US cattle inventory was in drought areas, compared with 24

percent a year earlier, according to USDA. In a December 2025 Farm Credit survey of more than 1,000 cow-calf producers, those not expanding ranked grazing conditions, drought forecasts, and pasture availability as their top reasons.

Third, selling heifers pays more today than keeping them. In July, 500- to 550-pound feeder heifers averaged \$397 per hundredweight in Oklahoma City, or about \$2,100 per head. Heifers held back were 12.9 percent of the July 2025 beef cow herd, the lowest since 1973, according to Burdine. "The market is certainly telling you and rewarding you for producing and selling weaned calves right now," Oklahoma State University's Derrell Peel said last year. Higher interest rates and an average beef operator age of 58.3 years shorten the payback many are willing to underwrite on a retained heifer.

Fourth, beef-on-dairy calves are filling part of the gap. Beef-on-dairy calf production rose from about 50,000 head in 2014 to 3.22 million in 2024, according to CattleFax, and these cattle now account for an estimated 12 to 15 percent of fed slaughter, as section 5 describes.

The price signal has now weakened before rebuilding started. On August 21, the President announced, and on August 26 proclaimed, a 300,000-metric-ton increase in the tariff-rate quota for lean beef trimmings. On September 16, live cattle futures settled near \$218 per hundredweight, down 6.4 percent year over year.

Peel notes that cyclical price peaks have historically followed sustained heifer retention, which has not yet occurred. For packers and feeders, tight supply is likely to persist into 2028. For cow-calf lenders, forage is the variable to watch, whatever the calf price.

4. Why Are Specialty Crops Going Through So Much Pain?

Several segments of specialty crop growers have experienced financial pressure over the last five years, and grower groups have advocated for a significant increase in federal support. USDA forecasts average net cash farm income for specialty crop farm businesses at \$286,700 in 2026, down 3 percent from 2025, the only crop specialization forecast to decline. Over the same period, average income for corn farm businesses is forecast to rise 46 percent and for soybean farm businesses 44 percent. Of the \$12 billion in bridge assistance USDA announced in December 2025, \$11 billion went to row crops and \$1 billion to specialty crops and sugar.

California almonds show how the trough has played out. The season-average grower price fell from \$4.00 per pound in 2014 to \$1.40 in 2022, according to USDA NASS. At the same time, bearing acreage rose every year through 2025, from 930,000 acres to 1.40 million

The information contained in this material is provided for informational purposes only and should not be construed as investment, lending, legal or tax advice, nor should it be relied on when making an investment or credit decision. It reflects the views of Meridian Agribusiness Advisors and is subject to change at any time without notice. Please see the end of this document for important disclosure information.

(**Exhibit 7**). University of California cost studies show almond operating expenses rose about 40 percent between 2019 and 2024 while gross returns fell 36 percent. In the Sacramento Valley, returns above total cost moved from a \$205 per acre gain in 2019 to a \$4,280 per acre loss in 2024. Potato, apple, and wine grape markets show similar imbalances.

We see three reasons why the pain in specialty crops seems sizable and prolonged. The first is cost, led by labor. US field and livestock wages rose 30 percent from 2019 to 2024, to \$18.12 per hour, according to USDA's Farm Labor Survey. The H-2A adverse effect wage rate, the minimum for guest workers, rose 40 percent nationally and 43 percent in California from 2019 to 2025. A Labor Department rule that lowered those rates in October 2025 has since been vacated by a federal court, which ordered a replacement by December 30, leaving 2027 labor costs uncertain.

The second is trade. US horticultural imports rose 53 percent from fiscal 2019 to fiscal 2025, to \$101.6 billion, while exports rose 19 percent, to \$41.6 billion, according to USDA. The horticultural trade deficit roughly doubled to about \$60 billion. Imports supplied 59 percent of US fresh fruit and 35 percent of fresh vegetables in 2023, up from 50 percent and 20 percent in 2007, according to USDA ERS, and Mexico accounted for most of that supply. On the export side, China's retaliatory tariffs since March 2025 have cut into what had been a major market for US tree nuts.

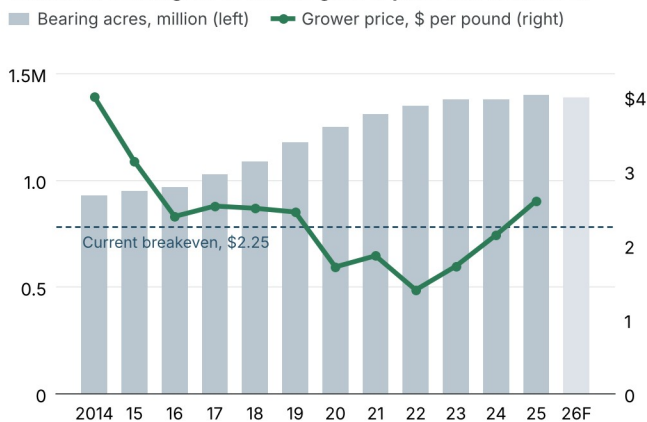
The third is a standoff over who takes the loss. Orchards and vineyards are long-lived assets, and their values rose sharply over the last cycle. California almond orchards averaged \$43,458 per acre in 2022, up from \$34,000 in 2019, according to the California Chapter of the American Society of Farm Managers and Rural Appraisers, and Fresno almond land sold for up to \$18,000 per acre in 2012. Even after declines since 2022, many owners hold equity built over the past decade, which lets them borrow against the land to carry losses rather than pull trees. Lenders have deferred principal and extended loan terms rather than force sales, according to the association's 2025 Trends report. Cutting acres carries a removal cost, and replanting means several years without revenue. Each season of waiting keeps acres in production and extends the trough.

Almonds show how the trough ends. The Almond Board of California and Land IQ estimate bearing acreage declined in 2026 for the first time since 1995, and the grower price recovered to an estimated \$2.60 per pound in 2025, above the University of California-Davis breakeven estimate of about \$2.25. In wine, Jeff Bitter of Allied Grape Growers estimates that up to 50,000 acres of vineyards may need to come out to restore balance. In potatoes, 2026 plantings fell 3 percent to 873,000 acres, the fewest since 1952. For

lenders and investors in specialty crops, in particular permanent specialty crops, the almond sequence suggests recovery tracks the pace of removals rather than demand.

Exhibit 7: Almond Acreage Kept Rising After Prices Fell Below Breakeven

California bearing acres versus grower price and breakeven



Sources: USDA NASS, USDA ERS, University of California-Davis, Meridian Ag Advisors. Data as of October 18, 2026.

5. What Is the Long-Term Implication of Beef-on-Dairy?

Five years ago, beef calves and cull cows contributed about 5 percent of the average US dairy's bottom line. In 2026, the share is about 15 percent, according to Dairy Herd Management, and approaches 20 percent on some operations. CattleFax estimates beef-on-dairy calf production rose from about 50,000 head in 2014 to 3.22 million in 2024 and projects 5 million to 6 million head in 2026 (**Exhibit 8**). Dairy now supplies about one in five pounds of US beef, according to CoBank, and beef-on-dairy cattle account for an estimated 12 to 15 percent of fed slaughter, according to an industry report led by Purina and CattleFax.

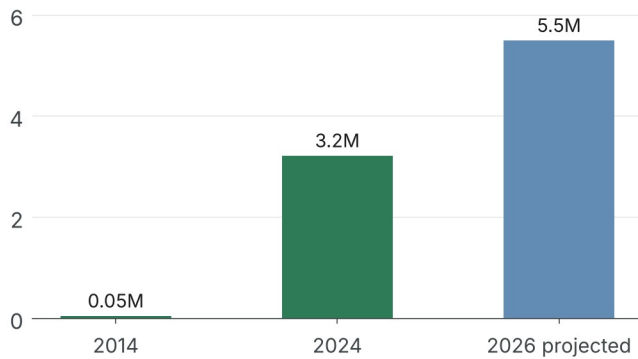
The near-term economics are straightforward. In early October, beef-cross bull calves a few days old sold for about \$1,250 per head at New Holland, Pennsylvania, compared with about \$990 for Holstein bull calves, according to USDA market reports. Between 2020 and 2025, beef semen sales to dairies rose 62 percent while conventional dairy semen sales fell 47.4 percent, according to CoBank and the National Association of Animal Breeders.

The longer-term effects are now showing in the dairy replacement pipeline. On January 1, 2026, dairy replacement heifers totaled about 3.90 million head, the lowest in the recent NASS series. CoBank estimates the industry is roughly 800,000 heifers short through 2026 and expects to add back about 285,000 in 2027 and 75,000 in 2028. Replacement prices average more than \$3,000 per head, with top heifers at Upper Midwest auctions clearing \$3,400 to \$4,400, compared with \$1,140 in April 2019. Dairies have kept

older cows instead, and the herd grew to 9.57 million head, the largest since 1993, alongside about \$11 billion of new processing capacity that needs more milk than the heifer pipeline can supply quickly.

Exhibit 8: Beef-on-Dairy Calf Output Has Grown From 50,000 Head to Millions

Beef-on-dairy calves, million head



Sources: CattleFax via Dairy Herd Management, Meridian Ag Advisors. Data as of October 18, 2026. 2026 is the midpoint of a 5 million to 6 million head projection.

On the beef side, crossbred dairy calves fill feedlot capacity that the beef cow herd cannot, which dampens the supply shortage that historically pushed ranchers to rebuild. Packers are moving toward red meat yield as a pricing signal, which tends to favor these cattle. The model depends on a calf premium tied to fed cattle prices, and live cattle futures fell from about \$251 per hundredweight in May to \$218 in September.

We see two long-term implications. Dairies now carry a beef revenue stream they cannot exit quickly, because rebuilding replacements takes about two years. And a growing share of US beef supply is set by breeding decisions in dairy barns, which is likely to make the beef cycle less responsive to calf prices than in past cycles.

6. Why Is Farmer Sentiment So Disconnected From Farm Economics?

In the last few months, the Purdue University-CME Group Ag Economy Barometer has confounded many. For example, in August, the Barometer rose to 135, its highest reading since December 2025, on an 11-point gain in expectations, while market income remained about a third below its 2022 peak. Days after the Barometer's release, USDA also added \$15.1 billion to its 2026 expense forecast and projected a 5.5 percent decline in inflation-adjusted net farm income. In September, the index fell 12 points to 123. A record 52 percent of respondents named input costs as their biggest concern, and 35 percent expected to be worse off a year from now, compared with 22 percent better off.

Since its launch, Barometer sentiment has not consistently moved with farm income (**Exhibit 9**). In

2022, when net cash farm income reached a record \$210.0 billion, the Barometer averaged 111, one of its lowest annual readings. In 2020, it averaged 143 with net cash farm income of \$120.9 billion. So far in 2026, the Barometer has averaged 121 on forecast income of \$176.4 billion.

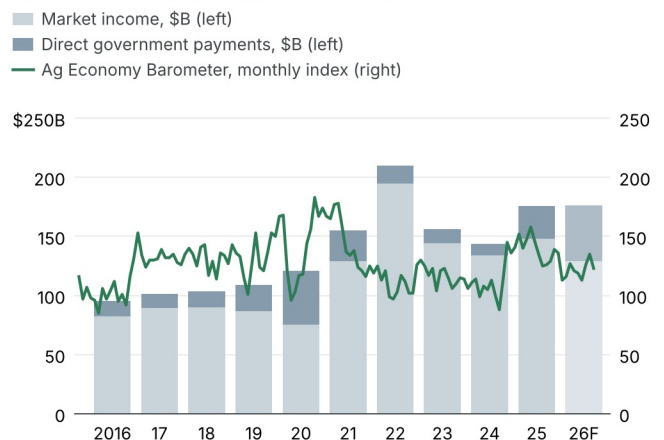
Our view is that the headline Barometer is a poor guide to farm finances and a better indicator of farmers' broad economic and political confidence. Three distortions in the Barometer drive our perspective.

The first distortion is what the index measures. Research by Purdue's Trey Malone and co-authors, covering November 2015 to September 2025, finds the Barometer moves most closely with small-business optimism, partisan consumer confidence, and policy uncertainty, and much less with commodity prices. Its correlation with the NFIB Small Business Optimism Index is 0.53, compared with 0.24 and 0.23 for monthly changes in corn and soybean futures prices. The largest monthly gain in the index's history followed the November 2024 election, before any policy had changed.

The second distortion is that the Barometer blends two groups with very different outlooks. In July, the Barometer averaged 143 among farms earning at least half their revenue from livestock and 116 among crop farms, a 27-point gap, according to an analysis of the survey by Purdue's Michael Langemeier and Joana Colussi. Asked about the next five years, 62 percent of respondents expected widespread good times for livestock producers, compared with 28 percent for crop producers.

Exhibit 9: Farmer Sentiment Has Not Consistently Moved With Farm Income

Net cash farm income versus farmer sentiment



Sources: Purdue University-CME Group Ag Economy Barometer; USDA ERS, Farm Income and Wealth Statistics; Meridian Ag Advisors. Data as of October 18, 2026. Barometer monthly through September 2026, October 2015 to March 2016 = 100. Net cash farm income annual, nominal, split into market income and direct government payments; 2026 is a forecast.

Additionally, the respondent pool is also weighted toward crop farms, with 70 percent of the target respondents being row crop farms and only 30 percent

The information contained in this material is provided for informational purposes only and should not be construed as investment, lending, legal or tax advice, nor should it be relied on when making an investment or credit decision. It reflects the views of Meridian Agribusiness Advisors and is subject to change at any time without notice. Please see the end of this document for important disclosure information.

livestock and dairy. While this is in line with the number of operations, it is not in line with the share of revenue. For example, livestock and livestock products account for slightly more than half of forecast 2026 cash receipts, \$287.3 billion against \$253.0 billion for crops, according to USDA. If the Barometer were weighted by farm receipts, the index would read higher than the published headline.

Timing adds a third distortion. In Farm Journal's The Scoop survey data we analyzed, roughly a quarter of corn growers had started seed decisions by the end of October and about a third had started fertilizer decisions. The September decline in the Barometer coincided with the start of that buying season, when growers first see input prices for the next crop. Said more bluntly, market analysts may review prices every month, but many farmers look a few times a year and often only when they are buying things.

For lenders and agribusiness, the Barometer's specific questions are more useful than its headline. The share naming input costs as the top concern, a record 52 percent in September, and the share expecting to need a larger operating loan, 21 percent in January, of whom 31 percent cited unpaid debt carried over from the prior year, track farm finances more directly than the overall index. Those readings line up with bank data and are more insightful and actionable for decision-makers.

7. Why Has New Ag Equipment Gotten So Expensive, and Where Could Things Go?

The list price of a 310-horsepower tractor rose 52 percent from 2019 to 2025, to about \$624,000, according to farmdoc daily machinery cost estimates. USDA's index of prices paid for farm machinery rose 39 percent over the same period, while the index of prices received for crops rose 16 percent (**Exhibit 10**).

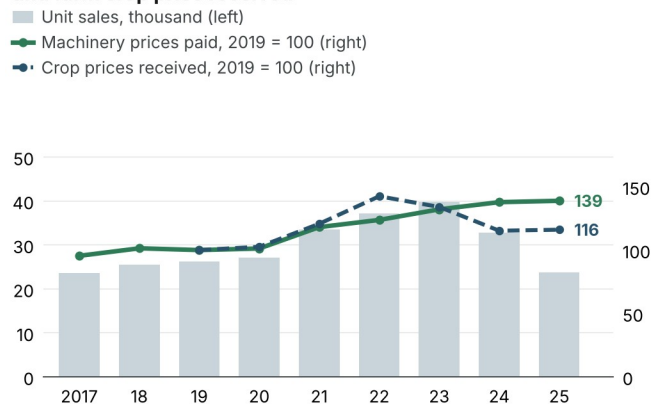
Three forces explain most of the increase. The first is manufacturing cost. The producer price index for farm machinery manufacturing rose 27 percent from January 2021 to December 2022 as steel, component, and labor costs climbed and supply chains tightened. It has risen another 6 percent since. The second is tariffs. In August 2025, Section 232 duties of 50 percent on steel and aluminum were extended to the metal content of tractors and many machinery parts. That raised costs for domestic manufacturers and importers alike, until the rate on certain agricultural equipment was cut to 15 percent in June. Deere guided to about \$1.2 billion of direct pretax tariff expense in fiscal 2026, double the prior year. The third is technology. Guidance, automation, and precision features that were options a decade ago are now standard on many large machines.

Our view is that lower unit sales are the result of these prices meeting softer farm economics. Retail sales of large tractors and combines fell 40 percent from 2023

to 2025, according to the Association of Equipment Manufacturers, and were down another 16 percent through August 2026. Tax policy can soften the cost, but only for some buyers. The One Big Beautiful Bill Act raised the Section 179 expensing limit to \$2.5 million and restored 100 percent bonus depreciation, and research suggests these provisions help stimulate capital investment. Using USDA farm survey data from 1996 to 2012, Williamson and Stutzman (2016) found that each \$1,000 increase in the Section 179 limit was associated with \$320 to \$1,110 of added farm investment. Expensing lowers the after-tax cost of a machine only for buyers with taxable income to offset, though, and fewer operations have that income in a down year. It can also pull purchases forward. In our view, many buyers who replaced equipment after the 2021 to 2022 income run are likely not due to replace for several years.

Exhibit 10: Machinery Prices Have Outpaced Crop Prices Since 2019

Large equipment unit sales versus farm equipment price paid and farm crop price received



Sources: USDA NASS, Agricultural Prices; Association of Equipment Manufacturers; Meridian Ag Advisors. Data as of October 18, 2026; annual data through 2025. Unit sales are US retail sales of 100+ horsepower two-wheel-drive tractors, four-wheel-drive tractors, and self-propelled combines. Price indexes are annual averages rebased to 2019 = 100.

The open question is whether farmers will run equipment longer. If they do, the equipment downturn is likely to outlast the farm income downturn, and dealers and manufacturers would face pressure on used inventory and new-machine pricing. In September, rural bankers' farm equipment sales index stood at 25.0, well below the neutral reading of 50, according to Creighton University's Rural Mainstreet survey. For lenders, longer machine lives mean older collateral and larger repair budgets. Early-order programs for 2027 models will be the first read on whether farmers are continuing to buy or making their machines last longer.

8. Why Are Ag Companies Breaking Themselves Apart After a Decade of Mega-Mergers?

Between 2017 and 2018, the global seed and crop protection industry consolidated into four large companies. Dow and DuPont merged in 2017, and

ChemChina acquired Syngenta for about \$43 billion the same year. Bayer acquired Monsanto for about \$63 billion in 2018, and BASF bought the seed and herbicide assets Bayer divested to secure antitrust approval. The logic was integrating seed traits with the chemistry that protects them and selling both to the same grower.

Eight years later the direction has reversed (**Exhibit 11**). On October 1, Corteva completed the spinoff of its seed business as Vylor. At the October 2025 announcement, the seed business carried about \$9.9 billion of estimated 2025 sales and crop protection about \$7.8 billion. Chief Executive Officer Chuck Magro described the opportunities in the two as "diverging."

The shifts also extend beyond Corteva. In February, FMC Corp. opened a review of strategic options that included a possible sale of the company. It concluded the review in July without a sale. Also in February, India's UPL announced a reorganization that would create a listed pure-play crop protection company by mid-2027. In September, Syngenta Group confidentially filed for a Hong Kong initial public offering of about \$5 billion, according to Bloomberg. Bayer is the exception. Its chief executive said in August that a breakup is off the table for now, following the resolution of its Roundup class actions. Debt reduction is a shared motive at FMC, UPL, and Syngenta. In our view, the antitrust divestitures required in the 2017 and 2018 deals make another combination of that scale unlikely.

Our emerging view is that the economics of seed and crop protection have fundamentally separated. Seed is a trait and germplasm business with patent protection, per-acre pricing, and limited generic competition. Crop protection is increasingly a generic market with significant competition from lower-cost Chinese and Indian producers. Based on our market data, about 60 percent of farmers now use generic crop protection products, up from 30 to 40 percent five years ago. Chinese manufacturers also carry lower production costs and spend less on selling, administration, and channel incentives, which materially changes the competitive dynamics for crop protection.

FMC shows the pressure from generics in several of its core products. In 2025, revenue fell 18 percent to \$3.47 billion, and the company reported a GAAP net loss of \$2.24 billion. It has since agreed to sell its India business and set out a plan to pay down \$1 billion of debt. On October 15, FMC said third-quarter adjusted EBITDA would be negative \$510 million to negative \$565 million. It is cutting prices on product held in distributor inventory and narrowing the gap between gross and net prices in its US rebate model.

Exhibit 11: A Decade of Ag Consolidation Is Now Unwinding

■ Consolidating ■ Unwinding

Year	Company	Action
2017	Dow, DuPont	Merger of equals into DowDuPont
2017	ChemChina, Syngenta	Acquisition, about \$43 billion
2018	Bayer, Monsanto	Acquisition, about \$63 billion
2019	DowDuPont, Corteva	Corteva ag unit spun off from DowDuPont
2026	FMC Corp.	Review ended without sale; India unit sale and asset sales to cut debt
2026	UPL	Restructured to a pure-play crop protection unit
2026	Syngenta Group	Hong Kong IPO filing, about \$5 billion
2026	Corteva, Vylor	Vylor seed unit spun off from Corteva
2027	BASF Agricultural Solutions	Frankfurt IPO readiness targeted

Sources: Company filings and announcements, Meridian Ag Advisors. Data as of October 18, 2026. Deal values as reported at closing.

For growers and retailers, separate companies are likely to price independently, which could weaken bundled discount programs and channel incentives. FMC's rebate cut shows how that can play out. Retailers that earned rebates on combined volumes may see thinner margins. Growers are likely to see lower net prices on off-patent chemistry and continued price strength in seed, where trait owners continue to capture a portion of the additional value created.

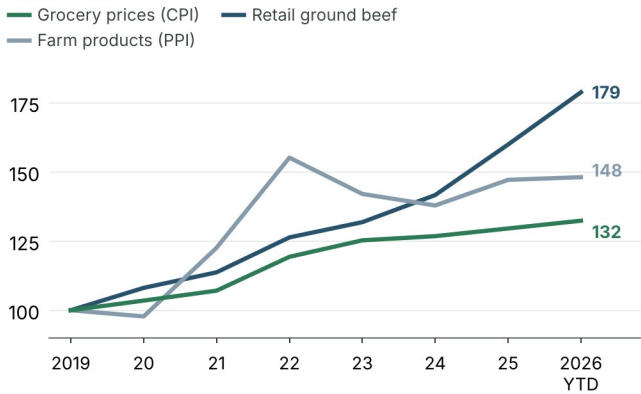
9. Why Are Food Prices High When Farm Prices Have Declined?

In August, the consumer price index, or CPI, for food at home stood about 12.5 percent above its level in May 2022, according to the Bureau of Labor Statistics. May 2022 was the peak of the producer price index, or PPI, for farm products, which has since fallen about 12 percent. Grain prices fell further and declined about 52 percent from the second quarter of 2022 to the third quarter of 2025, as measured by the PPI for grains. In the second quarter of 2026, the grain index was still about 46 percent below that peak.

On a 2019 base, both farm products and grocery prices are higher, in part because cattle and eggs carry heavy weight in the farm index (**Exhibit 12**). The difference is in the magnitude. Farm prices rose sharply into 2022 and fell back. Grocery prices have risen in every annual average since 2019.

Exhibit 12: Grocery Prices Have Risen Every Year While Farm Prices Peaked in 2022

Consumer price paid and farm price received for farm products, 2019 = 100



Sources: Bureau of Labor Statistics (CPI food at home, seasonally adjusted; PPI farm products; average price of 100 percent ground beef) via FRED, Meridian Ag Advisors. Data as of October 18, 2026. Annual averages; 2026 is January to August.

The divergence is largely driven by the fact that, outside a few outliers, the farm share of the food dollar is too small for farm prices to set retail prices. In 2024, the farm share was 11.8 cents of each dollar US consumers spent on food, according to the USDA ERS Food Dollar series, and 18.5 cents of each dollar spent on food at home. The rest pays for processing, packaging, transportation, energy, trade, and food service, and the associated labor, inputs, and capital required across the value chain. Labor is the largest of those costs. In 2024, salaries and benefits of food system workers equaled 54.1 cents of each food dollar in ERS's separate cost-type series. Those wages, leases, and service contracts are typically renegotiated upward and rarely downward. Given this cost structure, a 46 percent decline in grain prices changes the cost of a box of cereal or a loaf of bread by a small fraction of its shelf price.

Beef is an exception. Cattle make up a much larger share of the retail beef price, and supply is short for the reasons described in section 3. In August, retail ground beef averaged \$6.92 per pound, up 82 percent from its 2019 average of \$3.81.

For farm groups, the political conversation about food inflation tends to land on agriculture even though most of the retail price is set after the farm gate. For agribusiness, most of the value in the food chain is added after the farm gate and is largely driven by the cost of labor. For consumers, changes in farm prices are unlikely to show up in grocery prices outside a limited set of goods like beef.

10. Is History Repeating, or Only Rhyming?

Comparisons to the 1980s farm crisis come up in most discussions of a current downturn, and in this downturn the sequence is similar. Both downturns followed a demand-driven boom that pushed land

values and input costs higher. In both, market income fell for several years while federal payments rose to fill part of the gap. Direct payments equaled about 36 percent of net farm income in 1987, as published at the time, compared with about 30 percent forecast for 2026.

The measures that set the depth of the 1980s crisis look different today. **Exhibit 13** compares the two downturns at the same point, four years after each peak. The sector debt-to-asset ratio peaked at 22.2 percent in 1985, according to USDA ERS, compared with 13.5 percent forecast for 2026. Among the 2,424 Minnesota farms in the University of Minnesota's FINBIN database, about 54 percent carried debt above 40 percent of assets in 2025, and 21 percent carried debt above 60 percent. FINBIN farms are commercial operations, not a random sample. Still, the comparison suggests leverage among commercial operators is closer to 1980s levels than the sector ratio implies. The difference is the cost of carrying it. The prime rate averaged 18.9 percent in 1981 and 9.9 percent in 1985, compared with 7.0 percent today. Land values also tell a different story. Iowa farmland fell 56 percent from 1981 to 1985, according to Iowa State University's survey, compared with about 2 percent from the 2023 peak to 2025.

Measured by cash flow rather than leverage, stress today is potentially more narrow. In 2025, FINBIN farms with debt above 60 percent of assets still covered scheduled debt payments 1.17 times. Our own farmer data suggests that 10 to 12 percent of farmers are in a tight working capital position, compared with roughly 35 percent during the 1980s.

The safety net is the largest structural difference. In 1980, crop insurance covered about 7 percent of planted acres, according to the Government Accountability Office. By 2018, about 85 percent of planted principal crop acres were insured, and the program carried \$158.7 billion of liability in the 2024 crop year, according to USDA's Risk Management Agency. In the 1980s, losses were absorbed largely through falling land values, farm exits, and lender failures, and 62 agricultural banks failed in 1985 alone. In this downturn, a larger share of the loss is being absorbed by federal programs.

In our view, that shift changes the risk profile. Direct payments of \$47.4 billion account for close to 30 percent of 2026 net farm income, and \$26.5 billion of that, more than half, is ad hoc assistance authorized outside the farm bill. Income that requires new appropriations each year carries a different risk for lenders than income from crop and livestock sales. It moves part of the downturn from farm balance sheet risk to policy risk. Farm programs are well supported, but they are a fundamentally different risk to underwrite.

The information contained in this material is provided for informational purposes only and should not be construed as investment, lending, legal or tax advice, nor should it be relied on when making an investment or credit decision. It reflects the views of Meridian Agribusiness Advisors and is subject to change at any time without notice. Please see the end of this document for important disclosure information.

The lurking variable for the farm sector is debt the official data may not capture and what entities have exposure. USDA's farm debt statistics are built mainly from reports by regulated lenders, and credit from input suppliers, cooperatives, equipment makers, and fintech lenders is only partly reflected. In October, Land O'Lakes Chief Executive Officer Beth Ford said the cooperative's financing arm had grown from about \$100 million in committed loans a year earlier to more than \$1 billion for the 2027 crop year. By our estimate based on farmer survey data, about half of US commercial farms relied on vendor or nontraditional lenders to cover operating expenses this past season. That means the sector debt-to-asset ratio likely understates leverage among the farms that rely on it most. It also means that nontraditional lenders, including equipment manufacturers, retailers, and cooperatives, could be exposed to debt in a way fundamentally different than they were in prior downturns.

Exhibit 13: Comparing the 1980s and Today's Farm Economy

Measure	1985: Four years after the 1981 peak	2026: Four years after the 2022 peak
Sector debt-to-asset ratio	22.2% (1985)	13.5% (2026F)
Farms with debt above 40% of assets	21% of all farms; 34% of family-size commercial farms (Jan. 1985)	About 54% of Minnesota FINBIN farms; 21% above 60% (2025)
Farms under financial stress	Roughly 35% negative cash income (1987; N. Harl, Fig. 2.9)	10% to 12% of farmers in a tight working capital position (Spring 2026, Meridian farm data)
Prime rate	9.9% (1985 average)	7.0% (October 2026)
Iowa farmland value from peak	-56% (1981 to 1985)	-2% (2023 to 2025)
Insured share of crop acres	Under 30% of eligible acres (1980s average)	About 85% of principal crop acres (2018)
Direct payments, share of net farm income	About 24% (1985)	About 30% (2026F)

Sources: USDA ERS (AIB-492, AIB-500, AIB-733, ECIFS 8-1, farm sector solvency ratios, Sept. 3, 2026 forecast); Federal Reserve H.15; Iowa State University Land Value Survey; FDIC, History of the Eighties; GAO RCED-93-98; N. Harl, The Farm Debt Crisis of the 1980s; RMA; University of Minnesota FINBIN; Meridian Ag Advisors. In the 1980s, stress deepened after 1985; Iowa land values bottomed in 1986 and payments' share of income peaked in 1987. Measures and farm universes differ by row. Data as of October 18, 2026.

Our suspicion is that this cycle rhymes with the 1980s in its sequence and differs in its severity and in who absorbs the losses. Agriculture is likely to exit it with a different cost structure and input supply chain, a

reorganized livestock sector, and a larger federal share of income than it carried into it. We will be watching nontraditional loan portfolio performance, land values, farmer working capital, and operating margins for signs of improvement or deterioration.

What the Ten Mysteries Have Us Thinking About Going Into 2027

The ten mysteries point to a few questions that are likely to set the direction of the farm economy over the next 12 months, and to the data that should answer them.

Will land adjust from the value side? Rents have already fallen and transaction prices have softened in most of the Corn Belt, while survey values have held. The test is fall and winter listing volume. If estate and retirement sales rise faster than the buyer base of investors, developers, and cash-rich growers, survey values are likely to converge toward transaction prices. That should show in the third- and fourth-quarter Federal Reserve surveys and in Acres.com sale data.

Will input pricing break before grower margins recover? Fertilizer and seed suppliers have held margins through four years of lower crop prices, and crop chemical suppliers have not. The pace of fall input bookings, prepay volumes, and 2027 fertilizer price lists will show whether growers defer purchases, shift to generics, or cut rates, and which suppliers absorb the difference.

When will the herd rebuild? Pasture conditions in the Plains and Southeast are likely to matter more than the calf price, and beef-on-dairy calves will continue to fill part of the gap. The January 1, 2027 cattle inventory, scheduled for late January, will show whether heifer retention continued after the August import quota and the decline in feeder prices.

Which side moves first in specialty crops? Growers, lenders, and investors in permanent crops are each waiting for the others to absorb losses. Spring 2027 acreage reports for almonds, wine grapes, and potatoes, along with any increase in lender-driven restructurings, will indicate whether removals are accelerating enough to shorten the trough.

How much of 2027 income will depend on Washington? Direct payments account for close to 30 percent of 2026 net farm income, and more than half of that came from ad hoc assistance. USDA's December 2 forecast, the Senate farm bill markup, and any further supplemental assistance will set how much of 2027 income comes from markets and how much from appropriations.

How much farm debt sits outside the official data? Vendor, cooperative, equipment, and fintech credit has grown through the downturn and is only partly captured in USDA's debt statistics. Fall prepay and

The information contained in this material is provided for informational purposes only and should not be construed as investment, lending, legal or tax advice, nor should it be relied on when making an investment or credit decision. It reflects the views of Meridian Agribusiness Advisors and is subject to change at any time without notice. Please see the end of this document for important disclosure information.

input-financing volumes and USDA's planned research on vendor credit will show how much leverage is outside the sector balance sheet today, and whether it is concentrated among the farms already under the most pressure.

Where could financial stress concentrate? Aggregate ratios remain far from the 1980s, while carryover debt

and loan repayment problems are rising in specific groups of farms. Fourth-quarter Federal Reserve credit surveys and year-end bank delinquency data will show whether that stress stays concentrated among highly leveraged row crop and specialty operations or begins to spread into other types of farms or to other parts of the agriculture value chain.

Important Disclosure Information

All information contained in this material is as of October 2026 unless otherwise indicated.

This material is for informational purposes only. It should not be copied, distributed, published or reproduced, in whole or in part, or disclosed by any recipient to any other person without the express written consent of Meridian Agribusiness Advisors ("Meridian").

The views and opinions expressed in this material are those of Meridian analysts and are subject to change at any time without notice. This material does not constitute an offer of any service, nor a recommendation to buy or sell any security, commodity, farmland or other asset, or to adopt any investment, lending or marketing strategy.

There can be no assurance that any of the trends described in this material will continue or will not reverse. Past events and trends do not imply, predict or guarantee future events or results. Meridian has no responsibility to update any of the information provided in this material and makes no representation or warranty, expressed or implied, as to its accuracy or completeness, including information obtained from third parties.

Certain information contained in this material may be forward-looking in nature. Due to various risks and uncertainties, actual events or results may differ materially from those reflected or contemplated in such forward-looking information. Forward-looking statements may be identified by terms such as "may," "will," "should," "expect," "anticipate," "estimate," "project" or "believe."

This material may reference trade names or trademarks of companies not affiliated with Meridian. Their use is not intended to imply any relationship with, or endorsement by, those companies.

The information contained in this material is not intended to provide, and should not be relied upon for, accounting, legal, tax or credit advice. Recipients should consult their own advisors.

Past performance is not necessarily indicative of future results.

For information on how Meridian handles client data and confidential material, see the [Meridian Privacy and Confidentiality Policy](#).

© 2026 Meridian Agribusiness Advisors. All rights reserved.

meridianagadvisors.com