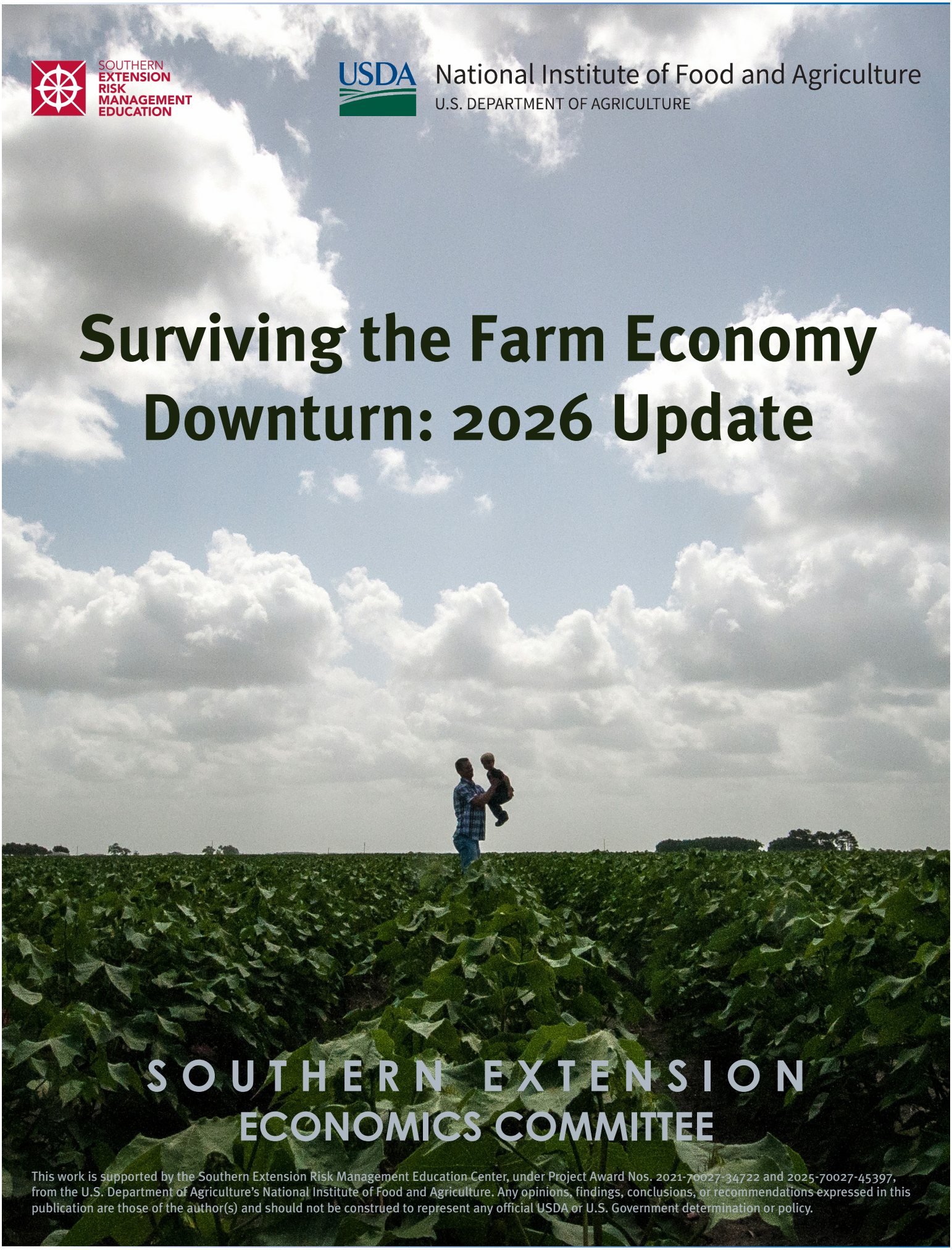
SOUTHERN EXTENSION RISK MANAGEMENT EDUCATION

USDA National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

Surviving the Farm Economy Downturn: 2026 Update



SOUTHERN EXTENSION ECONOMICS COMMITTEE

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Surviving the Farm Economy Downturn: 2026 Update

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Setting the Stage

Comparing the Current Situation to Previous Farm Financial Downturns

Joe Outlaw and Bart Fischer

Introduction

Agricultural producers in the United States are once again experiencing a downturn and struggling financially. However, this time, it's primarily crop farms that are struggling, while most livestock operations are faring much better, and beef cattle operations are thriving thanks to high cattle prices. Crop farms are losing money, and unfortunately, some will go out of business. Typically, those that are not going out of business are having to cut expenses, restructure debt, and look for additional sources of income to survive (Shaffer and Ray). This is nothing new to farmers and ranchers who have been through previous downturns.

However, the causes or economic circumstances this time seem quite different from those of the financial crisis of the 1980s and even the more recent downturn from 2014 to 2019. The primary problem in the 1980s (more in the Review of the 1980s below) was low prices that were made exponentially worse by very high interest rates and loan defaults that resulted in the value of the loan collateral (land) falling, putting the entire agricultural economy in a bad spot.

More recently, the 2014 to 2019 downturn came after record or near record prices for most crops during 2012 to 2013 (Table 1). The downturn came to an end as President Trump secured significant agricultural concessions from China, highlighted by the January 2020 "Phase One" trade agreement. Even with the global shutdown associated with COVID-19 in 2020, agricultural markets were fairly strong, masking a significant problem with input prices until 2024, when crop prices began falling.

The current downturn (2024 to current) isn't, singularly, the result of low crop prices, rather it is the combination of a little lower prices and signifi-

Table 1: Commodity Prices, 2012 to 2026.

Price	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Cotton ($/lb)	0.7790	0.6130	0.6120	0.6800	0.6860	0.7030	0.5960	0.6630	0.9140	0.8480	0.7610	0.6300	0.6176	0.6405
Wheat ($/bu)	6.8700	5.9900	4.8900	3.8900	4.7200	5.1600	4.5800	5.0500	7.6300	8.8300	6.9600	5.5200	4.9036	5.5613
Sorghum ($/bu)	4.2780	4.0320	3.3096	2.7890	3.2200	3.2592	3.3380	5.0400	5.9360	6.3840	4.9300	4.0700	3.6148	3.7591
Corn ($/bu)	4.4600	3.7000	3.6100	3.3600	3.3600	3.6100	3.5600	4.5300	6.0000	6.5400	4.5500	4.2400	4.0962	4.2078
Soybeans ($/bu)	13.0000	10.1000	8.9500	9.4700	9.3300	8.4800	8.5700	10.8000	13.3000	14.2000	12.4000	10.0000	10.2135	10.3520
Rice ($/cwt)	16.3000	13.4000	12.2000	10.4000	12.9000	12.6000	13.6000	14.4000	16.1000	19.8000	17.3000	14.8000	11.8012	13.0682
Peanuts ($/ton)	498.0000	440.0000	386.0000	394.0000	458.0000	430.0000	410.0000	420.0000	486.0000	536.0000	538.0000	521.0000	489.3810	489.4635
Cows Omaha ($/lb)	0.7638	1.0409	0.9976	0.7145	0.6674	0.6119	0.5897	0.5856	0.6351	0.7635	0.9578	1.2007	1.4349	1.5164
Ok City 6-7 Steer ($/lb)	1.5884	2.2507	2.2652	1.5344	1.5582	1.5920	1.5365	1.4582	1.5765	1.8151	2.4299	2.8275	3.6435	3.8269
NE Direct Steers ($/lb)	1.2589	1.5456	1.4812	1.2086	1.2152	1.1712	1.1678	1.0851	1.2240	1.4440	1.7554	1.8712	2.2437	2.3484
Barrow/Gilt ($/lb)	0.6405	0.7603	0.5023	0.4616	0.5048	0.4593	0.4795	0.4318	0.6729	0.7121	0.5859	0.6156	0.6501	0.6435
Milk Price ($/cwt)	20.1100	24.0700	17.2100	16.3400	17.6900	16.2800	18.6500	18.1600	18.5400	25.3900	20.3400	22.5500	21.1500	18.7537

Source: USDA Historical Prices and FAPRI Projections from FAPRI-MU Report #01-26.

cantly higher production costs. The lower prices are the result of lost export market opportunities due to Trump administration policies aimed at leveling the export playing field with our trading partners and increased competition from abroad – especially from Brazil. The significant increase in most input prices in combination with flat commodity prices that have been hovering close to the U.S. average cost of production for most crops has many producers experiencing the cost-price squeeze often talked about by agricultural economists (Figure 1). Individual crops are being impacted by different factors. For example, soybeans and rice have been hard hit by other countries' trade policies, while corn, cotton, and rice, as larger input users, have been impacted by rising production costs. All are impacted by higher interest rates, but crops with larger per acre costs are affected even more due to higher borrowing needs. Because different cop mixes are grown regionally, the impacts of this downturn have hit some regions harder. Note the significant divergence between the index of prices paid and prices received over the past few years. Looking at some of the individual input indices (Figure 2) provides an idea of how most of the input prices have been steadily increasing while fertilizer, chemicals, and fuel retreated somewhat from their historic highs a few years ago. Of course, this annual data and cost projections were developed before the recent sharp increase in fuel costs following the beginning of the war with Iran.

The current farm downturn has led to farmers and ranchers, politicians, and industry observers asking whether we are headed toward another 1980's magnitude farm financial crisis. There are several similarities between the current downturn in farm financial health and the conditions in the 1980s, but there are also some important differences. This paper will evaluate whether the conditions are similar enough to conclude that we might be headed toward a 1980's type of financial crisis.

Review of the 1980s

The U.S. farm financial crisis experienced in the 1980s is second only to the Great Depression in terms of widespread, devastating farm financial losses that affected all types of farms across the nation. In the 1980s, the sustained decline in farm incomes and corresponding drop in land values triggered a large number of loan defaults, leading to a significant number of farm bankruptcies. Many states had to set

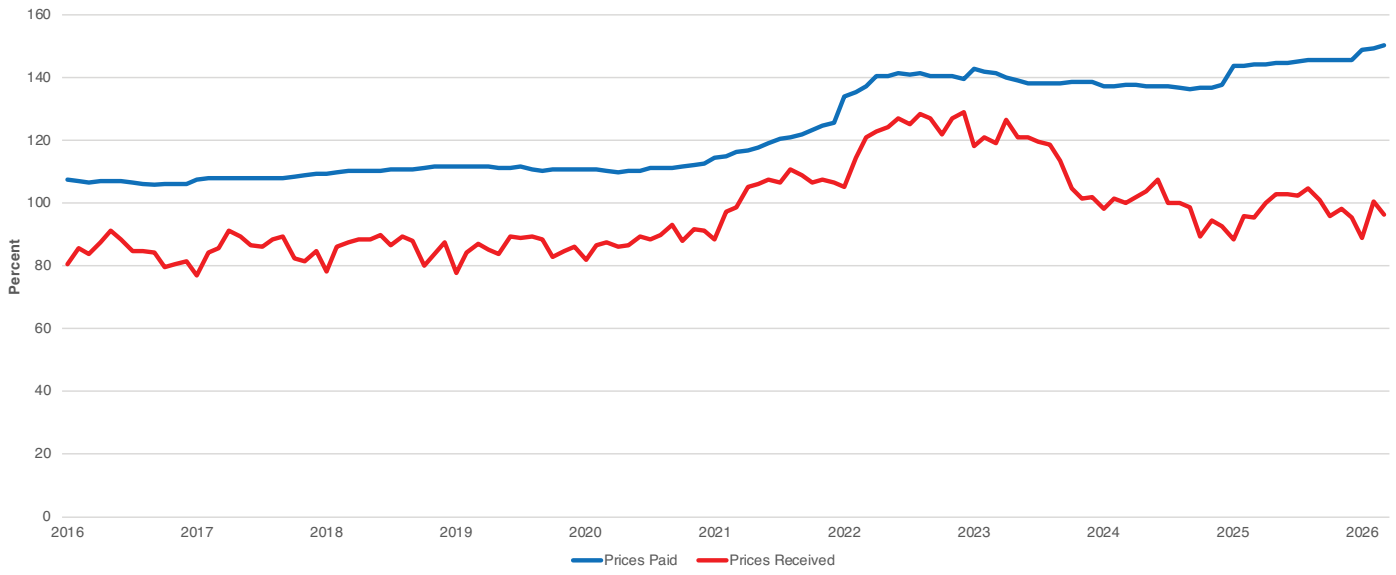


Figure 1: Crop Farm Prices Paid and Received Indexes (2011=100), All Items, Monthly, 2016 to 2026.
Source: U.S. Department of Agriculture-NASS.

up suicide prevention hotlines as farmers who saw no feasible way out of their financial problems took their own lives, and in some cases the lives of their entire families and their pets (Farkas). The problems of the 1980s were preceded by such good conditions in the mid to late 1970s that some refer to this period as "the golden age of agriculture".

This review will focus on the circumstances in the 1970s that led to the 1980's farm financial crisis. A review of these circumstances is necessary to determine whether the current conditions in agriculture are similar enough to lead to a similar crisis for farmers.

As stated earlier, the economic conditions and policies that were instituted in the United States during the 1970s, combined with events around the world, helped create the conditions that led to the 1980's farm financial crisis. During the 1970s, lower trade barriers, bad weather around the world, and large grain purchases by the Soviet Union led to record (at the time) prices and farm incomes (Manning). These conditions led Secretary of Agriculture Earl Butz to proclaim that farmers should "plant fence row to fence row" and "get big or get out". This means that farmers were encouraged to plant all available acres and look to add land to their farm operations. The implication was that the good times would last indefinitely. Farmers responded to these conditions just as the Secretary asked; they got bigger by borrowing money and taking on debt. And land prices soared as farmers and others bid more and more for land they needed to expand and take advantage of high commodity prices.

The economic conditions during the 1970's featured negative real interest rates, which means that after adjusting for inflation, it did not cost farmers to borrow money from an agricultural lender to purchase land and add to their operation. Under these conditions, farmers took on a lot of debt that was backed by their land. Conditions were so good that the U.S. Farm Credit System changed its lending requirements to allow agricultural lenders to lend farmers up to 85 percent of the value of a producer's assets, which had been set at 50 percent for many years (Bovard). This means that farmers could go out and buy more land and use up to 85 percent of their owned assets (which were mostly land) as collateral on the loan.

So, in a nutshell, if commodity prices ever fell, then land prices would fall, the value of the land

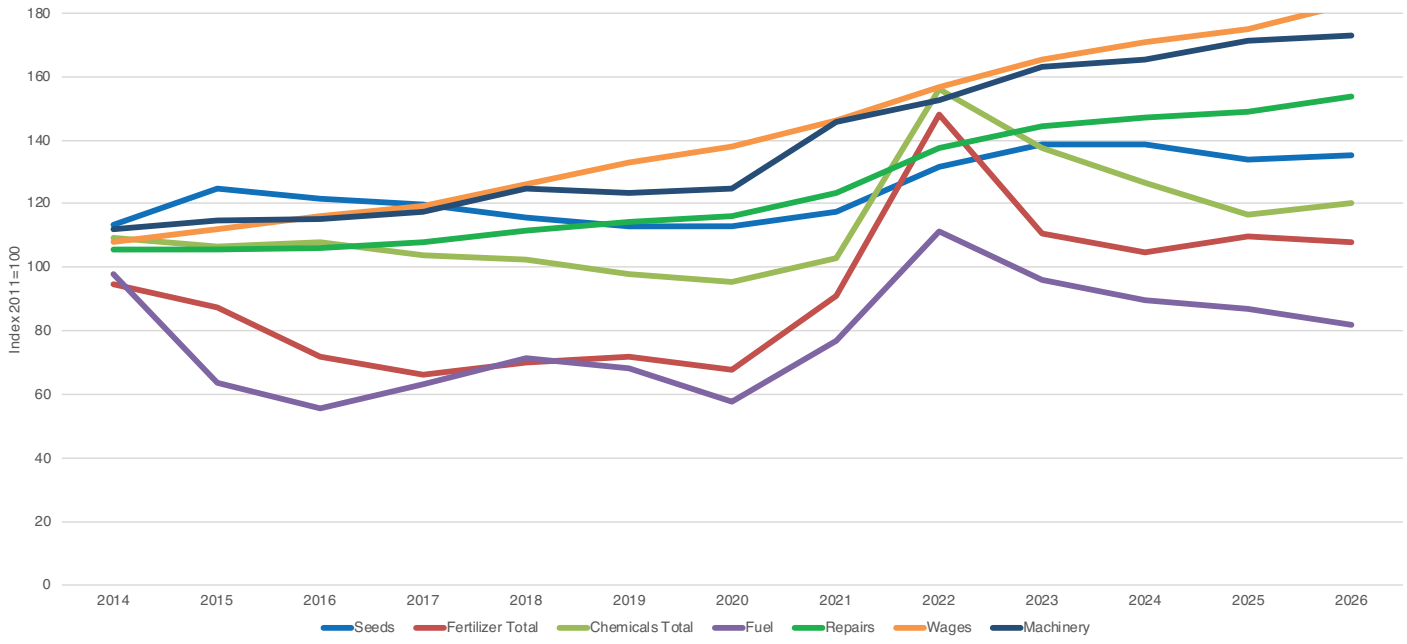


Figure 2: Prices Paid Index for Selected Inputs, (2011=100), 2014 to 2026.
Source: FAPRI-MU Report #01-26.

that farmers had pledged as collateral on their loans would fall, and since commodity prices fell, the loans wouldn't be repaid to banks. The banks would foreclose on the farm and would receive less value in land than they had lent to farmers, causing the banks to fail. And that and more is what happened in the 1980s (Stam and Dixon).

By the 1980s, the "fence row to fence row" production caused commodity prices to decrease substantially, causing land prices to fall. Many farms and banks failed. Some farmers and lenders committed suicide. The 1980s are remembered as a terrible time for agriculture (Bovard).

The current conditions in agriculture have some worried that we are headed for another farm crisis. In a summary of recent call reports, Martinez et al reported that the banks were seeing increased loan demand and decreases in loans being repaid to banks across the South.

Materials and Methods

To determine whether current conditions are trending toward those in the 1980s, each of the factors identified as important in the literature review will be compared for the current downturn versus the 1980s and the downturn from 2014 to 2019.

This analysis will use published data for each of six economic categories from the U.S. Department of Agriculture, Bureau of Labor Statistics, and Federal Reserve.

The six categories to be analyzed are:

- Net Farm Income – as farm income declines, producers are worse off
- Inflation Rates – as inflation rates increase, inputs become more expensive
- Interest Rates – as interest rates increase, the cost of borrowing money increases
- Exchange Rates – as exchange rates increase, it costs more for foreign customers to purchase our products, and results decreased demand for our products
- Land Values – as land values increase, the borrowing capacity increases
- Debt-To-Asset Ratio – as debt-to-asset ratios increase, farmers own less of their assets, indicating financial weakness.

Results

Graphs of data for the six measures used in the analysis are displayed in Figures 3-11 and discussed below. For ease of identifying differences between

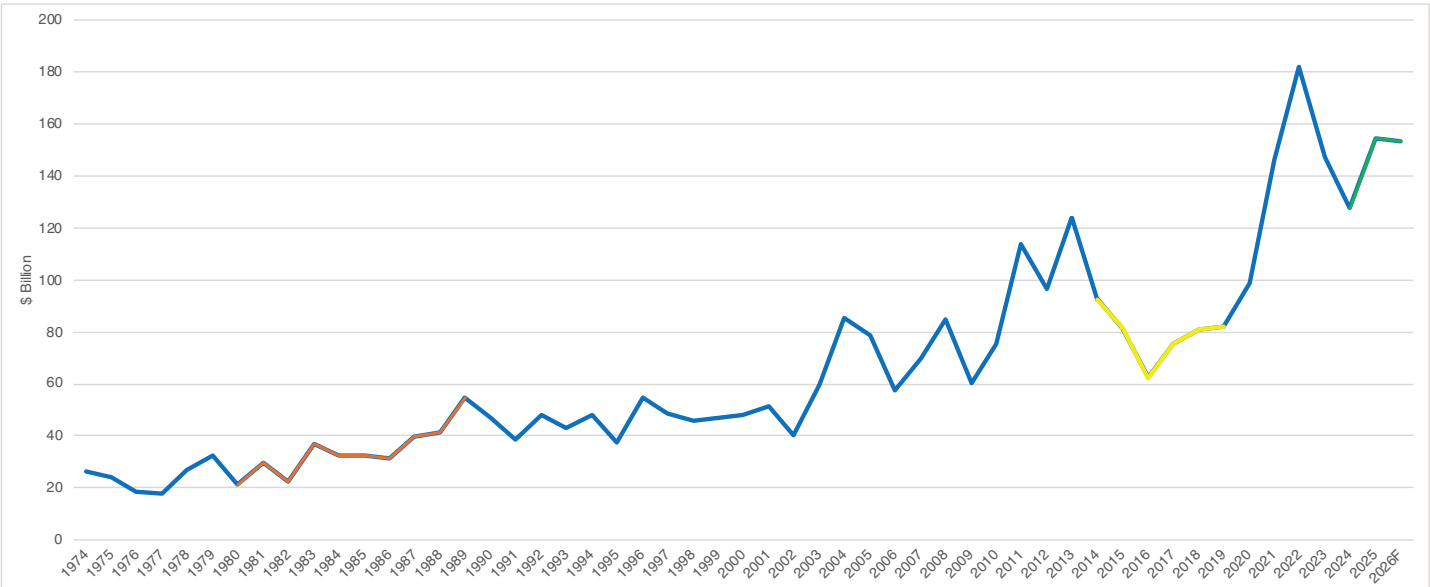


Figure 3: U.S. Net Farm Income, 1974 – 2026F.
Source: U.S. Department of Agriculture. Farm Income and Wealth Statistics.

the 1980s, the 2014-2019 period, and the current period is indicated by a different color on each graph. The 1980s are the red portion of each line, the 2014-2019 downturn is in yellow, while the most recent downturn (2024-2026) is green.

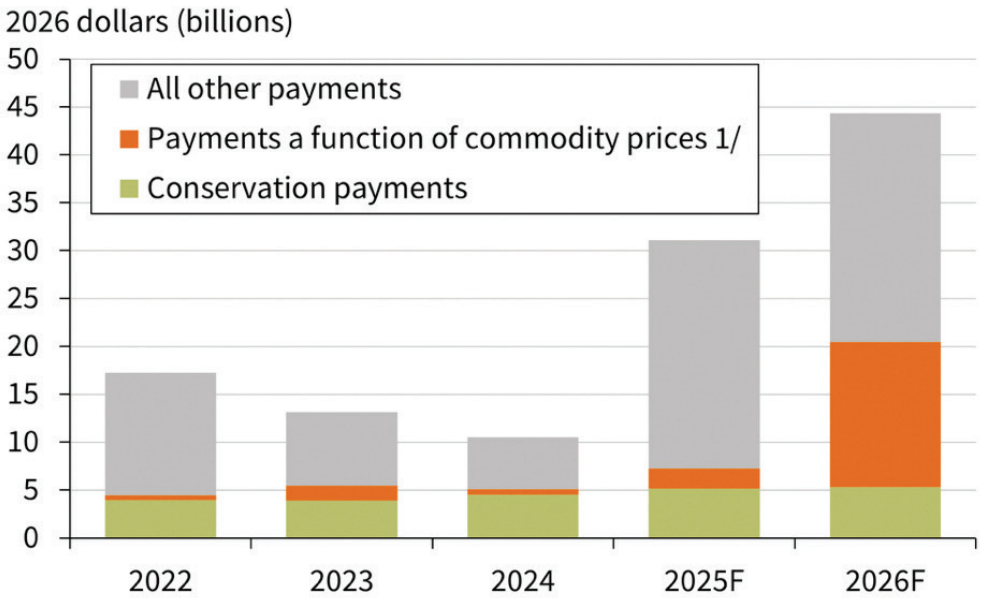
Net Farm Income

For most of the past 50 years, U.S. net farm income in 2026 real (inflation adjusted) dollars has displayed an upward trend with considerable year to year variability (Figure 3). The 1980s (highlighted in red) are considered to be the very worst financial conditions experienced by U.S. farmers and ranchers since the Great Depression. The most recent farm economy downturn, 2014-2019 (highlighted in yellow), actually had a bigger drop in net farm income than the 1980s. The current downturn (highlighted in green) does not show up in the net farm income data as a problem.

How can this be? Fortunately for crop farmers, Congress and both the Trump and Biden administrations have provided *ad hoc* assistance to make up for losses from the current cost price squeeze (Figure 4). While there are some that have said these payments are going directly to input suppliers, providing an incentive to continue raising prices, the point that should not be lost in all of this is that Congress and Administrations have identified problems and been more than willing to help producers.

Inflation Rates

The rapid increase in inflation rates during the 1970s ended by the end of the decade. Inflation decreased from an all-time high of 14 percent annually in 1979 to an average 4 percent level by the end of the 1980s (Figure 5). Compared to the 1980s, during the 2014-2019 period, inflation was very low. The current downturn has an inflation rate of around 2.5 percent, which is around the average rate over the past 50 years. The consumer price index is a commonly used measure of inflation that calculates the changes in prices of a market basket of con-



Note: F = forecast. Values are adjusted for inflation using the U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product Price Index (BEA API series code: A191RG) rebased to 2026 by USDA, Economic Research Service.
1/ Includes Price Loss Coverage, Agriculture Risk Coverage, loan deficiency payments (excluding grazeout payments), marketing loan gains, and Dairy Margin Coverage payments.

Figure 4: Government Payments to U.S. Producers.
Source: U.S. Department of Agriculture.

sumer goods over time. What should not be lost is the difference between the inflation measure by the market basket of consumer goods and inputs used in agriculture, shown in Figure 2.

Interest Rates

Inflation adjusted or real interest rates on 10 year notes trended downward from the 1980s to zero in 2013 (Figure 6). The 2014-2019 downturn saw a small increase, and in the current downturn,

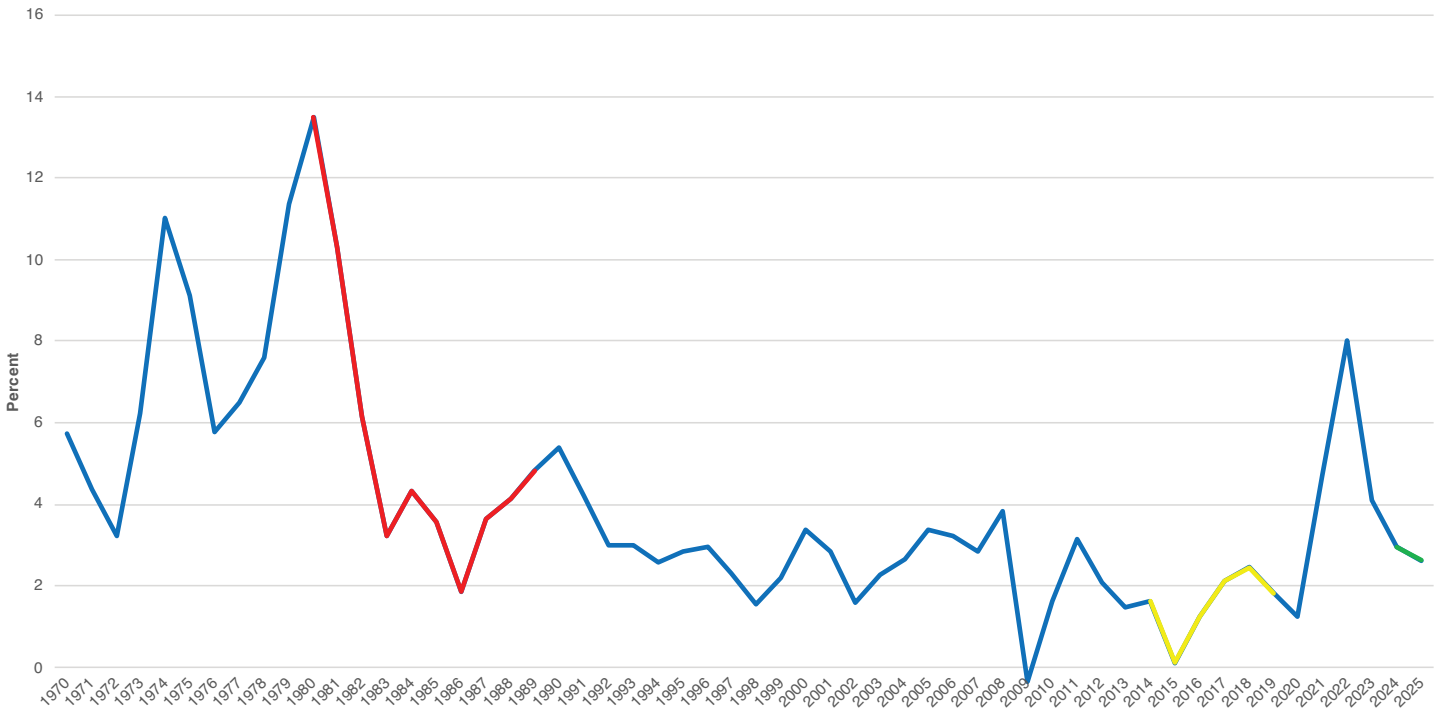


Figure 5: Annual Change in Consumer Price Index 1970 to 2025.
Source: Bureau of Labor Statistics.

Figure 6: 10 Year Real Interest Rates, Monthly, January 1982 to April 2026.
Source: Federal Reserve Economic Data, Federal Reserve Bank of St. Louis.

producers are experiencing the highest real interest rates in 20 years. While trending higher, current real Interest rates are considerably lower than during the 1980s.

Exchange Rates

The trade weighted exchange rate is a general measure of the strength of the U.S. dollar relative to a basket of other currencies. The data graphed in Figure 7 is an index that was developed, where the data for each year was divided by the number for 2015. It can be interpreted as the index goes higher, the value of the U.S. dollar is higher relative to the basket of other currencies. This means our products are relatively more expensive for our trading partners to buy. Relative to the decade of the 1980s,

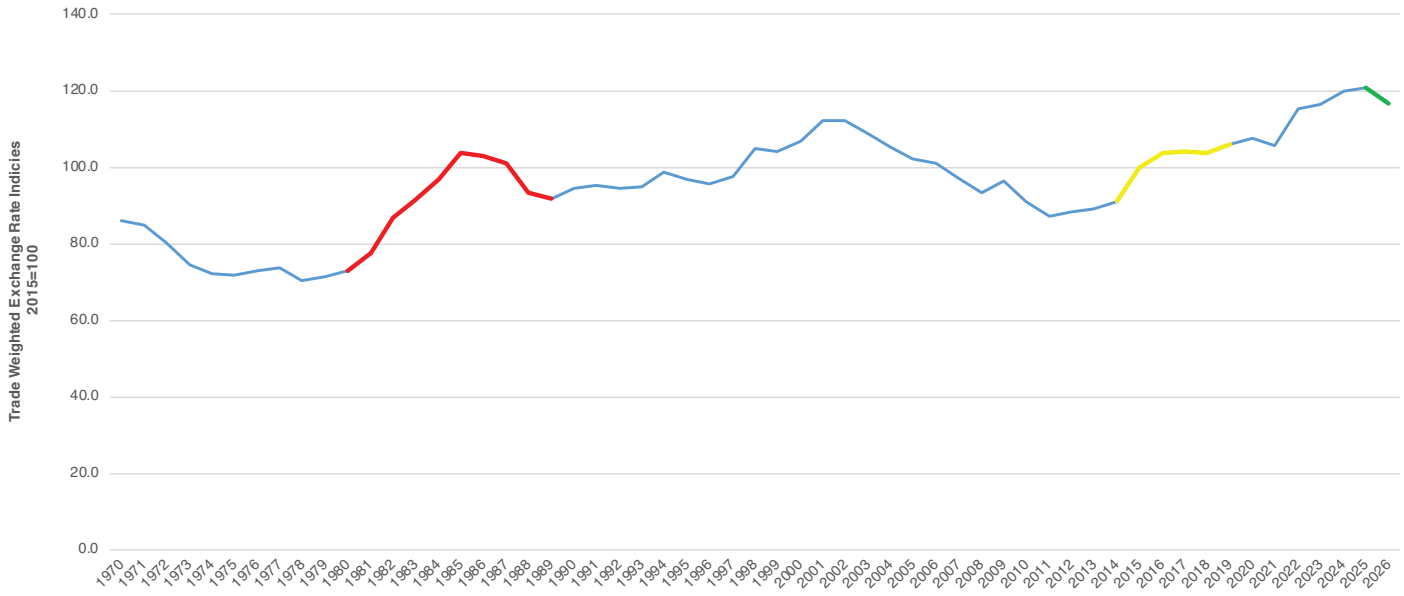


Figure 7: U.S. Agricultural Trade Weighted Exchange Rate, 1970 to 2026.
Source: U.S. Department of Agriculture. Farm Income and Wealth Statistics.

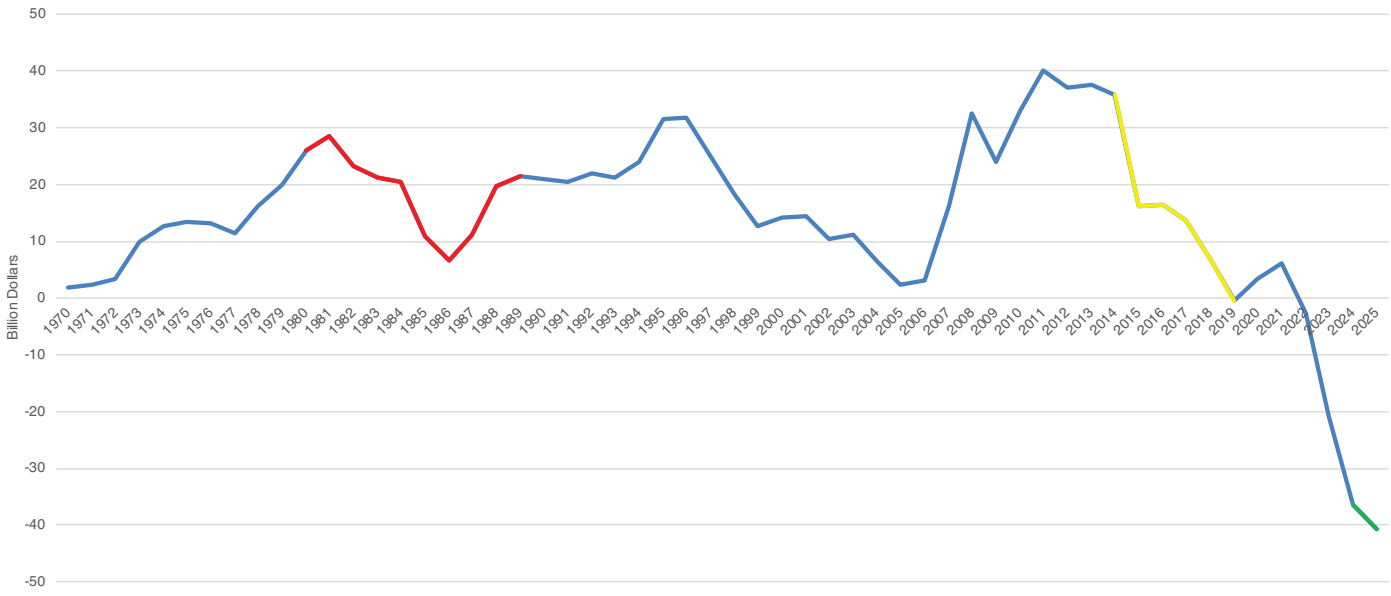


Figure 8: U.S. Agricultural Trade Balance, Calendar Year, 1970 to 2025.
Source: USDA, ERS, based on data from U.S. Department of Commerce, Bureau of the Census.

the value of the U.S. dollar is currently significantly stronger. This can be interpreted as a negative result because selling U.S. products to foreign customers will be more expensive and therefore harder to do. It is worth noting that exchange rates are not the only factor driving trade. Changing consumer demands for goods like avocados and other fruits and vegetables, and increasing beef imports as domestic production declines, have contributed to the negative trade balance. A stronger dollar has certainly contributed to the current agricultural trade balance that has been negative since 2022 (Figure 8).

Land Values

The value of land used on U.S agricultural operations decreased throughout the decade of the

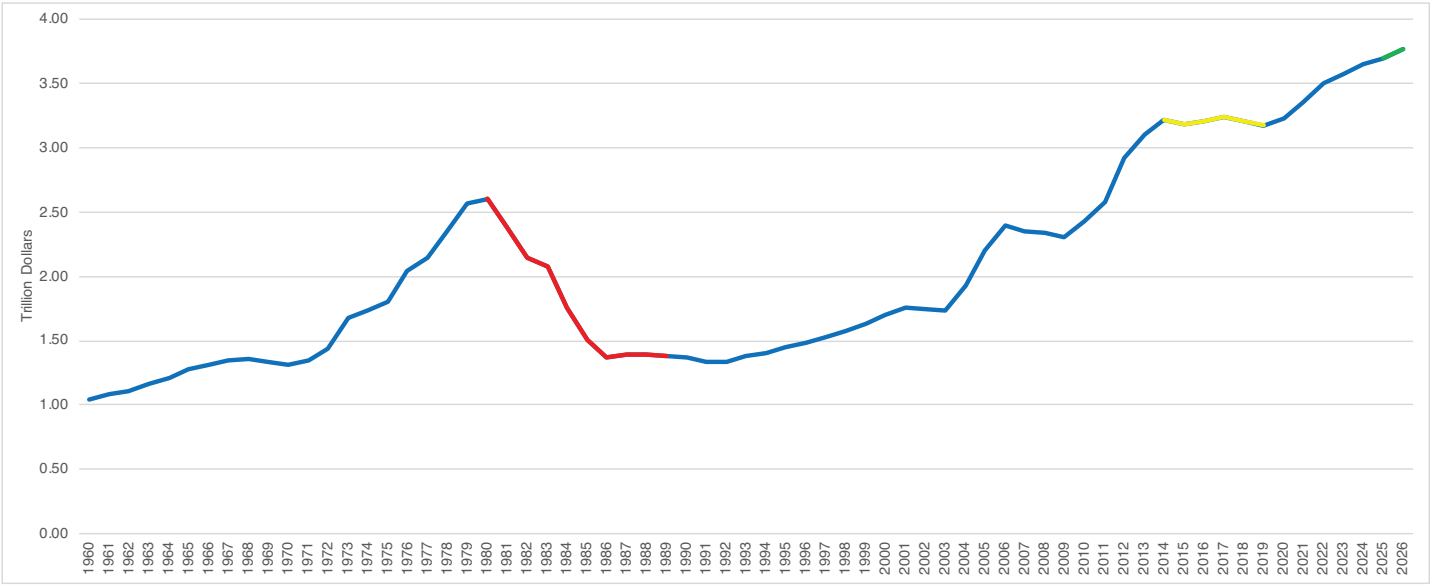


Figure 9: Value of U.S. Farmland Adjusted for Inflation (2026 Dollars) in Trillions, 1960-2026.
Source: U.S. Department of Agriculture. Farm Income and Wealth Statistics.

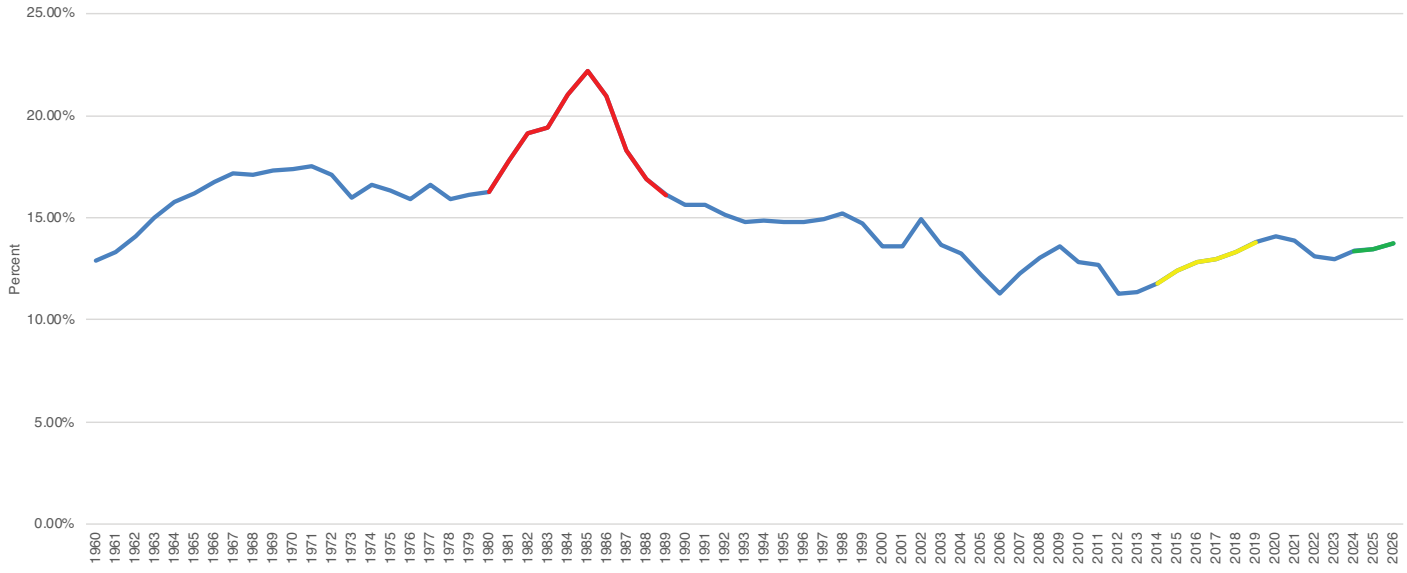


Figure 10: U.S. Farm Debt-To-Asset Ratio in Percent, 1960 – 2026.
Source: U.S. Department of Agriculture. Farm Income and Wealth Statistics.

1980s, which significantly lowered collateral values (Figure 9). The current value of land in the United States has risen almost annually since the 1980s, with the primary exception during the 2014-2019 downturn (in yellow). Land values during the current downturn have increased annually. The results for land values would indicate that the problems associated with declining collateral values during the 1980s have not reoccurred.

Debt-To-Asset Ratio

The debt-to-asset ratio for U.S. agriculture adds all the debt on farms and divides by the value of all assets on farms. As the debt-to-asset ratio increases it is generally considered that farmers are in a worse financial position because debt makes up a larger proportion of their assets. The U.S. debt-to-asset ratio increased each year through 1985 before declining each year through the end of the period (Figure 10). In general, the U.S. debt-to-asset ratio has been at historic lows throughout the past two decades. However, it should be acknowledged that the trend during the current downturn is increasing.

Figure 11 provides information on the Federal Reserve delinquency rates over the past 50 years. The general trend since the 1980s has been lower; however, the 2014-2019

Discussion and Conclusions

Crop producers in the United States are currently struggling financially due to commodity prices that are at or near their cost of production. Of the six measures that were analyzed in this study, only Exchange Rates indicate a worse situation relative to the 1980s. The other five measures: Farm Income, Inflation Rates, Interest Rates, Exchange Rates, Land Values, and Debt-To-Asset Ratio are all currently improved relative to the 1980s. However, Interest Rates, Inflation Rates (especially on crop inputs), and Debt-To-Asset Ratio are all currently trending in a bad direction.

These results lead to the conclusion that while there is significant financial pressure on U.S. farming operations, conditions are currently not as bad as the farm financial crisis experienced during the 1980s. Future research should continue to monitor the important criteria, as conditions could continue to deteriorate.

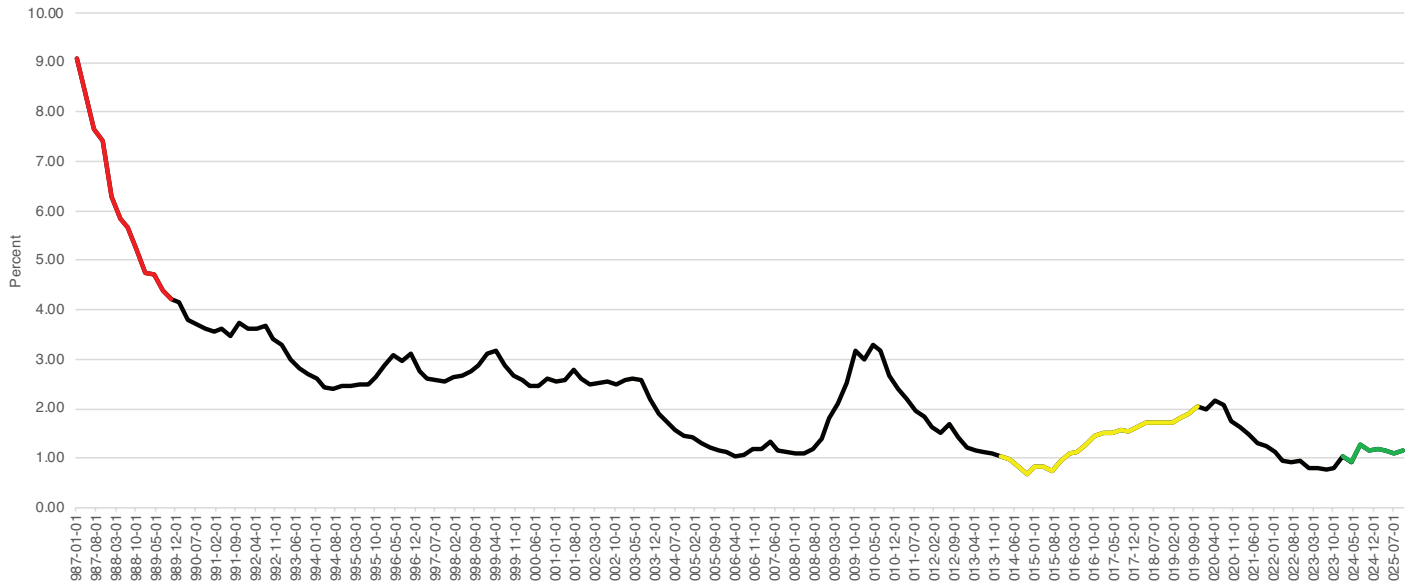


Figure 11: Delinquency Rate on Loans to Finance Agricultural Production, All Commercial Banks, Quarterly, Seasonally Adjusted, January 1987 to October 2025.
Source: Federal Reserve Economic Data, Federal Reserve Bank of St. Louis.

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The Impact of Rising Trade Dependence on the U.S. Farm Economy

Luis Ribera and Andrew Muhammad

As agricultural producers experience higher input costs and lower revenues, along with the current administration's strategy of leveraging tariffs to change trade relationships with the rest of the world, understanding the impacts of international trade and how markets and competition are affected will take on added importance for farmers, agribusinesses, policy makers, and agricultural leaders. International markets are important for many U.S. farm products. Trade liberalization has provided additional markets for some U.S. products, which in turn leads to higher prices and greater returns to producers. Trade is also a major source of import competition for some producers, leading to declining market prices and lower returns. Greater reliance on trade and recent trade tensions have increased market instability. Overall, U.S. agriculture has much to gain from freer trade, but these benefits come with added risks because trade is influenced by many factors. Changes in trade policies and economic growth across countries, exchange rate fluctuations, and the emergence of new competition all influence trade and make the international market risky for U.S. producers.

The United States is the largest exporter of farm products, and those exports account for about 35 percent of farm income, up from 28 percent in 1996; hence the importance of agricultural trade for U.S. farm income has increased over time. In addition, agricultural exports help support rural communities across the United States, with each dollar of exports stimulating another $2.06 in business activity (USDA ERS, 2026c).

Table 1: U.S. Agricultural Exports as a Share of Production for Selected Commodities, 2020-2025.

Commodity	Percentage of Production Exported
Cotton	85.9%
Sorghum	55.5%
Wheat	44.0%
Soybeans	43.0%
Rice	42.1%
Pork	25.1%
Corn	16.5%
Poultry	14.9%
Beef	11.0%

Source: ERS, USDA. PS&D Online.

The importance of export markets to U.S. agriculture is illustrated in Table 1: Between 2020 and 2025, about 86 percent of U.S. cotton production was exported, followed by more than one-half of all U.S. sorghum production. Wheat, soybeans and rice exports accounted for 44, 43, and 42.1 percent of production, respectively. Pork, corn, and poultry producers also depend on exports for a significant portion of their markets, while beef exports account for about 11 percent of production.

Agricultural imports are also important, as U.S. consumers are more dependent on them for certain commodities as well as for year-round supply. Not surprisingly, these include tropical products not produced, or only sparingly produced, in the United States, such as limes, bananas, and coffee (Table 2). Orange juice and tomato imports have increased

Table 2: U.S. Agricultural Imports as a Share of Domestic Consumption for Selected Commodities, 2020-2025.

Commodity	Percentage of Domestic Production
Limes	100.0%
Bananas	100.0%
Coffee	99.8%
Orange Juice	79.3%
Tomatoes	67.8%
Beef	13.9%
Pork	4.3%

Source: ERS, USDA. PS&D Online.

over the years as production, mainly in Florida, has decreased significantly. Other products such as beef and pork are important but account for a smaller share of U.S. imports.

China has been the largest destination for all U.S. ag products, accounting for 17.25 percent (Figure 1). In addition, agricultural products account for 23.98 percent of all U.S. products China imports. The second largest destination is Canada, where 15.38 percent of all U.S. agricultural products end up, and those agricultural products account for 10.01 percent of all U.S. products exported to Canada. To finish the top three, Mexico accounts for 14.99 percent of all U.S. agricultural products exported, while agricultural products account for 11.49 percent of all products the U.S. exported to Mexico. These top 10 countries account for 71 percent of all U.S. agricultural exports. Due to the latest trade tensions, China is no longer the top destination for U.S. ag exports but is now third behind Mexico and Canada.

Despite trade tensions, U.S. agricultural exports showed a modest overall decline from 2024 to 2025, falling $5.0 billion from $176.4 to $171.4 billion, but the most significant change is the reduction in exports to China. Noted losses for individual sectors globally include soybeans (-$8.0 billion), beef (-$1.1 billion), and rice (-$0.6 billion). On the other hand, corn exports increased by $3.3 billion and dairy and dairy products increased by $1.3 billion.

From 2024 to 2025, United States sales to China dropped from $24.4 billion to $8.4 billion, a 65.7% contraction (Table 3). This sharp downturn is due to weakening demand for U.S. exports, increased

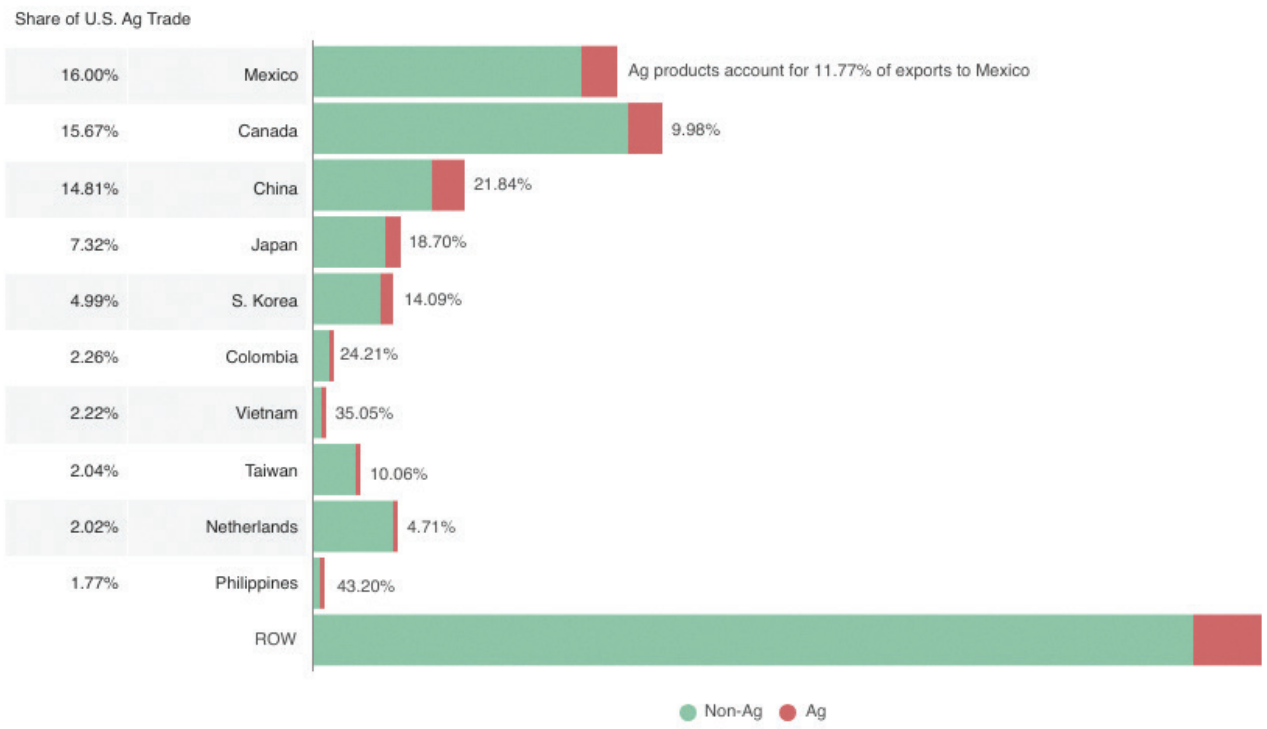

Figure 1: Top 10 Destinations for U.S. Exports, Agricultural and Non-Agricultural, 2020-2024 Average.
Source: Global Ag Trading System (GATS), USDA/FAS; USA Trade Online, US Census Bureau.

Table 3: U.S. agricultural exports by top destinations: 2024 and 2025.

Rank (2025)	Country	2024	2025	Change	% Change
		$ billion			
	World Total	$176.4	$171.4	-$5.0	-2.9%
1	Mexico	30.2	30.6	0.4	1.4%
2	Canada	29.5	28.2	-1.3	-4.4%
3	EU(27)	12.8	14.5	1.7	12.9%
4	Japan	11.9	12.8	0.9	7.8%
5	South Korea	8.5	9.8	1.3	15.1%
6	China	24.4	8.4	-16.0	-65.7%
7	Colombia	4.4	5.1	0.7	16.5%
8	Vietnam	3.4	4.7	1.3	37.6%
9	Taiwan	3.8	4.2	0.5	12.4%
10	Philippines	3.5	3.4	-0.1	-2.0%
11	India	2.3	2.9	0.7	29.1%
12	Indonesia	2.9	2.8	-0.2	-6.2%
13	Dom. Rep.	2.2	2.4	0.2	11.6%
14	UK	2.2	2.2	0.1	2.7%
15	Egypt	1.4	2.2	0.8	59.1%
16	Guatemala	1.9	2.1	0.3	14.1%
17	Turkey	1.7	2.0	0.3	16.9%
18	Australia	1.6	1.7	0.1	3.3%
19	Pakistan	0.9	1.6	0.8	88.7%
20	Hong Kong	1.4	1.5	0.1	7.4%
21	U.A.E.	1.4	1.5	0.1	8.0%
22	Honduras	1.4	1.4	0.1	5.8%
23	Thailand	1.3	1.3	0.0	1.8%
24	Saudi Arabia	1.4	1.3	-0.1	-7.9%
25	Bangladesh	0.8	1.2	0.4	56.3%
26	Costa Rica	1.0	1.2	0.2	25.3%
27	Malaysia	0.9	1.0	0.1	12.6%
	Rest of World	17.5	19.2	0.1	0.7%

Source: U.S. Department of Agriculture, Foreign Agricultural Service (2026).

domestic production, and trade policy tensions. Despite China's pullback, several other markets posted strong gains that partially offset the loss. Notable increases came from the EU (+$1.7 billion), South Korea (+$1.3 billion), and Vietnam (+$1.3 billion). Emerging markets such as Egypt, Pakistan, Bangladesh, and India also expanded rapidly, with growth rates ranging from 29% to nearly 90%. While none individually compensate for China's decline, together they show diversified demand and growing opportunities.

Importance of Low Trade Barriers

Trade barriers are government-induced restrictions, regulations, or policies that limit, complicate, or increase the cost of international trade. The two main trade barriers are tariffs and non-tariff measures (NTMs). A tariff is a tax imposed on imported goods and services. NTMs are policy measures other than ordinary customs tariffs, and they are divided into two categories, technical and non-technical measures. Examples of technical measures are sanitary and phytosanitary measures, i.e., food safety rules, standards, and labeling. Examples of non-technical measures are quotas, subsidies, and dumping.

The benefits of free trade or fewer trade barriers go well beyond a specific industry or country (Figure 2). Countries are divided into three trade freedom groups: lowest, middle, and highest. The areas compared for each trade freedom group are higher average national income, food security, political stability along with violence and terrorism, and the environment. Countries with more trade freedom have a higher average national income, $30,865, compared to $8,170 and $3,890 for the middle and lowest trade freedom groups, respectively. Moreover, countries with higher trade freedom scored higher in terms of food security. This is an interesting point, as some people believe that to have food security, most of the food must be produced domestically, which is not necessarily the case. Countries should produce agricultural products in which they have comparative and competitive advantages and import the ones that they do not or cannot produce year-round.

Countries with higher trade freedom experience more political stability and less violence and terrorism, something very important for law-abiding citizens who just want a peaceful life for themselves and their families. Finally, countries with more trade freedom also have healthier environments and less polluted ecosystems. As in the area of food security, trade freedom allows countries to be more efficient in the use of their resources by producing those products where the country is competitive and importing products where the country is non-competitive.

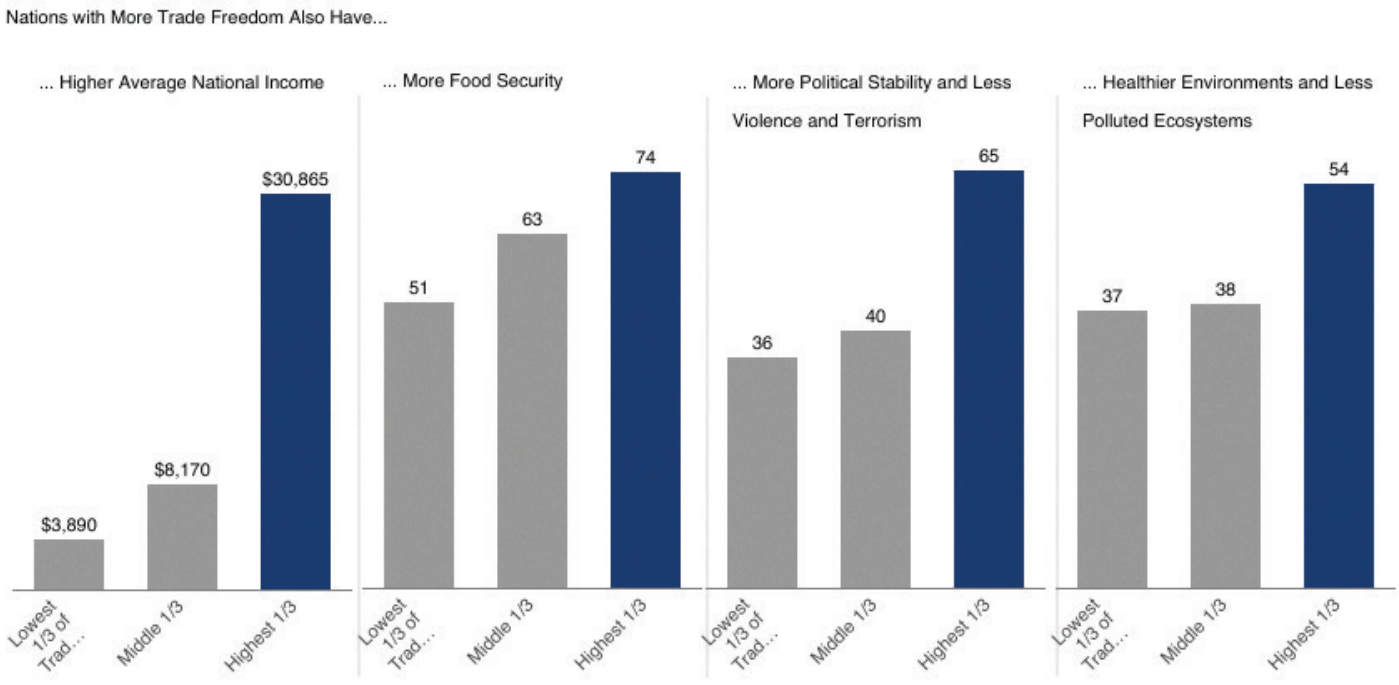

Figure 2: Results of Trade Freedom.
Source: Heritage.org with data from World Bank, Economist Intelligence Unit, Yale University, and the Heritage Foundation's *2023 Index of Economic Freedom*.

Trade Agreements vs. Trade Frameworks

Recent trade frameworks with countries like Argentina, Vietnam, and Taiwan, as well as previous frameworks with Japan and China (Phase One Trade Deal), negotiated under President Trump, are different from official U.S. trade agreements approved through Congress. These frameworks are technically executive agreements that rely on delegated Presidential authority rather than legislation, and do not have the same legal durability as a congressionally enacted free trade agreement (like the United States-Mexico-Canada Agreement (USMCA)).

A future president could modify, suspend, or exit these frameworks more easily than traditional trade agreements that require formal approval by Congress, embedding negotiated policies in U.S. law. In contrast, recent frameworks operate outside this formal structure, and are often preliminary, flexible, and do not carry the same legal force or permanence. More importantly, these frameworks tend to be narrower in scope and often function as temporary truces rather than fully developed trade architectures. By contrast, official trade agreements through Congress span broad areas of trade policy, including tariffs, services, intellectual property, dispute settlement, and regulatory cooperation (Zirpoli, 2025).

These executive frameworks can give U.S. agriculture a short-term export boost, but because they are not permanent, they can also create uncertainty for producers in the long run because they do not guarantee long-term market access. A Congressionally-approved agreement creates expectations that remain consistent across administrations, whereas recent frameworks, being executive in nature, depend heavily on presidential discretion and present greater uncertainty for U.S. farmers. While Congressionally-approved agreements have their benefits, Trade Promotion Authority—the legislative procedure that allows the President to negotiate international trade agreements that Congress can approve or reject—expired in July 2021. Consequently, no new trade agreements have been approved by Congress since USMCA passed the U.S. Senate in January 2020.

Figure 3: U.S. Agricultural Trade and Trade Balance: 1990 – 2025.
Source: U.S. Department of Agriculture, Foreign Agricultural Service (2026).

U.S. Agricultural Trade and Outlook

According to official trade data, we are now firmly in an era of U.S. agricultural trade deficits, marking a clear departure from the long-standing surplus years prior (Figure 3). From 1990 through 2018, the United States mostly ran agricultural trade surpluses, rising from a surplus of $20.1 billion in 1990 to highs near $39.3 billion in 2011 and $34.9 billion in 2014. The trade balance turned negative in 2019 (–$1.3 billion), before a brief pandemic-era rebound in 2020 ($2.9 billion) and 2021 ($5.5 billion). Since 2022, however, the United States has moved decisively into deficits as agricultural imports have outpaced exports. In 2025, the United States imported $213.1 billion of agricultural products and exported $171.4 billion, resulting in a record deficit of $41.7 billion.

As noted in a Southern Ag Today article (Muhammad and Hossen, 2024), U.S. agricultural imports differ fundamentally from exports. While exports are dominated by bulk commodities such as soybeans, corn, cotton, and wheat, as well as minimally processed products like tree nuts, beef, and pork, imports consist overwhelmingly of higher value, consumer-oriented goods. These include fresh fruits and vegetables, coffee, beer, wine, and distilled spirits. In 2025, U.S. imports of beer, wine, and spirits totaled more than $22 billion, compared with only $3.5 billion in U.S. exports of those same products (USDA FAS, 2026a). This imbalance alone accounted for nearly half of the total agricultural trade deficit in 2025, underscoring how the composition of U.S. imports plays a central role in driving the agricultural trade gap.

The sharp decline in U.S. agricultural exports in 2025, as well as over the last few years, has been due to decreased sales to China. United States exports to China peaked recently at $38.1 billion in 2022, but by 2025 had fallen to just $8.4 billion, a staggering decline of $29.7 billion, or roughly 78% from peak to trough. This single-country drop accounts for the majority of the recent contraction in overall U.S. export performance, and it marks one of the steepest market losses ever recorded for a major U.S. agricultural buyer. However, it is important to point out that U.S. ag exports to China have been very inconsistent over the years (Figures 4 and 5). Other major markets, however, show a more mixed pattern. Exports to Canada remained relatively stable, moving only slightly from $28.7 billion in 2023 to $28.2 billion in 2025. Mexico, in contrast, continued to grow modestly, rising from $28.4 billion in

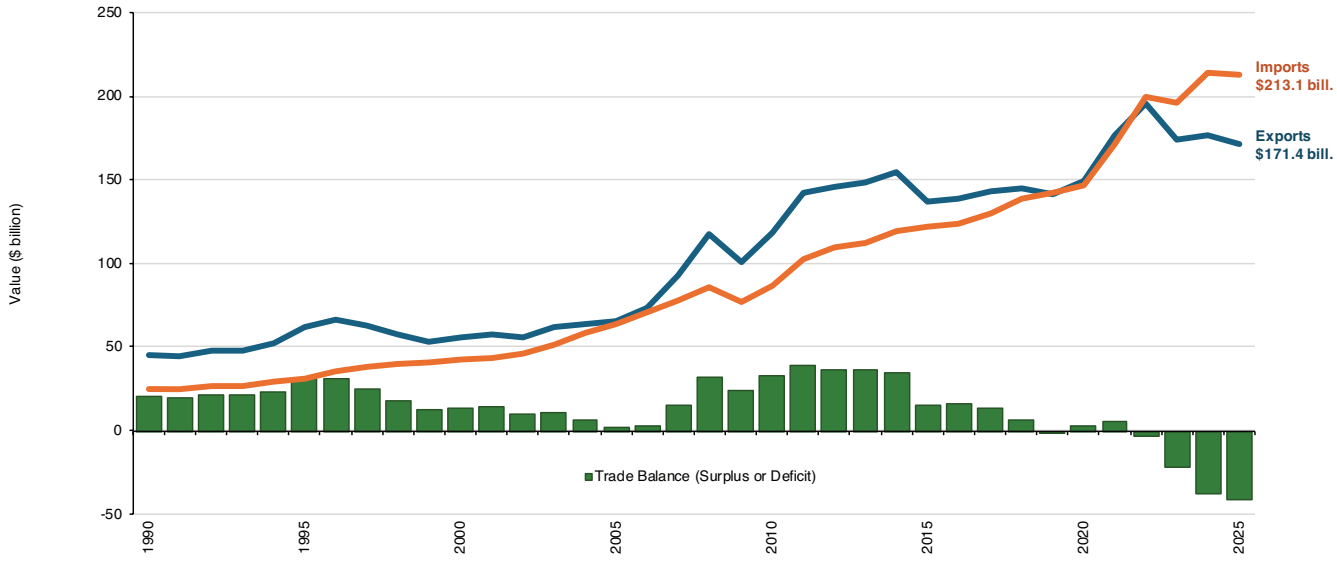

Figure 4: U.S. Top Exports to China-HK, 2010 – February 2026.
Source: Global Ag Trading System (GATS), USDA/FAS.

2023 to $30.6 billion in 2025, now surpassing China by a wide margin as a leading U.S. agricultural market (USDA FAS, 2026a).

The recent export slump is overwhelmingly concentrated in the loss of the Chinese market, while most other major destinations have either held steady or slightly expanded (Figure 5) (Muhammad, 2026). This has been further exacerbated by Brazil's deepening partnership with China, reshaping global trade flows. Brazil's expanding production capacity and rising prominence as a reliable supplier of commodities such as soybeans and meat to China has elevated its role as a cornerstone of global agricultural markets and a critical contributor to growing demand in Asian markets. In recent years, Brazil has emerged as one of the world's leading exporters of soybeans, corn, cotton, beef, poultry, sugar, and coffee (USDA FAS, 2026b). Expanding production capacity and vast land resources have positioned Brazil as a key supplier to food-importing nations.

The most recent USDA trade outlook (February 2026) projects that U.S. agricultural exports will rise slightly to $174.0 billion in fiscal year (FY) 2026. In terms of products, grains and feeds are expected to grow, with export value increasing to $42.4 billion, driven largely by higher corn shipments forecast at $18.5 billion. Oilseeds and products, traditionally a major export pillar, are forecast to decline to $30.1 billion, with soybean exports dropping to $18.3 billion as both volume and value weaken. Livestock, poultry, and dairy exports show steady resilience, projected at $39.1 billion, supported by stable beef, pork, and dairy demand. Canada ($27.9 billion) and Mexico ($31.5 billion) are projected to be the two largest markets. USDA is also forecasting imports to fall to $203.0 billion, decreasing the agricultural trade deficit to $29.0 billion (USDA ERS, 2026).

Closing

Trade is an important part of agricultural markets. As U.S. agriculture has become more dependent on trade, world events create more price risk. Growing export markets will continue to be an important goal for U.S. agriculture in the coming years, and those markets could be key to help producers get over the current economic downturn. However, trade barriers complicate or increase the cost of international trade. Low trade barriers, on the other hand, are beneficial and their impacts go

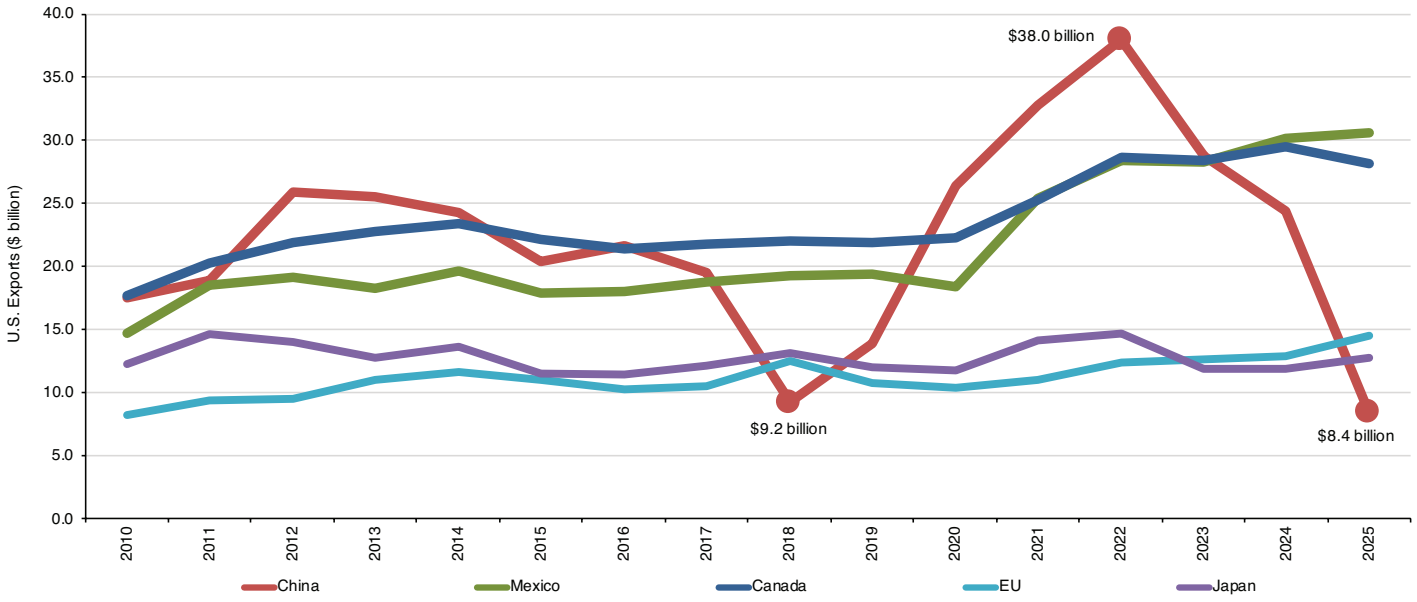

Figure 5: U.S. Agricultural Exports to the Top Destination Markets: 2010–2025.
Source: U.S. Department of Agriculture, Foreign Agricultural Service, Global Agricultural Trade System (GATS) (USDA, 2026).

well beyond a specific industry or country.

The recent trends in U.S. agricultural trade underscore several essential takeaways for producers and policymakers. U.S. agriculture is now operating in a structurally different trade environment, one defined by persistent deficits, shifting global demand, and intensifying international competition. China's steep pullback from U.S. markets has revealed how dependent past export gains were on a single buyer, and how quickly market share can erode when global competitors, most notably Brazil, expand capacity and strengthen strategic partnerships. At the same time, the relative stability of exports to Canada and Mexico shows the value of reliable regional partners and the importance of maintaining open North American markets, despite recent trade tensions and unresolved issues with Canada.

Policy consistency and market access will play a critical role in shaping future competitiveness. Temporary executive-level trade frameworks may provide short-term gains but do not offer the stability needed for long-run planning. Strengthening durable trade agreements, expanding diversified markets and increasing value-added processing capacity at home will be essential steps if the United States is to regain momentum in global agricultural trade.

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Rural Vulnerability in Times of Economic Downturn

Chrystol Thomas and Frank Seo

While economic downturns affect both rural and urban communities, rural communities, particularly those where agriculture is the backbone of the local economy, often experience more severe and persistent impacts than other areas due to their unique economic structure. One key reason is that farmers cannot easily shift to other products or services because of high fixed costs, including large upfront investments in land and equipment. Moreover, agricultural commodities are particularly sensitive to supply and demand volatility caused by external shocks such as weather events, trade disruptions, and fluctuations in global commodity markets. As a result, rural communities that rely heavily on agriculture are more vulnerable to economic downturns than communities with more diversified economies.

The concentrated economic structure of Southern rural communities further increases their vulnerability. Although these communities produce a variety of commodities, most income remains focused on a few high-value commodities, including broilers, cattle and calves, cotton, and soybeans. A shock to any of these key commodities can have a severe impact on farm income, generating significant economic challenges for these rural communities. Figure 1 highlights the historical volatility of farm income compared to non-farm income, which emphasizes Southern states vulnerability to external shocks (BEA, 2025). Over the past decade, while non-farm income growth in Southern states has remained relatively stable and consistently positive, farm income growth fluctuated widely due

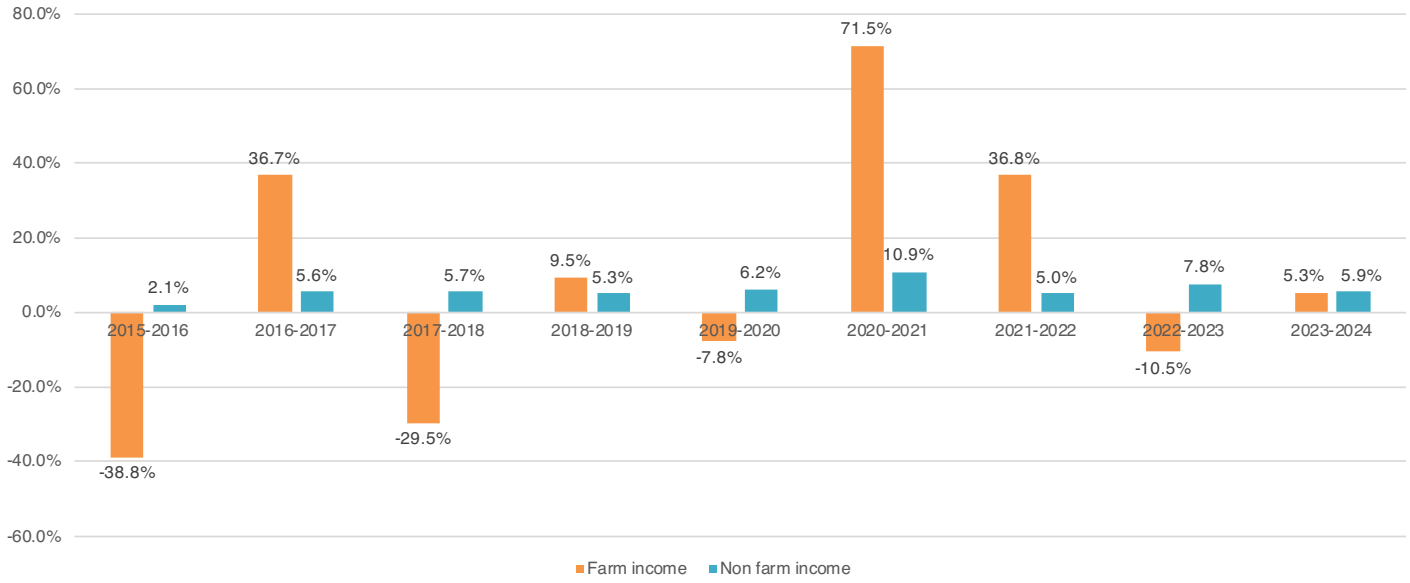

Figure 1: Annual Growth Rates of Farm and Nonfarm Income in Southern States, 2015–2024.
Source: U.S. Bureau of Economic Analysis (BEA).
Note: Southern states include Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.

Table 1: Agricultural Production, Processing, and Retail Share of State GDP, 2024.

States	Agriculture Sector* including Ag Retail	Agriculture Sector excluding Ag Retail	Ag Production**	Ag Processing***	Ag Retail****
Alabama	7.30%	4.70%	1.20%	3.60%	2.50%
Arkansas	10.90%	8.40%	3.20%	5.30%	2.50%
Florida	4.30%	1.30%	0.50%	0.80%	3.00%
Georgia	6.70%	4.40%	0.80%	3.60%	2.40%
Kentucky	9.10%	6.20%	1.40%	4.80%	2.80%
Louisiana	5.60%	3.20%	0.70%	2.50%	2.40%
Mississippi	9.40%	6.60%	2.50%	4.10%	2.80%
North Carolina	7.50%	4.90%	0.80%	4.10%	2.50%
Oklahoma	6.00%	3.30%	1.60%	1.70%	2.70%
South Carolina	6.40%	3.30%	0.60%	2.70%	3.10%
Tennessee	6.70%	3.80%	0.40%	3.30%	2.90%
Texas	4.10%	1.90%	0.60%	1.20%	2.30%
Virginia	5.70%	3.40%	0.30%	3.10%	2.30%
United States	5.20%	2.80%	0.90%	1.90%	2.40%

Source: U.S. Bureau of Economic Analysis (BEA); 2017 North American Industry Classification System (NAICS).
* The Agriculture Sector is defined as the sum of Agricultural Production and Agricultural Processing.
** Ag Production includes agriculture, forestry, fishing and hunting, farms, and forestry, fishing, and related activities.
*** Ag Processing includes wood product manufacturing, furniture and related product manufacturing, food and beverage and tobacco product manufacturing, textile mills and textile product mills, apparel, leather, and allied product manufacturing, and paper manufacturing.
**** Ag Retail includes food services and drinking places.

to external events such as floods, droughts, trade disruptions, and the COVID-19 pandemic. As a result, the annual growth rates of farm income ranged from –38.8% in 2015–2016 to +71.5% in 2020–2021. These patterns indicate that agriculture-centered Southern rural communities remain highly exposed to economic downturns and are heavily impacted by external shocks that affect local production.

This chapter examines the structural dependence of Southern rural communities on agriculture and how this reliance shapes their economic resilience. Many of these communities are vulnerable to economic downturns due to their localized economic structures, yet they continue to make substantial contributions to the national economy. To underscore the importance of Southern rural communities, we analyze their contributions to state economies, focusing on the agriculture sector, and assess their vulnerability to economic downturns. We also explore the role of agribusiness and the broader rural economic ecosystem in buffering against economic shocks. Finally, we discuss community assessment and survival strategies that offer practical insights into how these communities can respond to and recover from economic challenges.

Structural Dependence of Rural Communities on Agriculture

Table 1 presents the share of state GDP attributable to agricultural production, processing, and retail in 2024, based on the latest North American Industry Classification System (NAICS) (BEA, 2025). As shown, most Southern states have a higher share of GDP in the Agriculture Sector than the U.S. average, highlighting the relative importance

of agriculture across the South. In many Southern states, the combined Agriculture Sector, including Ag Retail, accounts for a larger share of state GDP than the U.S. average of 5.2 percent. States such as Arkansas, Mississippi, and Kentucky stand out, with agriculture contributing between 9.1 and 10.9 percent of total state GDP when retail is included. Even in larger and more diversified economies such as Texas and Florida, agriculture remains a measurable and meaningful component of overall economic output. Since the table excludes agriculture-related indirect industries such as wholesale trade, retail trade, transportation and warehousing, finance, insurance, real estate, rental, and leasing, the total economic footprint of agriculture in the Southern states is likely substantially larger than the figures reported.

Similarly, the share of farm related income in total personal and proprietors' income underscores the importance of agriculture to rural communities across the Southern states. Based on BEA (2025) data, several Southern states exhibit farm income, particularly farm proprietors' income, shares that exceed the U.S. average, reflecting the prominent role agriculture plays in supporting local livelihoods (Figure 2). Although this pattern is not uniform across all states, the concentration of income from farm and proprietors' sources in many parts of the South highlights agriculture's central role in rural economies. Because farm and proprietors' income are inherently more cyclical and sensitive to fluctuations in commodity prices and yields than wage and salary income, rural communities with greater reliance on these income sources face heightened exposure to external economic shocks. Overall, these patterns emphasize both the continued importance of agriculture to Southern rural communities and the economic risks associated with reliance on production based income streams.

The Southern states' agricultural production concentration further emphasizes the risk to their rural communities from external shocks. Table 2 presents the 2023 share of top commodities in total cash receipts in Southern states (USDA ERS, 2025). Commodities for which cash receipts represent at least 25 percent of total receipts are considered to have high commodity concentration, following a rule of thumb adapted from Salsgiver and Hines (1993), who define counties as having high farm employment or income when farming accounts for at least 25 percent of labor and proprietors' income; this same threshold is applied here to characterize high

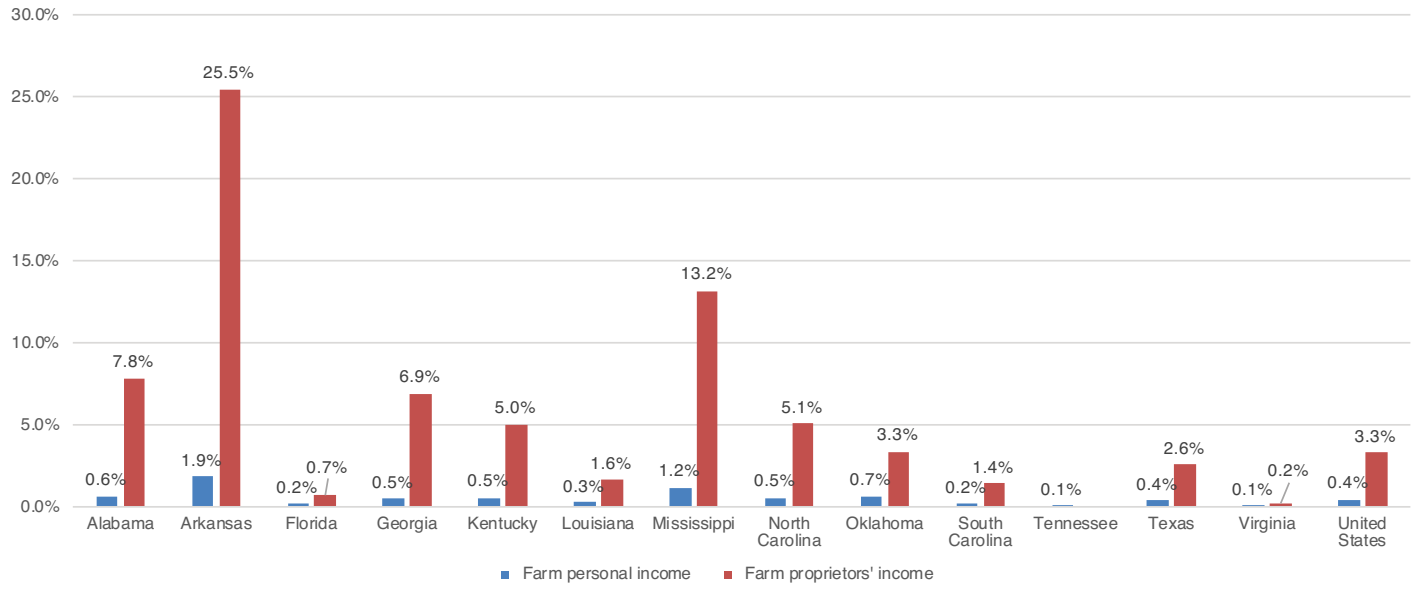

Figure 2: Farm Income and Farm Proprietors' Income as Shares of Total Personal and Proprietors' Income by State, 2024.
Source: U.S. Bureau of Economic Analysis (BEA).

Table 2: Share of Top Commodities in Total Cash Receipts by State, 2023.

States	Top Commodities	Cash receipts 1,000 dollars	Cash receipts percent of State (%)	Cash receipts percent of U.S. (%)
Alabama	Broilers	4,705,800	59.2	11.1
Arkansas	Broilers	5,306,075	40.4	12.5
Florida	Miscellaneous crops	1,811,306	19.6	6.4
Georgia	Broilers	5,813,731	46.6	13.7
Kentucky	Soybeans	1,419,752	17.6	2.5
Louisiana	Sugarcane for sugar and seed	925,450	22	49.9
Mississippi	Broilers	3,152,886	43.1	7.4
North Carolina	Broilers	5,636,408	36.1	13.2
Oklahoma	Cattle and calves	4,387,152	50.8	4.3
South Carolina	Broilers	1,266,288	37.5	3
Tennessee	Soybeans	991,266	19	1.8
Texas	Cattle and calves	13,374,298	44.8	13.2
Virginia	Broilers	1,291,742	27.1	3

Source: USDA ERS State Fact Sheets (2025).

concentration based on cash receipts. From Table 2, most states rely heavily on a single commodity, with broilers dominating in Alabama, Arkansas, Georgia, Mississippi, North Carolina, South Carolina, and Virginia, while cattle and calves are the top commodity in Oklahoma and Texas, and soybeans and sugarcane lead in a few others. The high concentration of cash receipts in only a few commodities underscores the dependence of these rural economies on specific agricultural products, making them particularly sensitive to price fluctuations, disease outbreaks, and other shocks that may affect their main commodities.

Role of Agribusiness and the Rural Economic Ecosystem

Although Southern rural communities are vulnerable to economic downturns, small-scale entrepreneurship within agribusinesses and related industries better support employment, sustain local livelihoods, and help buffer these communities from external economic shocks. According to a JPMorganChase Institute report, microbusinesses, defined as those with less than five employees, constitute about 85 to 95 percent of businesses in the United States, with the Southern states having a higher concentration (Wheat and Chan, 2025; see Figure 3). These establishments employ over half of the workforce in rural areas (Wilmoth, 2023). Rural communities' reliance on agribusiness firms that are highly concentrated in few related areas can have effects similar to those experienced by communities that depend on specific farming commodities, causing income vulnerability, employment losses, and migration pressures. Yet, despite economic strains such as those created from COVID-19, researchers have shown that agribusinesses in rural areas are able to better survive economic shocks due in part to their social capital characteristics (customer loyalty, tight community networks, mutual business support), fewer competitors, and reliance on internal financing (Ngo, 2022). Collaboration among producers, agribusiness firms, and local govern-

ments strengthens both upstream supply firms such as suppliers of seed, fertilizer, and machinery, and downstream value-added businesses, including processors, packers, and marketers. These related sectors are especially critical in recessions, when diversification from production into value-added and other ventures reduces vulnerability to downturns and stable, food-based demand cushions rural economies against volatility in other industries.

Value-added enterprises are central to this resilience. According to the U.S. Department of Agriculture (USDA) Office of Rural Business Development, value-added products include those that change the physical state of a commodity, such as milling wheat into flour, are produced in ways that enhance value, such as organic certification, or are physically segregated to preserve identity and quality. The processing of raw commodities into higher-value products enables rural areas to capture more income locally rather than exporting raw goods with minimal returns. By moving up the value chain, rural businesses retain a larger share of the farm dollar. When a consumer spends $1 on food in the United States, only about $0.09 returns directly to farmers, while the remainder circulates through processing, transportation, retail, finance, and other related industries (USDA ERS 2024). Though fewer rural firms are able to reach $1 million in sales during their first five years of operations, compared to urban ones (Wheat and Chan, 2025), research consistently shows that growth in agriculture is two to three times more effective at reducing poverty than growth in other sectors, underscoring the sector's impact in rural communities (de Janvry and Sadoulet, 2010; Christiaensen and Martin, 2018).

Community Assessment and Survival Strategies

Rural leaders can strengthen resilience during economic downturns by fostering deep community engagement and building coordinated regional partnerships. Firms that also prioritize community ties in conjunction with local inputs or sales are better positioned to manage economic shocks because they cultivate trust, shared problem solving, and diversified demand (Ngo, 2022; Nguyen

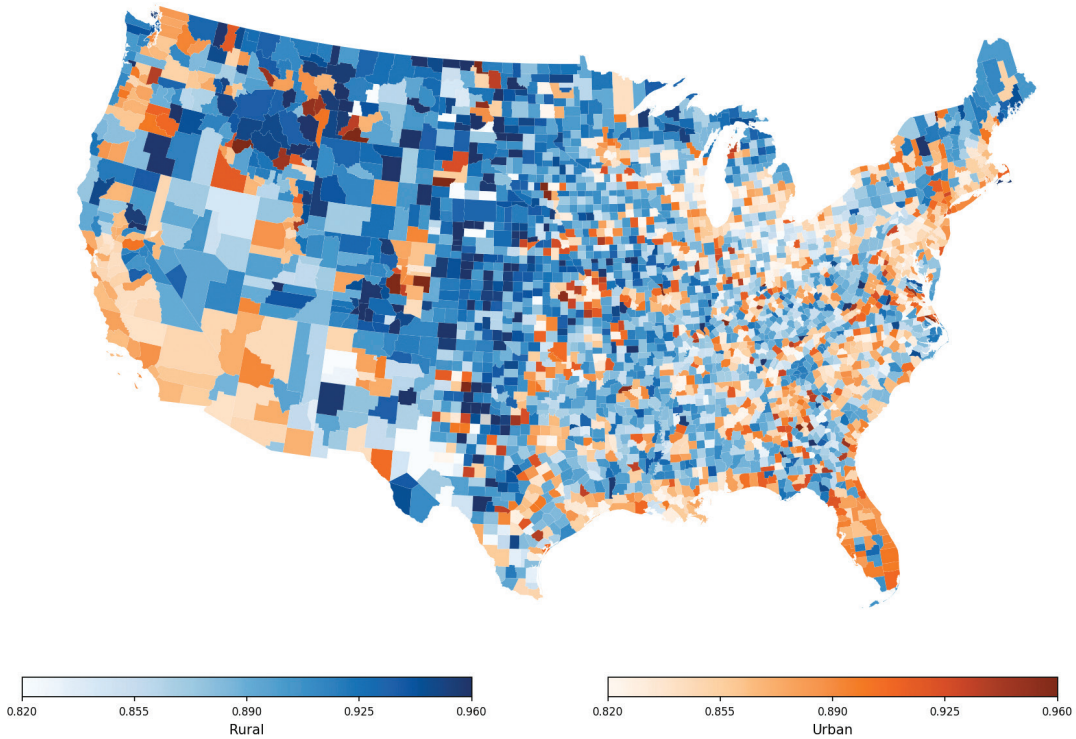

Figure 3: Proportions of Microbusinesses out of All Businesses by Urban and Rural Areas.
Source: Wheat and Chan, 2025.
Note: Rural areas are defined as non-metropolitan counties as determined by the U.S. Office of Management and Budget.

et al., 2025). Policymakers can encourage partnerships that connect farmers with agribusiness firms in coordinated blocks, improving access to credit, aggregation, technology, and markets. Developing efficient local value chains, including local processing and marketing enterprises, reduces profit leakage and generates multiplier effects that sustain employment across agriculture, food services, logistics, and retail. Because rural communities can be different, strategies should be tailored to local demographic and economic conditions, particularly in places experiencing declines in the working age population, which can constrain labor supply, shrink market demand, and weaken the local tax base.

Stakeholders must also address structural barriers that limit rural economic adaptability. Expanding broadband infrastructure is critical because improved connectivity strengthens the local workforce through access to education and skills training, enables small businesses to reach markets beyond their immediate geography, and supports entrepreneurship through digital tools and e-commerce. Broadband can also help offset population decline by attracting remote workers and new enterprises. In addition, policymakers should closely monitor small rural business financing, especially as consolidation among small banks, which have historically been key rural lenders, reduces credit access. Ensuring diverse and locally responsive financing channels, alongside investments in infrastructure and workforce development tailored to community needs, can help rural areas remain competitive and resilient during economic downturns.

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Washington Policy Update: Dysfunctional but Delivering

Bart Fischer and Joe Outlaw

After enduring multiple years of negative returns and observing near constant gridlock in our nation's capital, it would be understandable if farmers grew discouraged. However, in spite of the disfunction and the constant brinksmanship, the reality is that the federal government has delivered a significant amount of support to farmers and ranchers over the last 10 years. While much of this assistance was outside of the farm bill—in the form of *ad hoc* assistance—it nonetheless was essential in helping keeping farmers afloat during this latest downturn. This shifting balance between the traditional farm safety net (i.e., Title 1 of the farm bill), the Federal Crop Insurance Program (FCIP), and *ad hoc* disaster assistance—and the implications for producers—are the primary focus of this chapter.

Farm Policy in Historical Context

Prior to passage of the first farm bill in 1933, most of the policy focus had been on allocating land (e.g., the *Homestead Act of 1862*) and building institutions/infrastructure (e.g., the *Morrill Act of 1862* establishing the Land Grand University system) to facilitate the growth of the country in general and agriculture in particular. When the first farm bill was signed into law—and for the 6 decades that followed—farm policy was designed to help deal with chronically low commodity prices resulting from excess capacity. Until the mid-1990s, this largely involved the Federal government attempting to support prices by manipulating supplies of staple commodities.

While Washington flirted with the idea of getting out of traditional farm policy altogether in the 1996 Farm Bill, huge losses resulted in record levels of *ad hoc* spending to producers. Congress responded by investing heavily in the farm safety net in the 2002 Farm Bill while decoupling the support from production decisions in an attempt to encourage producers to plant for the market. Around the same time, the *Agricultural Risk Protection Act (ARPA) of 2000* significantly improved the affordability of crop insurance. These two changes ushered in a period where *ad hoc* assistance averaged just $2.5 billion per year from 2002 to 2017 as noted in Figure 1.

In the 2014 Farm Bill, relatively good prices coupled with widespread adoption of crop insurance—to the point where it was widely regarded as the cornerstone of the farm safety net—resulted in significant changes to traditional farm policy. These changes included the elimination of the Direct Payment program and the creation of the Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs, resulting in a net reduction in projected spending. Those changes were largely maintained in the 2018 Farm Bill.

While crop insurance is indispensable, it is based on prevailing futures prices. In other words, when the farm economy enters a prolonged slump, the value of crop insurance falls with the market. In spite of the Federal government sharing in the cost, crop insurance is still relatively expensive for producers to purchase, resulting in coverage levels that average roughly 70% nationwide (leaving a deductible of 30% that must be shouldered by producers). These periods of low prices is where traditional farm policy—Title 1 of the farm bill—typically steps in. However, ARC and PLC were not designed to offset the effects of a trade war or a global pandemic. Why? In the case of PLC, the support levels are generally set at less than 90% of the cost of production (i.e., they only kick in

when producers are losing money). Those levels are further reduced by 15% due to the 85% budget factor applied to the calculation of benefits. The benefits are further reduced by sequestration. On top of all of that, the 2018 Farm Bill limited payments to $125,000 per individual and entity.

Growing Reliance on Ad Hoc Assistance

Because of these limitations, the farm safety net simply wasn't up to the task of simultaneously addressing natural disasters, a global pandemic, and a trade war with China. As noted in Figure 1, since 2018, farm bill programs have averaged just $7.73 billion per year compared to *ad hoc* assistance that was more than double (or $17.95 billion per year). Rather than taking steps to bolster the farm safety net, Congress and the Administration(s) have stepped in with significant amounts of *ad hoc* assistance. Select examples are highlighted below.

- **Wildfires and Hurricanes Indemnity Program (WHIP).** Congress provided $2.36 billion in disaster aid for hurricane and wildfire losses not fully covered by crop insurance or NAP in 2017.
- **Market Facilitation Program (MFP 1).** In July 2018, USDA announced up to $12 billion in assistance ($10 billion for MFP) would be available for producers for losses incurred in 2018 in response to retaliatory tariffs imposed during the trade war with China.
- **WHIP+.** Expanded on WHIP while providing $3.005 billion for losses incurred in 2018 and 2019.
- **Market Facilitation Program (MFP 2).** In May 2019, USDA announced an additional $16 billion in assistance ($14.5 billion for MFP) would be available for losses incurred in 2019 due to the ongoing trade war.
- **Coronavirus Food Assistance Program (CFAP 1 and 2).** Congress provided approximately $30 billion (roughly $16 billion under CFAP 1 and $14 billion under CFAP 2) for market losses incurred by producers due to COVID-19 in 2020.
- **Emergency Relief Program (ERP).** In two separate appropriations bills, Congress provided in excess of $13 billion for losses incurred by producers due to natural disasters in 2020, 2021, and 2022. ERP was the successor to WHIP/WHIP+.
- **Supplemental Disaster Relief Program (SDRP).** Congress provided $20.78 billion in funding for natural disaster losses incurred in 2023 and 2024, $16 billion of which was used to establish SDRP, the successor to ERP.
- **Emergency Commodity Assistance Program (ECAP).** Congress provided $10 billion in economic relief for losses incurred due to chronically low prices and high input costs in crop year 2024.

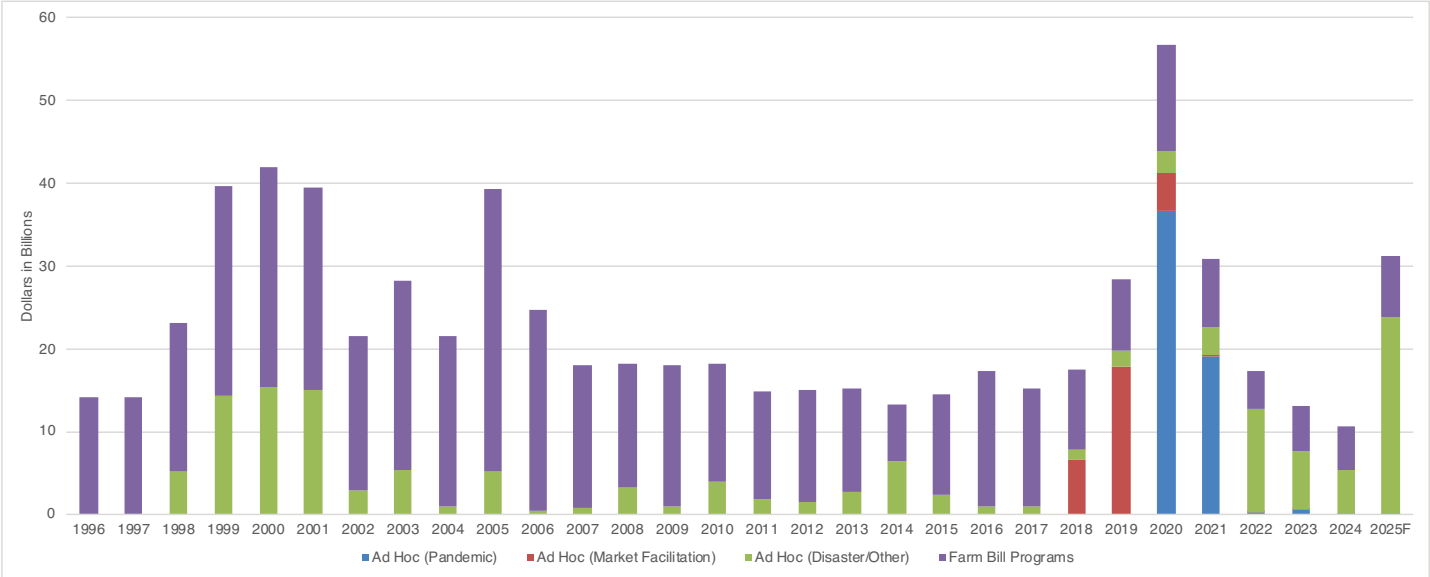

Figure 1: Direct Payments to U.S. Agricultural Producers, 1996-2025F.
Source: author analysis of USDA-ERS data.

- **Farmer Bridge Assistance (FBA).** In December 2025, USDA announced $12 billion in economic relief for losses incurred due to chronically low prices and high input costs—in addition to ongoing impacts from trade retaliation—in crop year 2025.

In total, over $143 billion in *ad hoc* assistance has been provided to agricultural producers over the last 8 years.

Signs of Returning to the Farm Safety Net?

While this shift to *ad hoc* assistance has been vital for keeping producers in business, it comes with numerous challenges:

- *Ad hoc* assistance always arrives after the fact, often months or years after the disaster event occurred. Contrast this dynamic with crop insurance that arrives within days or weeks after a claim has been filed.
- Because *ad hoc* assistance is not known in advance, producers cannot plan around it.
- Because *ad hoc* assistance is generally provided as a lump sum to USDA to administer, it arguably ends up costing the taxpayer more than it would if Congress fine-tuned and targeted the assistance in a farm bill.
- Increasingly, there are concerns that *ad hoc* assistance is inflationary in nature and is resulting in input costs remaining elevated.
- Much of the *ad hoc* natural disaster assistance (e.g., WHIP, ERP, and SDRP) is in the form of free area-wide coverage (i.e., covering a portion of county-level losses). This assistance has persisted in spite of the fact that area-wide crop insurance policies are already available for purchase.

Congress has begun to take steps to turn the page on *ad hoc* assistance. For example, in the *One Big Beautiful Bill Act* (OBBBA), Congress made significant changes to area-wide crop insurance which should drive higher adoption rates, namely raising the coverage level from 86% to 90% and increasing the premium subsidy from 65% to 80%. Congress also raised reference prices by roughly 10-20% depending on the crop. Despite these improvements, the reference price increases have not kept up with inflation. As a result, row crop producers continue to struggle to break even and Congress continues to debate yet another round of *ad hoc* disaster assistance (AFPC, 2026).

As for the new farm bill making its way through Congress, it is following a familiar path: budget neutral with no new money. While we have enumerated a number of reasons why making additional investments in the farm safety net—and navigating away from *ad hoc* assistance—would be far better for producers, these facts remain: (1) farm bills are increasingly difficult to get across the finish line, especially if they raise spending (the 2002 Farm Bill was the last time that happened) and (2) despite its limitations, *ad hoc* assistance is still preferable to simply leaving producers to fend for themselves.

Conclusion

Politics in Washington, D.C., has always been chaotic, but since the advent of 24-hour cable news, everyone has had a front row seat. When you add social media to the mix, everyone becomes an expert and their opinion can be shared with the world, regardless of whether there is a shred of truth/fact in their arguments or not. All of these things make legislating more difficult and can leave any outside observer worried about the future. This is particularly the case for farmers, where the farm safety net plays such an integral role in helping them manage the risks they face, ranging from the vagaries of weather to prices that can be significantly influenced by the whims of dictators on the other side of the planet. While the disfunction in Washington, D.C., may influence the process, farmers should take heart at the fact that Congress and the Administration continue to find a way to come together to provide assistance.

Crop Market Outlooks

Rebalancing the Row-Crop Sector: Supply Expansion, Policy Shifts, and the Path Back to Profitability

Grant Gardner, William Maples, and Yangxuan Liu

Introduction

Following what some have called "the dog days" of the 2010s, commodity prices peaked following the COVID-19 pandemic. During the COVID period, grain prices rose not simply because of the pandemic itself, but because of a rapid tightening in global fundamentals. Logistical bottlenecks disrupted normal trade flows, while aggressive fiscal and monetary stimulus— including large fiscal transfers, historically low interest rates, and rapid money supply expansion— supported commodity demand and asset inflation. At the same time, China purchased a large quantity of U.S. agricultural commodities after signing the Phase 1 Trade deal with the United States, pushing commodity prices to a historically high level. This surge in demand occurred against already tightening global stocks. The combination of supply chain disruptions, macroeconomic stimulus, and renewed export demand pushed a majority of the row-crop sector into a short but historically strong period of profitability.

However, the row-crop sector responded quickly to the profitable period at both the national and global levels. Elevated prices incentivized acreage expansion. U.S. producers planted aggressively, while Brazil continued to expand production. Additionally, Black Sea exports remained resilient despite ongoing geopolitical tensions. As supply caught up, stocks rebuilt and demand growth normalized, profitability quickly left the sector. At the same time, monetary tightening pushed interest rates higher and inflationary pressures, trade disruptions, and prior money supply expansion contributed to still elevated input costs including fertilizer, land, and machinery. Beginning in 2022, prices adjusted downward more quickly than costs, compressing net farm revenues.

Figure 1 illustrates U.S. average net returns per acre for major row crops from 2018 to 2024, excluding government payments. A consistent pattern emerges: moderate margins prior to 2020, historically strong profitability during the 2021-2022 cycle, and meaningful compression beginning in 2023. While the timing of the cycle is similar across commodities, the magnitude and persistence of the downturn varies by crop.

Importantly, downturns are not permanent conditions. Profitability can improve through several channels: stronger demand growth, weather-driven supply tightening, policy adjustments, input cost moderation, or improvements in productivity at the farm level. The sections that follow examine each crop, important to the South, individually, identifying not only the forces behind recent margin compression but also the key factors that could improve profitability in 2026 and beyond.

Corn

Recent Situation

In 2025/26, corn markets continue to feel the lingering effects of strong futures incentives and trade policy uncertainty. Those price signals encouraged heavy corn planting, contributing to an expected record U.S. crop. New production was layered on top of substantial 2024 carryover, keeping total supplies burdensome and limiting meaningful price recovery.

Demand has improved but not enough to materially tighten the balance sheet. Ethanol production remains near capacity, offering steady but capped support, while feed demand is expected to soften as cattle herd expansion still appears several years away. Exports remain the strongest component of demand, with buyers such as Mexico continuing to purchase shipments. Even with solid export performance, additional demand growth is needed to significantly reduce record-level supplies and support higher prices.

What's Next?

For profitability to return to the corn sector, soybeans must become more competitive in the rotation. Given the tight agronomic relationship between corn and soybean acreage, the United States will likely need to see additional soybean planting to curb corn production and rebalance supply. In both 2024 and 2025, corn output simply exceeded demand.

Figure 2 illustrates the monthly corn-soybean price ratio. While the ratio as of February 2026 remained below levels that have historically triggered large shifts in acreage, current planting intentions indicate an increase in soybean acreage and a reduction in corn acreage this year. This suggests that factors beyond the price ratio alone, including relative input costs, expected returns, and producer risk management considerations, are influencing planting decisions. If realized, the acreage shift could help moderate corn supply growth and provide some support to corn prices in the near term.

Long Term Profitability

Corn is currently in a position where supply is outpacing demand. In the near term, production is unlikely to adjust meaningfully without a policy-driven shift. While marginal acreage does tend to exit during prolonged downturns, acreage responses occur gradually and price recovery often lags.

Compounding these domestic pressures is the growing competitive threat from Brazil. With expanding safrinha corn production, lower input costs, and a structurally weaker currency, Brazil has in-

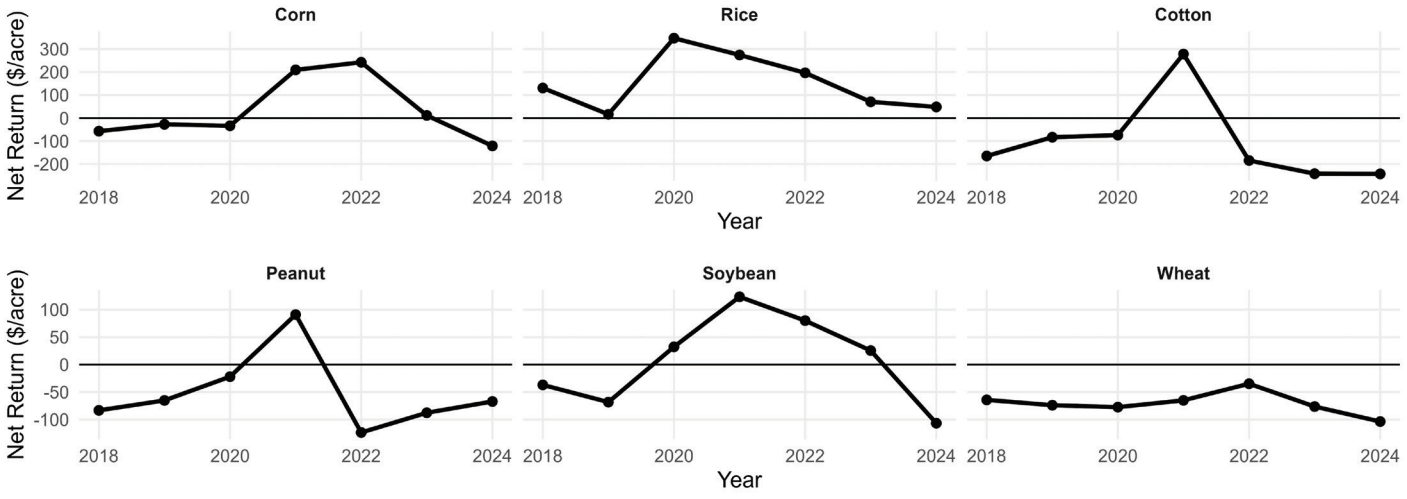

Figure 1: U.S. Crop Net Returns per Acre, 2018-2024 (USDA ERS national averages excluding government payments).
Source: USDA ERS Commodity Costs and Returns. Created by Grant Gardner.

creasingly displaced U.S. corn in key export markets such as China and Southeast Asia. As Brazilian export infrastructure continues to improve, the United States share of global corn trade faces sustained headwinds, limiting the price recovery that would otherwise follow a domestic supply adjustment. This external competition means that even if U.S. acreage moderates, the relief to corn prices may be slower and shallower than historical cycles would suggest.

At the same time, significant policy levers are being discussed on the demand side. Domestically, higher Renewable Volume Obligations (RVOs) under the Renewable Fuel Standard (RFS) could increase ethanol blending requirements. The proposed 45Z clean fuel production credit may also incentivize additional biofuel output. Nationwide approval of year-round E15 use would further support ethanol demand, and longer term, expansion in sustainable aviation fuel and other bioenergy pathways could provide incremental demand growth.

However, the most immediate impact may occur on the soybean side. Higher RVO levels that stimulate renewable diesel production increase soybean oil demand, which in turn supports soybean acreage. As soybean plantings expand, the rotational relationship between corn and soybeans may ultimately constrain corn acreage, helping rebalance the corn market. In this way, adjustments in soybean demand could indirectly play a key role in restoring equilibrium to the corn sector.

Soybeans

Recent Situation

In 2025/26, soybean markets remain in a period of adjustment following the strong profitability cycle earlier in the decade. While the sharp correction has moderated, the sector has yet to fully rebalance. Production remains ample and global supplies are comfortable relative to demand. Domestic crush capacity continues to expand, providing structural support to soybean usage and signaling long-term confidence in processing growth.

However, export performance has been less consistent. Uncertainty surrounding trade relationships—particularly with China—has limited the ability of the export sector to materially tighten the balance sheet. As a result, domestic demand growth has not fully translated into stronger overall market conditions. The near-term trajectory of soybeans will depend largely on export follow-through, trade policy stability, and how acreage responds to current market signals.

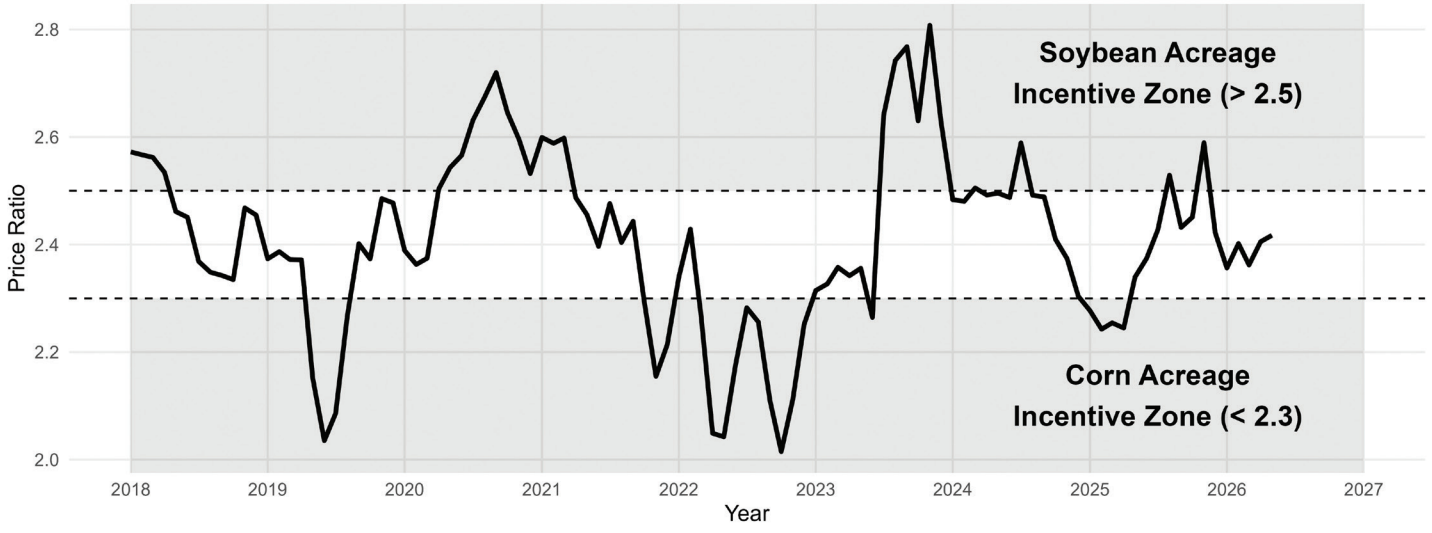

Figure 2: Monthly Corn-Soybean Futures Price Ration (Nov/Dec): November Soybeans + December Corn Rolling Contracts.
Source: CME futures (Nov Soybeans, Dec Corn) from LMIC. Created by Grant Gardner.

What's Next?

In the near term, soybean market direction will depend primarily on export performance, crush utilization rates, and acreage response. While domestic processing capacity has expanded rapidly, increased capacity alone does not guarantee tighter balance sheets. Utilization rates, crush margins, and near-term policy clarity will determine how much of that capacity is actively used.

Export demand remains the key swing factor. Trade stability, particularly with China, will heavily influence whether domestic demand gains translate into meaningful tightening. At the same time, improved crush margins or supportive biofuel policy could encourage stronger soybean oil demand. As acreage has expanded in response to improved relative returns, increased production could offset some of the demand growth. The short-run outlook therefore hinges on trade flows, utilization levels, and producer planting decisions.

Long Term Profitability

Over the longer term, soybeans appear structurally better positioned than several other row crops due to sustained expansion in domestic processing capacity. As shown in Figure 3, U.S. soybean crush has trended steadily higher and is projected to continue increasing through the end of the decade. Total installed crush capacity now approaches roughly 3 billion bushels annually, with current utilization in the mid-80 percent range. This growth reflects significant capital investment tied to renewable diesel production and evolving biofuel mandates, representing a structural shift in domestic demand rather than a purely cyclical export surge.

If exports remain near the levels projected for 2025 and crush capacity continues to operate at high utilization rates, the soybean balance sheet should tighten progressively over time. Under that scenario, expanding domestic use would gradually absorb available supplies, providing a more durable foundation for long-term profitability. (Figure 3)

Crush expansion is closely tied to RVO levels and broader biomass-based diesel incentives. If mandates remain supportive, soybean oil demand could continue expanding, reinforcing higher processing volumes. However, long-term profitability will ultimately depend on how this structural demand growth interacts with supply. Expanding domestic use can tighten the balance sheet, but it may also incentivize additional acreage both domestically and globally. If crush demand stays strong, exports hold steady, and farmers manage acreage carefully, soybeans could settle into a sustainably profitable cycle. If exports weaken or production expands too aggressively, the tightening effect of crush expansion may be muted.

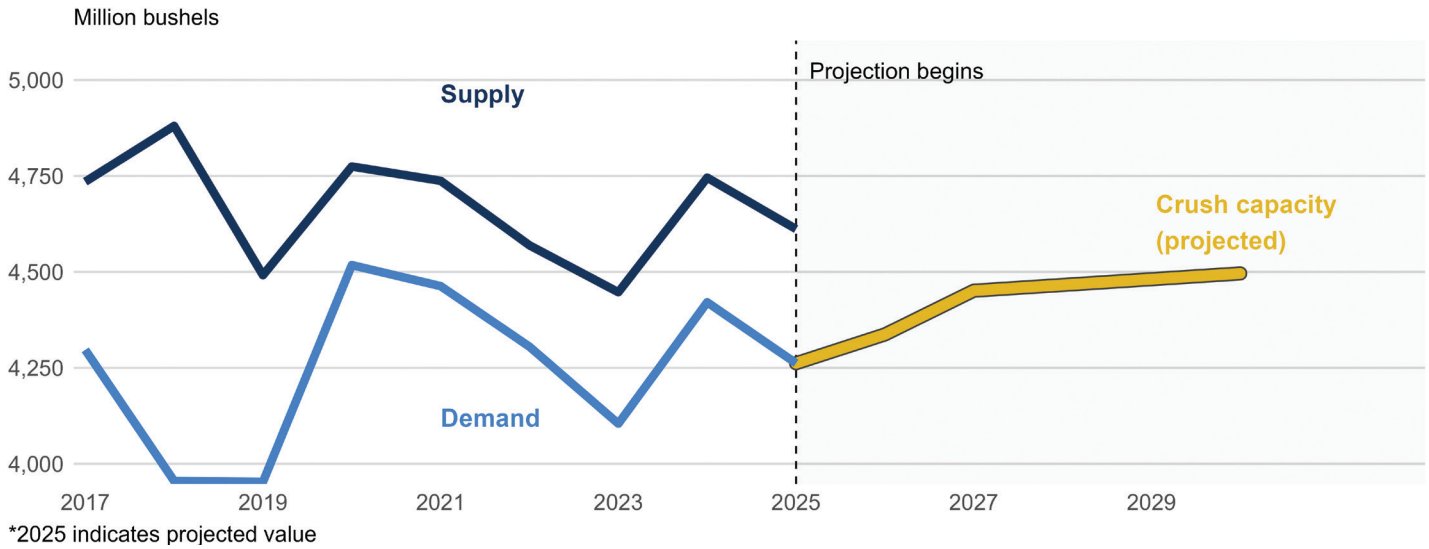

Figure 3: U.S. Soybean Supply, Demand, and Projected Crush Expansion (Million Bushels).
Source: USDA Oilseed Yearbook / American Soybean Association. Created by Grant Gardner.
Note: *2025 indicates projected value.

Wheat

Recent Situation

Total U.S. wheat production has held relatively steady although planted acreage has fallen from its 2023/24 peak in a response to record 2022 prices following Russia's invasion of Ukraine. Favorable winter precipitation across key wheat producing regions has supported yields and offset the reduction in acres.

While plantings continue to decline, ending stocks are projected to remain elevated, creating limited pricing opportunities. Food use, the largest portion of wheat use within the United States, is relatively consistent each year while feed use only peaks in times of limited corn supply (Figure 4). Typically, rallies in U.S. wheat are driven by changes in exports; however, drought in the Southern Plains region has lead to a price rally along with a re-emergence of supply uncertainty within the Black Sea region.

What's Next?

Ongoing financial pressure at the farm level could further reduce wheat acreage in 2026/27, particularly within double-crop wheat-soybean systems. Elevated nitrogen costs and muted soybean prices compress margins, diminishing the economic incentive to include wheat in the rotation relative to soybeans alone.

However, this outlook could shift quickly. A slowdown or disruption in Black Sea exports would likely support global wheat prices. Sustained strength in wheat futures could improve projected returns and re-incentivize planting in both double-crop and traditional wheat systems.

While exports are projected higher in 2025, wheat quality remains an important factor in trade flows. Millers demand high-protein, high-quality wheat for food products, and U.S. exports have historically strengthened when competing exporters face quality shortfalls or broader production deficits. Should crop stress or weather events constrain supplies from the Black Sea, the European Union, or Australian origins, the United States would be well-positioned to capture redirected demand.

Long Term Profitability

Wheat is a globally traded crop that lacks the clear domestic demand engines seen in soybeans (crush expansion) or corn (ethanol growth). Its price is largely determined in the world market, where trade flows are influenced not only by supply and demand, but also by quality differentiation. Various wheat classes serve different end uses, and importing countries often require specific protein levels

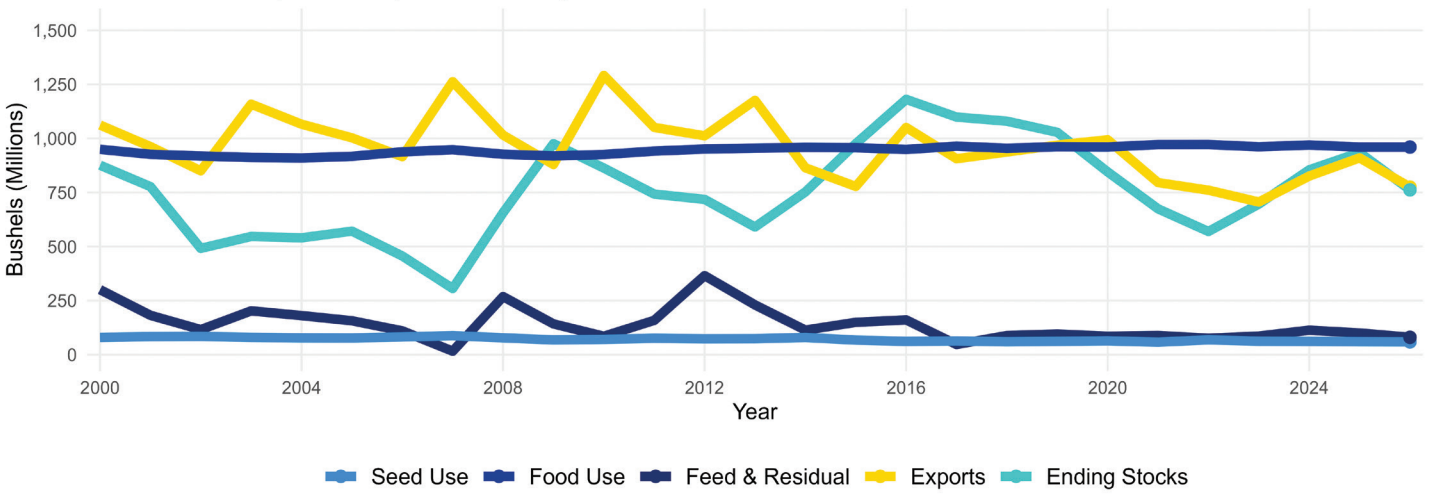

Figure 4: U.S. Wheat US and Ending Stocks by Marketing Year: Domestic Use Components, Exports, and Ending Stocks.
Source: ERS Wheat Yearbook and WASDE. Created by Grant Gardner.
Note: *2025 includes latest WASDE projection.

or milling characteristics, adding another layer of complexity to pricing dynamics.

In periods of compressed farm margins, wheat often becomes the adjustment crop within U.S. rotations. Relative to corn and soybeans, it typically offers lower expected returns, remains input intensive, particularly with respect to nitrogen, and faces intense global competition. Without strong global demand tailwinds, acreage can decline quickly when projected margins narrow.

Long-term profitability in U.S. wheat production will therefore depend less on structural growth and more on navigating cyclical volatility. Geopolitical disruptions, weather shocks, export restrictions, quality shortfalls, and exchange rate movements all contribute to price swings. Local basis patterns, particularly harvest weakness followed by seasonal strengthening near mills, can also meaningfully influence realized cash prices through storage.

Cotton

Recent Situation

The 2025/26 production year was particularly challenging for U.S. cotton growers. Persistently high input costs, elevated interest rates, and historically low cotton prices created negative profit margins for many operations. In response to poor profitability, U.S. producers significantly reduced planted acreage in 2025. However, increased harvested acres partially offset acreage declines, contributing to continued domestic supply pressure and reinforcing downward price trends.

The United States has historically been the world's leading cotton exporter, sending an average of 87% of its production to foreign markets. Starting in 2024, Brazil has surpassed the United States as the world's top cotton exporter. Figure 5 shows the competition of U.S. cotton from Brazil, where cotton can be produced at lower cost with comparable quality.

Market conditions were further complicated by trade policy uncertainty, especially renewed tensions between the United States and China, which is the world's largest cotton consuming country. While exports to China have trended down and are variable year to year, U.S. cotton has shifted exports to other countries, including Bangladesh, Vietnam, Pakistan, and Turkey, where textile production has increased.

Globally, cotton demand showed modest improvement in 2024 and 2025, but production continues to exceed consumption, leading to a steady increase in global ending stocks. The buildup in global supply remains a major factor limiting any significant price recovery for cotton.

What's Next?

For cotton prices to rise, besides a reduction in cotton production in Brazil and improvement in trade with China, there must also be a significant increase in global demand for cotton fiber. Currently, the consumption of man-made fibers is growing much faster than that of cotton. Even a modest one- to two-percent increase in global cotton fiber demand could help push prices toward more sustainable levels. Moreover, emphasizing cotton's sustainability attributes presents an opportunity to further boost consumer demand and support long-term market growth.

Long Term Profitability

Data from USDA's Economic Research Service show a long history of financial challenges for U.S. cotton producers. From 1997 to 2024, cotton receipts exceeded total production costs in only four years. Over the entire period, growers faced average annual losses of $113 per acre. Looking ahead, cotton profitability is expected to remain challenging. Input costs are likely to remain elevated, and U.S. cotton prices may continue to face pressure from strong global competition from Brazil. However, there are some signs that market conditions could become more favorable. Higher oil prices would likely improve cotton's price competitiveness relative to man-made fibers. Additionally, the growing emphasis on sustainability and traceability standards across global textile markets also presents an opportunity to differentiate cotton's value proposition and potentially stimulate demand for U.S. cotton. While these developments won't immediately reverse current price trends, they offer positive

signals that could support long-term market resilience for cotton producers.

Peanuts

Recent Situation

2025 presented peanut producers across the United States with a complex and evolving market environment. While acreage and production continued to expand, the resulting surge in output outpaced growth in both domestic use and export demand (Figure 6). For the 2025/26 marketing year, U.S. peanut planted acreage is forecast at 1.95 million acres, the highest since 1991, as growers continued shifting land away from less profitable crops, largely cotton. Peanut prices did not drop like cotton in major peanut and cotton-producing regions. Lenders also helped drive the acreage increase due to the certainty of contracts. This expansion reflects a broader trend in 2025: producers increasingly viewed peanuts as a more stable economic option amid ongoing financial pressure in other row-crop sectors.

However, expanded acreage led to a substantial increase in peanut production. At the same time, export growth has remained sluggish and domestic food use has expanded only moderately, creating a widening imbalance between production and demand. With only modest growth in demand, U.S. peanut ending stocks have risen, intensifying supply-side pressure in the market. Together, these factors contributed to a sharp post-harvest price decline in late 2025 and have raised concerns about the persistence of downward price pressures as the market adjusts to abundant supplies and a slower-than-expected demand.

Per capita peanut consumption peaked at a record 7.6 pounds during the pandemic but has since leveled off with a slight decline. In the 2024/25 marketing year, per capita peanut consumption was estimated at 6.9 pounds. Shifts in consumer preferences toward healthier eating, reinforced by new guidance from the U.S. Department of Agriculture encouraging "real food" choices, starts to create challenges for peanut demand. Products such as peanut-based candies have experienced declines in consumer consumption as a result.

What's Next?

With large peanut supplies and carryovers, identifying alternative markets and new uses for peanuts has become increasingly important for stabilizing prices and supporting grower profitability. Expanding foreign market access remains a critical strategy, particularly as traditional export destina-

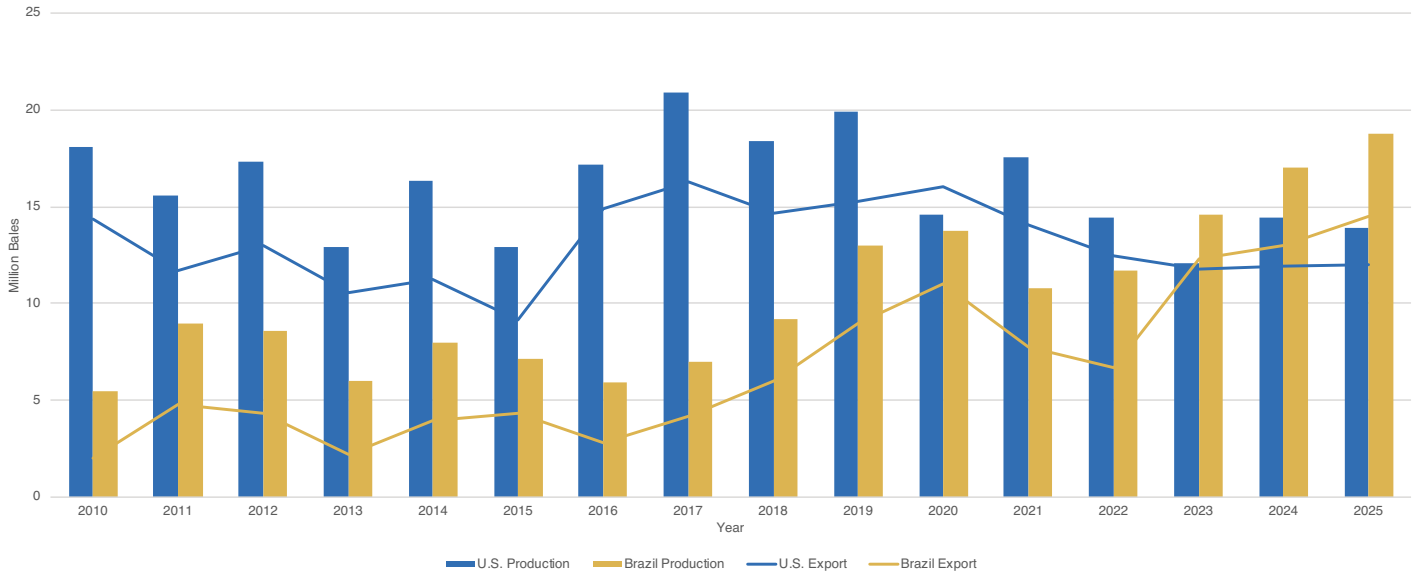

Figure 5: U.S. and Brazil Cotton Production and Exports.
Source: USDA Production, Supply, and Distribution (PSD) Database.

tions show slower growth. Using cultivars with higher oil content and growing for crush instead of the food market channels would be another alternative. At the same time, exploring innovative, non-food applications, such as the potential use of peanut oil in sustainable aviation fuel, offers an emerging opportunity to diversify demand. These alternative pathways could help absorb excess production and provide peanut producers with new avenues for long-term market resilience.

A recovery in peanut prices would likely require peanut acreage to return to more typical levels in the Southeast and Southwest states where cotton is grown, led by Georgia and followed by Alabama, Florida and Texas. Peanuts are typically rotated with cotton, making peanut acreage closely tied to cotton price trends. However, low cotton prices continue to encourage producers to plant peanuts, as peanuts remain a relatively attractive alternative. At the same time, persistently high fertilizer costs may also motivate farmers to plant peanuts, limiting potential reductions in acreage needed for price recovery.

Long Term Profitability

Data from USDA's Economic Research Service highlight a long-standing pattern of financial strain for U.S. peanut producers. Between 1995 and 2024, peanut revenues exceeded total production costs in only five of those thirty years. Over the full period, growers incurred average annual losses of $55 per acre, indicating persistent negative margins rather than temporary market fluctuations. Nearly three decades of consistent losses reveal a deeper structural imbalance in the peanut sector. However, there are constructive policy developments underway: USDA continues to offer marketing assistance loans that give producers flexibility in timing sales, and recent expansions in peanut crop insurance and new risk-management options under the One Big Beautiful Bill provide broader protection against yield and price volatility for peanut production. While challenges remain, these supports illustrate ongoing efforts to stabilize and improve the economic outlook for peanut growers.

Rice

Recent Situation

The 2025/26 crop year marked a downturn in long-grain rice prices (Figure 7). Persistently elevated planted acreage and export challenges in 2025 have contributed to a sharp decline in prices. In 2022, long grain rice planted area fell to 1.8 million acres, breaking a nearly decade-long cyclical pat-

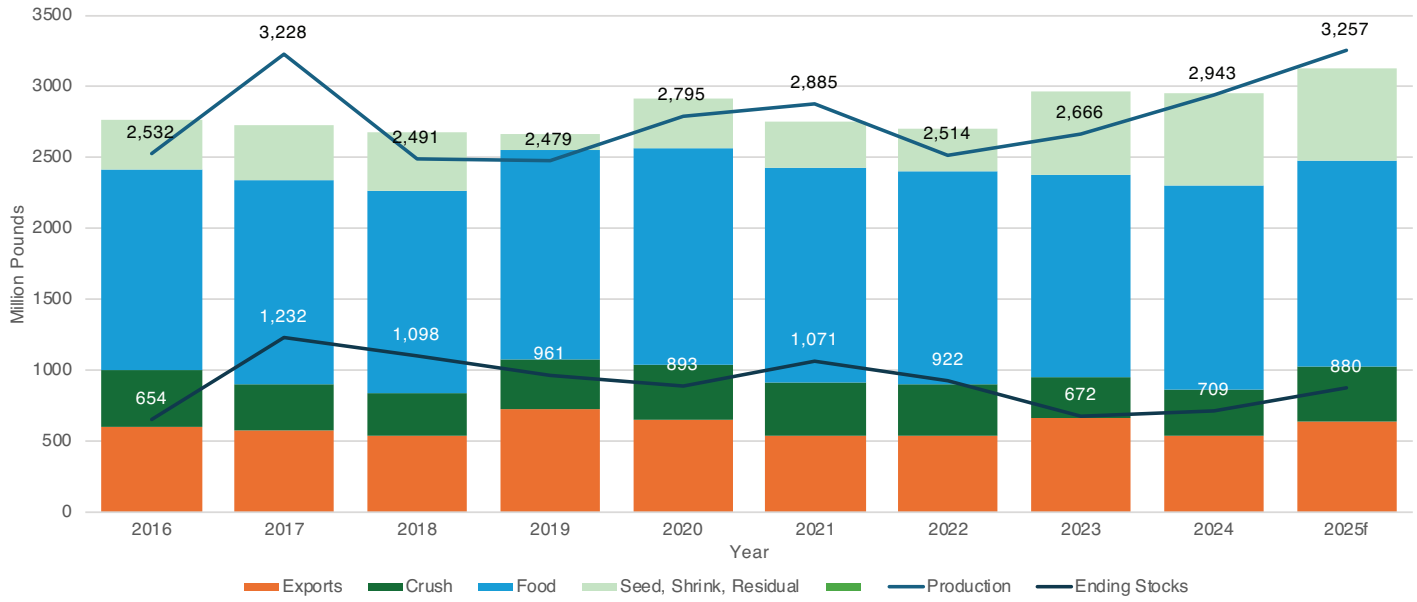

Figure 6: U.S. Peanut Supply and Disappearance: Production, Use Categories, and Ending Stocks. Source: USDA WASDE.

tern of alternating increases and decreases in planted acreage. Like many other commodities at the time, rice experienced a sharp price increase following the acreage decline, with long-grain rice prices reaching $16.70 per hundredweight in 2022. Those higher prices encouraged expansion. Long grain rice planted acreage increased to 2.2 million acres by 2024. While prices began to decline from their 2022 peak, rice remained relatively competitive compared to other crops.

Long-grain rice acreage remained elevated during the 2025/26 crop year at 2.1 million acres, but the United States began facing stiff competition in export markets. U.S. long grain rice is primarily exported to Latin America, particularly Mexico, which remains the largest market. However, increased competition from South American exporters has reduced U.S. market share in the region. Globally, India is the largest rice exporter and has fully reentered the export market after implementing export restrictions in 2022. The return of Indian supplies has added additional downward pressure to global prices.

What's Next?

Given the extremely tough profit outlook, rice acreage is declining in 2026. Rice is the most cost intensive commodity grown in the Mid-south region, and producers are shifting acres to lower-cost soybeans. The recent uncertainty in fertilizer markets is also contributing to this shift, since rice requires substantial nitrogen inputs. This reduced acreage will provide some breathing room to the market, but demand remains the key piece for recovery in the rice market. In the short term, the United States will need to work on regaining a strong foothold in key export markets. The outlook for El Nino drought conditions in Southern Asia could create this opportunity due to reduced production in key rice producing countries.

Long-Term Profitability

In global terms, the United States is a relatively small rice producer, accounting for approximately 1 to 2 percent of total world production in most years. Despite this, the United States is consistently among the top five rice exporters. As a result, global market conditions largely determine the prices received by U.S. producers. However, the United States often faces a competitive disadvantage in export markets, as U.S. rice prices tend to be consistently higher than those of other major exporting countries. In addition, quality considerations, particularly milling performance, play an important

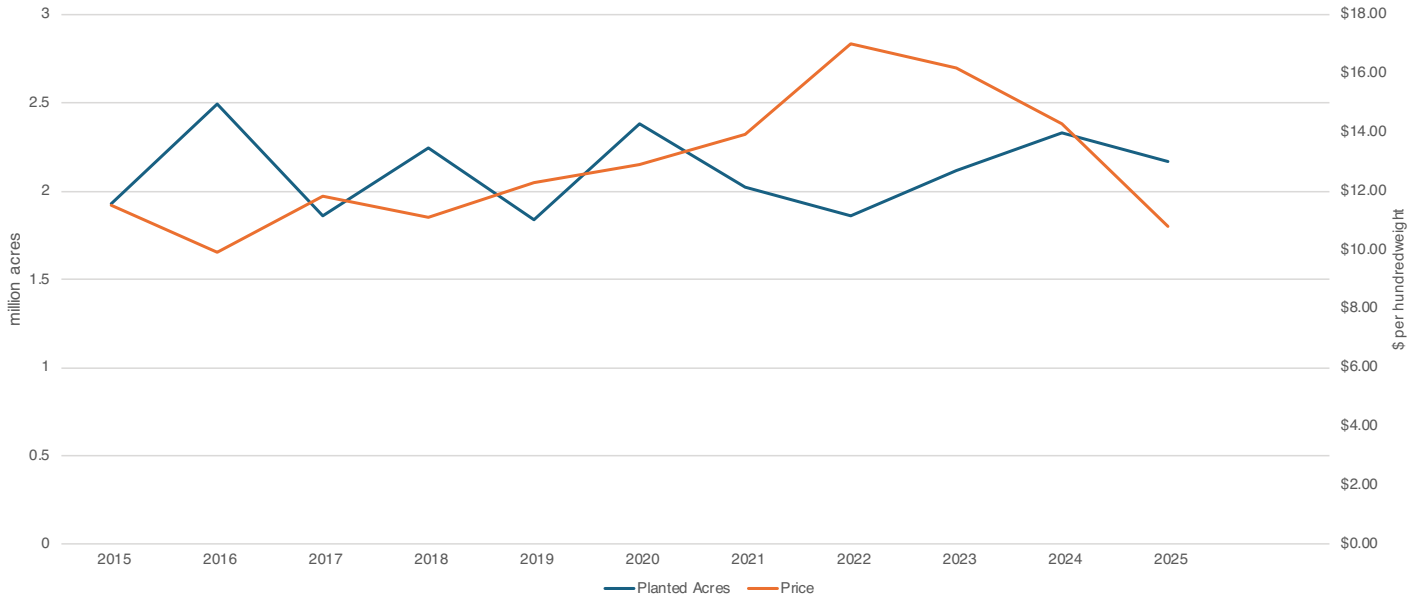

Figure 7: U.S. Long Grain Rice Planted Acres and Price: Annual Planted Acreage and Marketing Year Average Price.
Source: USDA, NASS / WASDE.

role in export competitiveness, as many importing countries are highly sensitive to grain quality. Maintaining consistent quality, improving milling efficiency, and strengthening trade relationships will be critical for ensuring market access and supporting long term producer profitability.

Another important factor for long-term profitability will be expanding domestic demand. Imports of rice into the United States continue to grow, primarily from India and Thailand. These imports largely consist of basmati and jasmine varieties that are not currently produced domestically. U.S. consumers have demonstrated a clear preference for these aromatic types, presenting a long-term opportunity for the domestic industry. By developing basmati and jasmine varieties suited for U.S. growing conditions, the industry could better compete in this segment. While success is not guaranteed, this represents a strategic area the industry should actively explore.

Conclusions

Across major row crops, the recent downturn reflects a familiar pattern in agricultural markets. Strong prices during the early 2020s encouraged production expansion both in the United States and globally. As supply responded and global stocks rebuilt, prices adjusted downward more quickly than input costs, compressing margins across much of the row-crop sector. While the magnitude varies by commodity, the underlying challenge remains the same: supply growth has temporarily outpaced demand.

Despite current financial pressure, several factors suggest that conditions can gradually improve. Structural demand growth is emerging in areas such as biofuels and domestic processing, particularly for soybeans, through expanding crush capacity and renewable diesel production. As soybean demand strengthens, soybean prices and acreage could become more competitive relative to other crops. Because soybeans anchor many U.S. crop rotations, stronger soybean markets can indirectly support the profitability of other crops in the rotation by limiting acreage expansion and tightening supplies. Policy discussions surrounding Renewable Volume Obligations, year-round E15 availability, and clean fuel incentives could further support demand for both corn and oilseeds, while global population growth, rising protein consumption, and continued export demand provide longer-term support for feed grains and oilseeds. Together, these factors suggest that improvements in soybean-driven demand could ripple across crop rotations, helping restore balance and profitability across the broader row-crop sector.

Finally, agricultural markets tend to rebalance over time as producers respond to price signals. Prolonged periods of weak margins typically lead to acreage adjustments, slower production growth, and gradual tightening of supplies. While near-term profitability may remain challenged, the combination of demand expansion, policy developments, and supply responses suggests that the sector will eventually move back toward a more balanced and profitable environment.

U.S. Agricultural Labor Trends and Issues

Derek Farnsworth, Luis Ribera, and Samuel Zapata

Introduction

U.S. agricultural producers are challenged with a constrained labor supply and rising labor costs. Increased domestic immigration enforcement and reduced migration from Mexico are reducing the availability of farm workers. These hiring difficulties are increasing production costs and exacerbating an already difficult time in the broader farm economy. As a result, agricultural employers are increasingly turning to alternatives such as mechanization and the H-2A Temporary Agricultural Workers Program, which allows employers to hire foreign workers for temporary or seasonal farm jobs when qualified domestic workers are unavailable.

Immigration Enforcement

Agricultural production is sensitive to immigration enforcement because many U.S. agricultural workers lack secure legal status. Immigration enforcement has ramped up considerably under the Trump administration with additional enforcement personnel, higher deportation targets, and more visible raids, including raids at meatpacking plants and farms (Blair and Hausman, 2026).

Enforcement has direct and indirect impacts. A recent analysis found that increased immigration related arrests lower agricultural labor force participation and weekly hours, with the largest effects occurring where unauthorized workers make up a large share of the workforce and production is labor intensive. Workers who are not directly targeted may limit mobility, avoid specific employers or regions, or leave agriculture, raising turnover and recruitment costs (Gutiérrez Li and Rubalcaba, 2025). For agricultural producers, increased enforcement raises the cost of employing unauthorized workers and increases the risk of abrupt workforce losses.

In 2022, there were approximately 2.6 million agricultural workers in the United States. Of these 2.6 million agricultural workers, approximately 1.5 million were U.S.-born (820,000), naturalized (170,000), permanent residents (200,000), or H-2A guest workers (300,000). The remaining 1.1 million agricultural workers, representing about 42% of the agricultural workforce, were estimated to be unauthorized (Devadoss and Luckstead, 2025). As a result, U.S. agriculture is still highly dependent on an unauthorized workforce and is therefore heavily influenced by immigration enforcement policy.

In general, U.S. domestic workers are reluctant to engage in field jobs, thereby exacerbating reliance on foreign workers. However, recruitment and retention of domestic farm labor could improve with higher wages and the provision of employment benefits such as insurance, housing, food allowance, and transportation (Luckstead and Nayga, 2023). These additional benefits translate into higher operating costs though, which is a primary driver for hiring foreign-born workers in the first place.

Growth of the H-2A Program

In addition to the recent rapid increase in immigration enforcement, the flow of unauthorized workers has been decreasing since the early 2000s (Passel and Krogstad, 2025). This long-term trend has caused the unauthorized proportion of the domestic agricultural workforce to shrink and age over

time. To compensate for this workforce shortfall, utilization of the H-2A Temporary Agricultural Workers Program has increased significantly.

The H 2A program allows certain agricultural employers to hire foreign workers for temporary positions when they cannot find enough domestic workers. Hiring workers through the program requires meeting specific wage, housing, and transportation standards (USDA-ERS, 2025). Devadoss and Luckstead (2025) estimated that an H 2A worker costs about $10,000 more per season than a similar domestic worker after accounting for costs including recruitment, visa, housing, and transportation. Ribera and Young (2024) estimated that these costs add 35-40% to the hourly rate paid to H-2A workers. Because of the seasonal nature of the program, some sectors such as dairy (which requires year-round milking) cannot fully utilize the program.

H 2A positions have grown from less than 50,000 positions in 2005 to more than 380,000 positions in 2024 (USDA-ERS, 2025). The program has become the main source of new seasonal farmworkers as the settled workforce ages and as unauthorized inflows from rural Mexico and other origins decline (Martin and Rutledge, 2025). H-2A use is concentrated in labor intensive crops and in states such as Florida, Washington, California, and Georgia (Devadoss and Luckstead, 2025).

Labor scarcity, and thus H-2A program utilization, is most visible in specialty crop production. This sector is difficult to mechanize, and hand labor remains the highest cost of production. To put it in perspective, labor expenses for all agricultural production account for around 10% of total operating expenses. However, labor expenses for fruits and vegetables average 38.5% and 28.8%, respectively (USDA-ERS, 2025). In some fruit and vegetable operations in Florida and Georgia, H 2A workers already make up more than half of the workforce (Devadoss and Luckstead, 2025).

Increasing Farm Wages

As agricultural labor has become scarcer in the United States, farm wages have correspondingly increased. As shown in Figure 1, the average wage for a crop worker has grown from $11.72/hour to $18.64/hour between 2015 and 2025 (USDA-NASS, 2025). This trend has significantly increased pro-

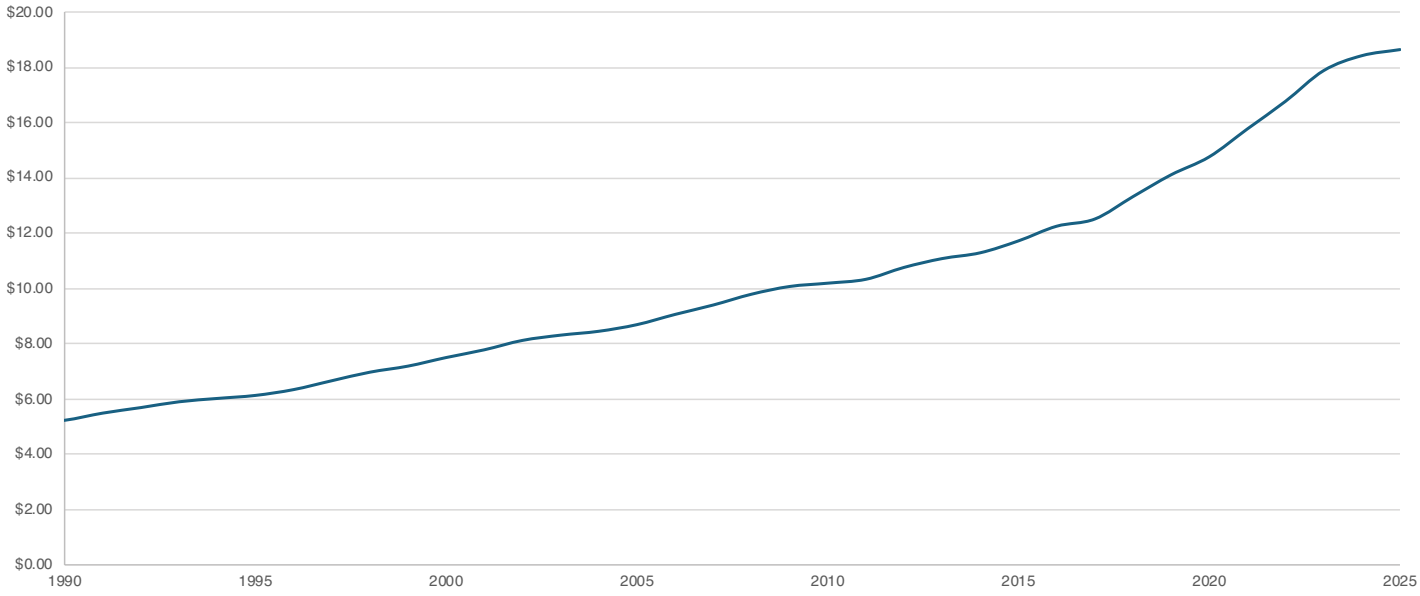

Figure 1: Average Hourly Wage Rate for Crop Workers, 1990-2025.
Source: USDA-NASS, 2025.
Note: Data only available for the first half of 2025.

duction costs for agricultural producers and will likely only accelerate as increased immigration enforcement further reduces the supply of agricultural labor. Relatedly, the general increase in farm wages has also led to higher minimum hourly wages for the H-2A Temporary Agricultural Workers Program.

To ensure that hiring H-2A workers does not depress domestic agricultural wages, H-2A workers are required to receive a minimum hourly wage known as the Adverse Effect Wage Rate (AEWR). AEWRs are calculated by state and have risen sharply in many key H 2A states, outpacing wage growth in many nonfarm sectors (Figure 2). For example, in Florida, the state that employs the most H-2A workers, the AEWR grew from $11.71/hour in 2020 to $16.23/hour in 2025 (Devadoss and Luckstead, 2025). Moreover, if costs associated with the H-2A program are included (e.g., recruitment, visa, housing, and transportation), the wage rate in Florida approaches $22.72/hour. Industry experts shared that agricultural wage rates in Mexico average around $20.59 in Colima and $23.53 in Sonora per day, or $2.57 and $2.94 per hour for an 8-hour workday, respectively. AEWR increases have significantly increased production costs for producers reliant on the program, especially specialty crop producers.

To reduce labor costs for agricultural producers seeking a legally authorized workforce through the H-2A program, the Department of Labor (DOL) has revised the AEWR calculation starting in 2026. Under the new rule, H-2A positions will be classified under two different experience levels with different AEWRs. DOL estimates that this change will reduce agricultural labor costs by $2.4 billion per year (Ayoub, 2025).

Mechanization in Agriculture

Rising wages, labor scarcity, and enforcement risk are accelerating interest in mechanization and labor saving technologies across U.S. agriculture. In labor intensive crops, research and commercial development focus on mechanical and robotic

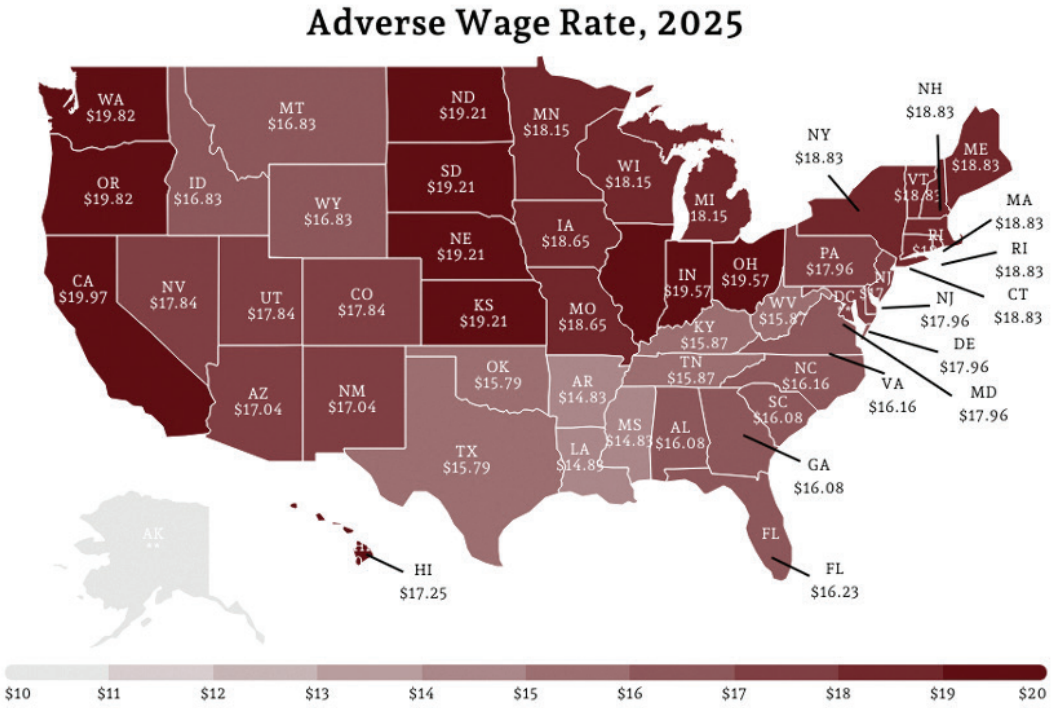

Figure 2: Adverse Effect Wage Rate by State, 2025.
Source: U.S. Department of Labor.
Note: ** Farm Labor Survey (FLS) does not report an average hourly wage for non-range occupations for this state.

harvesters, automated platforms, and sensor based systems for tasks such as pruning, thinning, and weeding, often combined with redesigned orchards and fields that improve machine access (Calvin, Martin, and Simnitt, 2022). An analysis of robotic apple harvesters shows that, at plausible picking speeds and damage rates, investment in robotic systems can yield per acre harvesting costs and profits comparable to manual harvest when seasonal labor is scarce and expensive (Charlton *et al.*, 2025). Row crop and livestock systems are also adopting more automation, including GPS guided tractors, robotic milking parlors, and automated feeding and monitoring systems (USDA-ERS, 2025). However, high upfront costs, technical limits in handling delicate produce, and the need for complementary changes in plant varieties and farm layout mean that mechanization remains a gradual and uneven response rather than a simple replacement for agricultural workers.

Summary

U.S. agriculture faces persistent labor shortages and rising labor costs as immigration enforcement intensifies and migration from Mexico declines. To compensate, employers have increasingly relied on mechanization and the H-2A Temporary Agricultural Workers Program, even though it has significant administrative requirements and about $10,000 in additional per-season costs per worker. This has caused the H-2A program to expand from under 50,000 positions in 2005 to more than 380,000 in 2024. The increased utilization of the program has also generated interest in revising the program to be more accommodating to agricultural employers. A recent Department of Labor rule change has led to decreased minimum hourly wage rates for H-2A employees. Given the current administration's focus on immigration policy, the H-2A program may see further administrative changes in the future.

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Strategic Risk Management Opportunities for U.S. Specialty Crops

Kimberly L. Morgan and Maria Bampasidou

Snapshot of the Specialty Crops Industry

According to USDA's most recent Census of Agriculture (2022), specialty crop farmers produced nationwide on approximately 240,000 farms. Specialty crops operators grow in all 50 states, with most acres located along the coastal states (Figure 1). The category covers more than 350 diverse crops ranging from maple syrup to sweet potatoes to woody perennials (USDA-NASS, 2024) and represents 15 percent of total U.S. agricultural cash receipts (USDA-ERS, 2024). Harvested specialty cropland acres exceeded 39 million and the market value of agricultural products sold totaled $115.4 million (USDA, 2024).

Economic Risk Assessment

Specialty crop operations face persistent challenges that affect their operating capacity and financial health. Among those challenges are (1) production costs, (2) weather events, (3) support mechanisms, and (4) market conditions. Production costs for high-volume crops such as almonds,

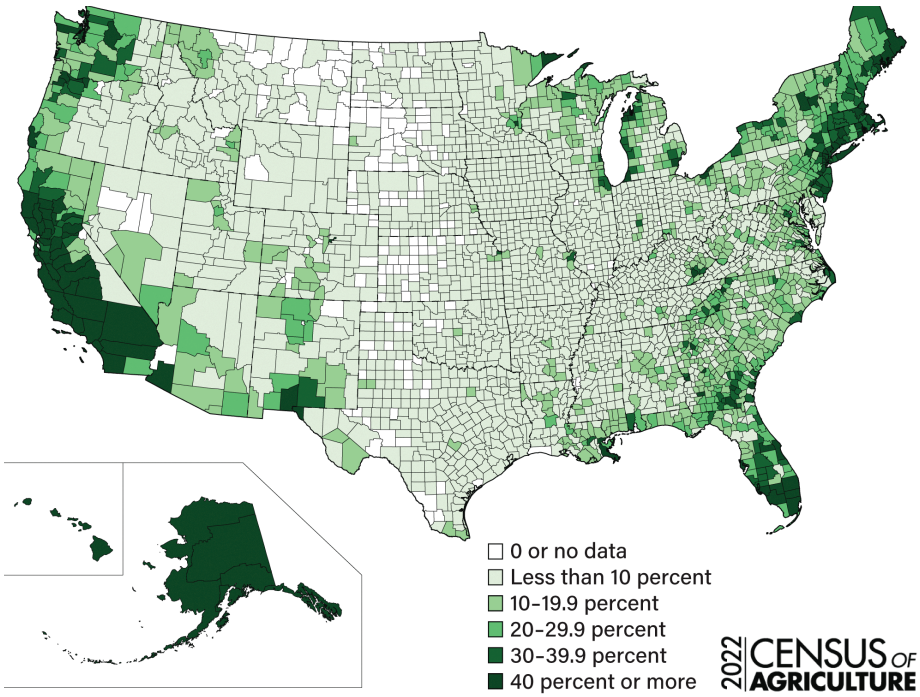

Figure 1: Share of Farms Primarily Growing Specialty Crops, by County.
Source: USDA-ERS, April 2024.

apples, potatoes, and berries exceeded estimated returns in 2025 by millions of dollars (Figure 2) (Munch, 2026). California's 2022 drought conditions cost an estimated $2 billion and resulted in the loss of more than 19,000 jobs (Medellin-Azuara *et al.*, 2022). The Florida Department of Agriculture and Consumer Services (FDACS) estimates 2026 Winter Storm Fern cost growers $3 billion, motivating the USDA Secretary of Agriculture to approve a federal disaster declaration just months after delivering $675.9 million in USDA assistance to cover losses incurred because of damages from four hurricane strikes in 2024 (Ogles, 2026). Extension experts estimated the February 2026 Florida freeze event will result in fresh produce crop losses of 30-80% statewide (Herrick, 2026). Weather disasters' impacts on perennial specialty crops like blueberries are long-lasting, as bud and limb injury or damage persists, delaying the fruit harvest and leaving the bush susceptible to future disease pressure (Rodriguez, 2026). Weather conditions will continue to limit production and investment along the United States-Mexico border as water availability and management constraints affect competitiveness and fuel uncertainties between future agricultural and industrial demands (Mexico Business News, 2026).

Specialty crop producers benefit from far fewer traditional government support programs designed to mitigate economic risks relative to row crop and livestock/poultry producers. Limited specialty crop insurance programs are available to help growers mitigate production and market risks (Bampasidou, 2022). Just $80 million in USDA-NIFA competitive grant dollars was allocated to the 2025 Specialty Crop Research Initiative (SCRI) to support research and extension projects. On the other side of the profit equation, more frequent and rising government legislated regulatory costs specific to workforce and food safety mandates fall on the shoulders of the farm (Figure 3). The American Farm Bureau Association reported that 2025 Chapter 12 bankruptcies increased for the second year, particularly in the Southeast, and noted that eligibility hinges on most of the family income coming from farming (Ayoub, 2026[a]). Added uncertainty and variability in tariffs and ongoing volatility in production input markets contribute to negative impacts on specialty crop farm profitability as input prices such as diesel and fertilizer swing wildly, impacting current and planned planting decisions.

As farm bill negotiations continue, the Congressional Specialty Crop Caucus penned a letter to Con-

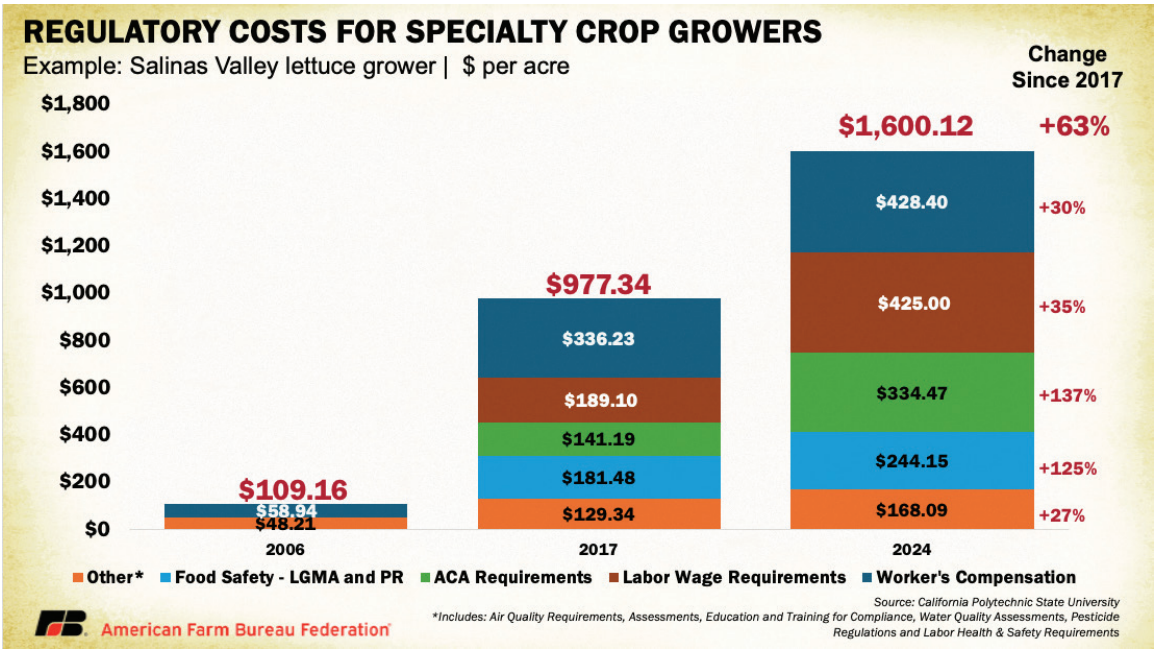

Figure 2: Regulatory Costs for Specialty Crop Growers.
Source: Munch, 8 October 2025.

gress asking for funds to ease the negative impacts of high costs, labor shortages, and trade conditions. The Specialty Crop Farm Bill Alliance (SCFBA, 2026), the American Farm Bureau Federation, and other U.S. agricultural associations have called for $5 billion in aid dedicated to the diverse specialty crop sector, yet the Trump Administration approved just $1 billion in February 2026 through the USDA Farmer Bridge Assistance program (USDA-FSA, 2026),

In summer of 2026, the United States-Mexico-Canada Agreement (USMCA) will undergo a scheduled joint review that requires the three countries to come together (Office of the U.S. Trade Representative, 5 March 2026.) Enacted in 2020, the long-term success of the USMCA is a top priority for members of the International Fresh Produce Association (IFPA) and the Canadian Produce Marketing Association (CPMA) (Strailey, 2026[a]; Bluebook, 2026[a]). Successful negotiations are intended to extend the trade pact to 2036 and require the agriculture, auto, and energy industries to collaborate to prevent major disruptions as U.S. trade policies continue to vacillate. International Fresh Produce Association Chief Global Policy Officer Alexis Taylor stated that "Since the agreement took effect, fresh U.S. fruit export values have increased by 34%, while U.S. vegetable exports have grown by 14%. These gains highlight the tangible value USMCA delivers across the fresh produce supply chain and reinforce the importance of a strong, integrated North American trade environment (Bluebook, 2026[a])." However, antidumping claims continue as Southeastern U.S. growers voice continued concerns of decreased competitiveness relative to imported fresh produce during the winter season. In July 2025, the U.S. International Trade Administration announced the U.S. Department of Commerce's withdrawal from the 2019 Agreement suspending the Antidumping Duty Investigation on Fresh Tomatoes from Mexico (DOC-ITA, 2025), a move which benefited the Florida field-grown tomato industry yet may result in higher consumer prices and job losses along the fresh tomato supply chain (Johnson, 2025; Muhammad and Ribera, 2025). In January 2026, the U.S. Trade Commission commenced a preliminary antidumping duty investigation at the request of the Florida strawberry industry against imported fresh winter strawberries from Mexico (ITC, 2026; Bluebook, 2026[b]).

Given the reduced barriers to free trade since the North American Free Trade Agreement went into force in 1994, the U.S. specialty crop supply

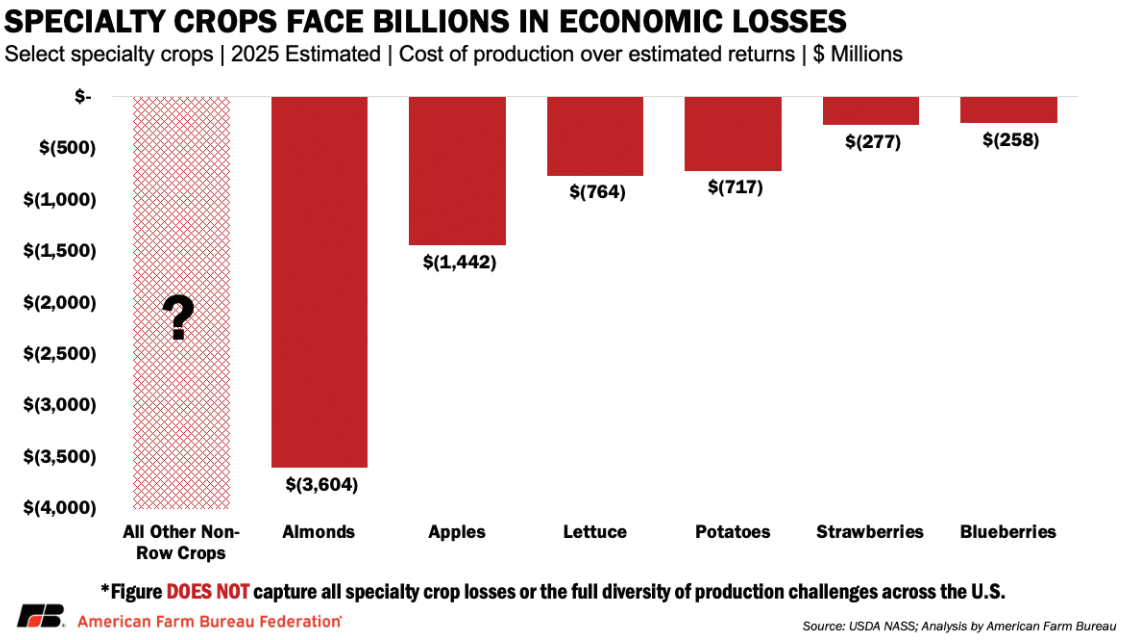

Figure 3: Specialty Crops Face Billions in Economic Losses.
Source: USDA, NASS, Analysis by American Farm Bureau.

chain depends on either importing fresh produce or securing access to a migrant workforce, primarily from Mexico (Martin, 2017). Labor cost estimates as a share of total gross cash farm income were 38 percent across specialty crops in 2022 (Subedi and Giri, 2024) and are often the constraining factor in a grower's decision to harvest the crop when faced with declining market prices. Over time, while U.S. agricultural labor wages remain consistently higher relative to Mexican wage rates, the farm labor supply continues to tighten, evidenced by rising U.S. farm wages relative to nonfarm wages (Zahniser *et al.*, 2018). As with farm owners, the agriculture workforce has declined due to aging (Figure 4), lack of the next generation's interest in agriculture-related jobs, and concerns about being away from home for lengthy periods of time (Gallardo *et al.*, 2024). The H2-A visa program, launched in 1986, allowed for the admission of temporary nonimmigrant foreign workers to perform agricultural labor to assist U.S. specialty crop producers. The number of H2-A positions certified soared to 400,000 in 2025, with Florida leading the nation, hosting 56,818 H2-A workers (Ayoub, 2026[b]). Changes in immigration enforcement, coupled with recent decreases in the 2025-2026 adverse effect wage rates (AEWR) meant to alleviate farm operating costs, may serve to further constrict labor supply.

Potential Paths to Profit

Profit maximization—one of the primary objectives of any successful business—requires continued producer commitment to balancing production decisions around operation and market geographies, size, scale, access, and diversification to best utilize human resources and technologies, as well as factoring in state and federal regulatory mechanisms.

Specialty crop operations may benefit from diversification along the timeline of the land and water resources available to the farm. A 120-year

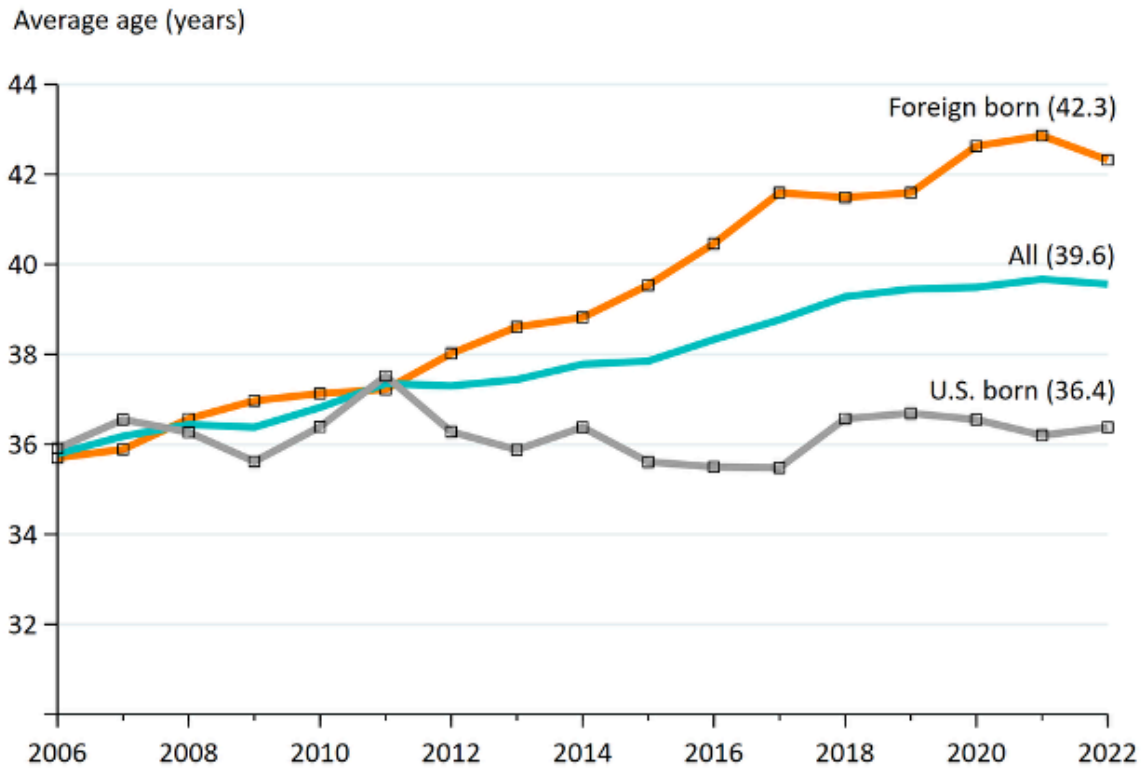

Figure 4: Average Age of U.S. Farm Laborers/Graders/Sorters by Place of Birth, 2006-2022.
Source: USDA, ERS using data from the U.S. Department of Commerce, Bureau of the Census, annual American Community Survey.

metanalysis of farm operations (Raveloaritiana and Wanger, 2026) linked increased long-term profitability, biodiversity, soil quality, and weather risk mitigation benefits to agricultural diversification. Diversification of product offerings across multiple farm enterprises balances market risk exposure through added revenue streams and sharing fixed and variable costs across the whole farm business. Productivity and profitability are highly dependent on strong record-keeping strategies. Data-driven models that run across crop seasons ensure that growers and their communities of input suppliers and buyers will benefit primarily to ensure sustainability of food flows and to drive investment in environmental stewardship.

Specialty crops are labor-intensive; hence, finding the hands to work on the farms becomes important for sustaining operations during peak season. Availability of reliable and affordable human resources limits the growth and scale of farm operations, and owners and managers often rely on off-farm income and health benefit provisions. The problem of long-term lower productivity growth in agriculture persists "...if farmers are less willing to invest in capital that ultimately leads to higher wages... (Hamilton *et al.*, 2021)." Increased pressure to find and secure labor, and time and financial means needed to respond and adapt to technologies, requires investment in skill economies (Morgan, 2025) to cultivate the next generation that may include family members (~ 21 percent) and beyond to people new to production agriculture (Kohl, 2026). Future production decisions rely on invested individuals who are tech savvy, willing to take educated and timely risks in decision making and to make investments in innovative operations. Credentialed, science-based, accessible educational programs offered through extension, technical degrees, and lifelong-learning programs will bring tomorrow's agricultural professionals on par with industry developments.

Technologies such as robotics, sensors, precision agriculture, and artificial intelligence (AI)-driven tools need to be developed and adapted to each farm operation with the potential to increase farm productivity, minimize marketable yield loss, add to information transparency, and improve the health of operators. Specialty crop producers who engage in scenario analysis projections of potential payoffs, macroeconomic conditions, operation characteristics, and timelines stand to gain from co-creation of technical or mechanical aids by adapting their production practices in response to clear market signals (Serviss and Thornsbury, 2025). The use of citrus under protected structure (CUPS) technology has documented trees grow three times faster under higher planting densities, resulting in 97 percent of the crop packed out for the high-value fresh fruit market, alongside protection from the Asian psyllid pest that carries the HLB virus. Winter Storm Fern (2026) revealed an additional benefit to CUPS, as the screen protection reduced wind damage to the CUPS trees along with microjet irrigation (Callies, 2026). As climate change continues to impact food supply chains, farm managers should track weather patterns and acknowledge the variations within microclimates, which impact markets and industry subsegments differently, as doing so is required for long-term survival.

Increasing yield is desired, yet wasted production due to a lack of markets and/or human resources negatively affects financial outcomes for growers who face continued pressures of high production costs and limited risk management tools. Pay attention to supply chain trends and produce; accordingly, for example, Lipman Family Farms channels its 75-year history into fresh-cut products that utilize 100 percent of crop yields and offers convenient product lines to customers. The company intends to earn additional gains through vertical integration, product uniformity, and food safety skills (Dutton, 2026). While the standard assumption is that size survives, from conversations with industry leaders along the produce supply chain, Woods (2025) summarized that "Automation related to management tools that can...better facilitate the handling of high value perishable crops may have a large impact on managing costs and adoption may not be as scale dependent." As most specialty crop old-timers will tell you, the industry was built on trusted relationships that translated into economic value that includes commitments to the community,

the environment, and wellness (Woods, 2024). In some cases, a smaller footprint is an advantage, as noted in a recent article: "For example, grocers that serve only a certain part of the country may find it easier to source products locally or customize their assortments to specific shopper bases, which can help them stand out in ways national retailers can't match. In addition, regional chains are more likely to have managers and other staff members who know their communities on a much deeper level than people who run stores that are part of national retailers. That empowers smaller retailers to make decisions more nimbly, giving them an edge over rivals that are part of more complex organizations (Silverstein, 2025)."

Fresh fruit and vegetable consumption trends and related health implications provide what are arguably the most relevant insights into the future profitability of specialty crops (Morgan, 2024[a]). In 2019, 12.3 and 10.0 percent of surveyed adults met the daily fruit and vegetable intake per the USDA's 2020-2025 Dietary Guidelines, respectively (Figure 5). Grocers may bear some blame for failing to meet consumers' wants and needs, as evidenced by relatively lower increases in produce prices, up just 18 percent compared to average retail price increases between 30 and 40, since 2019 (Silverstein, 2026). Finding ways to motivate consumers to easily incorporate fresh produce into daily diets requires investing in varietals grown to maximize taste profiles and nutrient composition, and a move away from the limited focus on how to survive shipping and to extend shelf-life. Choosing to focus on differentiation by retail and farm locations, consumer groups, product forms, and packaging, provides opportunities to partner with retailers and foodservice and attract and retain customers, defending these margins against competitors (Morgan and Ryals, 2024). Outside of USDA recommendations on healthy eating habits, consumers are looking to influential people and trends when constructing food diets and purchasing plans for their households. Some Florida growers and the Florida Fruit and Vegetable Association have hosted popular influencers and restaurants on farm tours, gaining access to their followers and sharing boots-on-the-ground insights. Value-added and fresh-cut produce professionals urge growers to share their investments

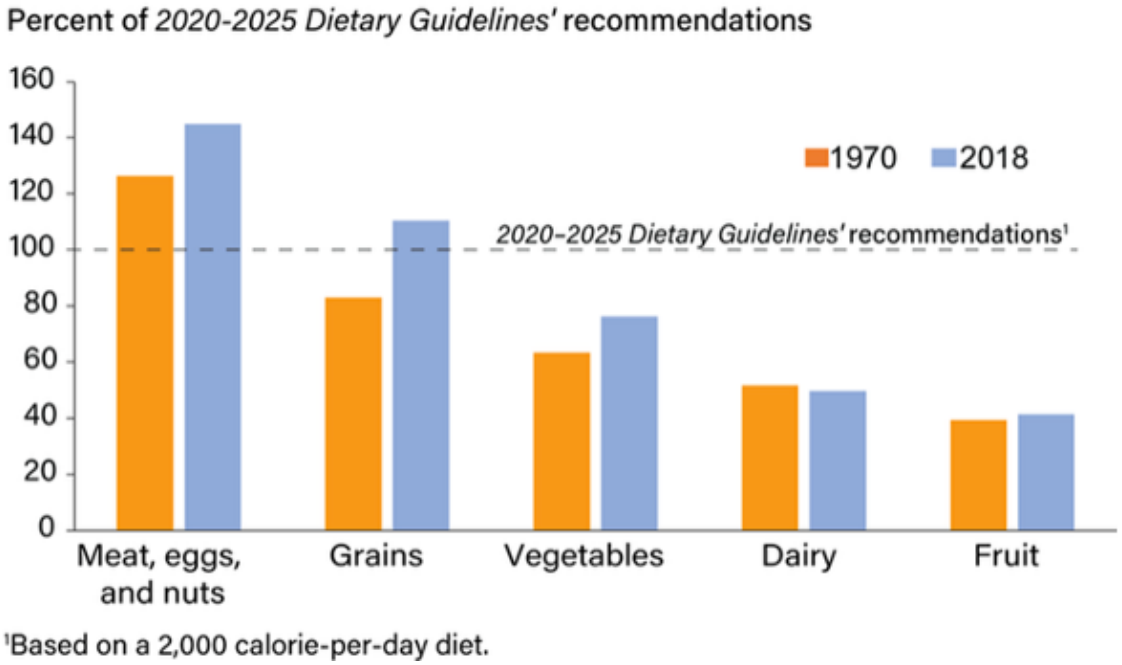

Figure 5: Average U.S. Consumption Compared to Recommendations, 1970 and 2018.
Source: USDA, ERS, Loss-Adjusted Food Availability Data and 2020-2025 Dietary Guidelines.
Notes: Loss-adjusted food availability data are proxies for consumption. Rice availability data were discontinued in 2010 and thus are not included in the grains group.

in sustainability features such as carbon neutrality, waste reduction, and fair labor practices with distributors and foodservice companies (Morgan, 2024[b]). Going forward, relationships that prioritize social responsibility will continue to pay off in the form of consumer loyalty and better margins along the supply chain, as noted by Kim Chackal, co-owner and vice president of sales and marketing for Equifruit: "What is so big to grower-packer-shippers like Equifruit, who are 100% fair trade certified, is we already have long-standing relationships with our growing partners, which helps supply during dramatic events in the banana industry and helped really protect us," Chackal says (Strailey, 2026[b])".

Conclusions

In summary, specialty crop growers can build on experience and forward-looking supply chain insights to find opportunities to address the economic risks facing them in 2026 and beyond. Collaborative relationships built on who you know, and shared core values lead to trusted partnerships and a collective voice in the policy arena. Prioritizing investment in human capital reveals useful applications of technologies and drives productivity gains on the farm and within the community. Adapting production practices and logistics in response to market signals from buyers and consumers results in differentiation, which feeds competitiveness. The farm business that cultivates data collection, educated analysis, and consistent planning generates the ideas that drive improved revenues and cost management.

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Livestock

Managing the Beef Cattle Herd through the Cattle Cycle

Andrew P. Griffith, David Anderson, and Kenny Burdine

Record high cattle prices have created a markedly different situation for the cow-calf sector than row crop agriculture. Yet, managing in high price years is critical to prepare for the inevitable low prices to come.

The beef cattle industry is an extremely dynamic industry that requires extensive management skills ranging from management of production components (forage, genetics, feeding systems, and health) to management of marketing characteristics (weight, time, location, and marketing method) as well as the interaction between the two. Many production and marketing decisions are annual decisions that vary only slightly from year-to-year unless necessitated by outside factors such as weather. However, an added intricacy to the beef cattle industry is the cattle cycle. The cattle cycle is a well-known component of the beef cattle industry, and many participants have navigated the cycle several times during their careers. The beef cattle cycle is composed of three phases: expansion, contraction, and turnaround. These three phases influence decision making and management of cattle herds across the nation.

Figure 1 shows January 1 beef cow inventory in the United States from 1920 to 2026. It is fairly easy to see times of expansion and contraction in beef cow inventory which define the cycle. An individual beef cattle cycle will generally last 8 to 14 years with 10 years being the average. Periods of higher cattle prices are typically associated with the beginning of the expansion phase as the higher prices spur cattle producers to retain more heifers and reduce the cull rate of mature cows that are reproductively sound.

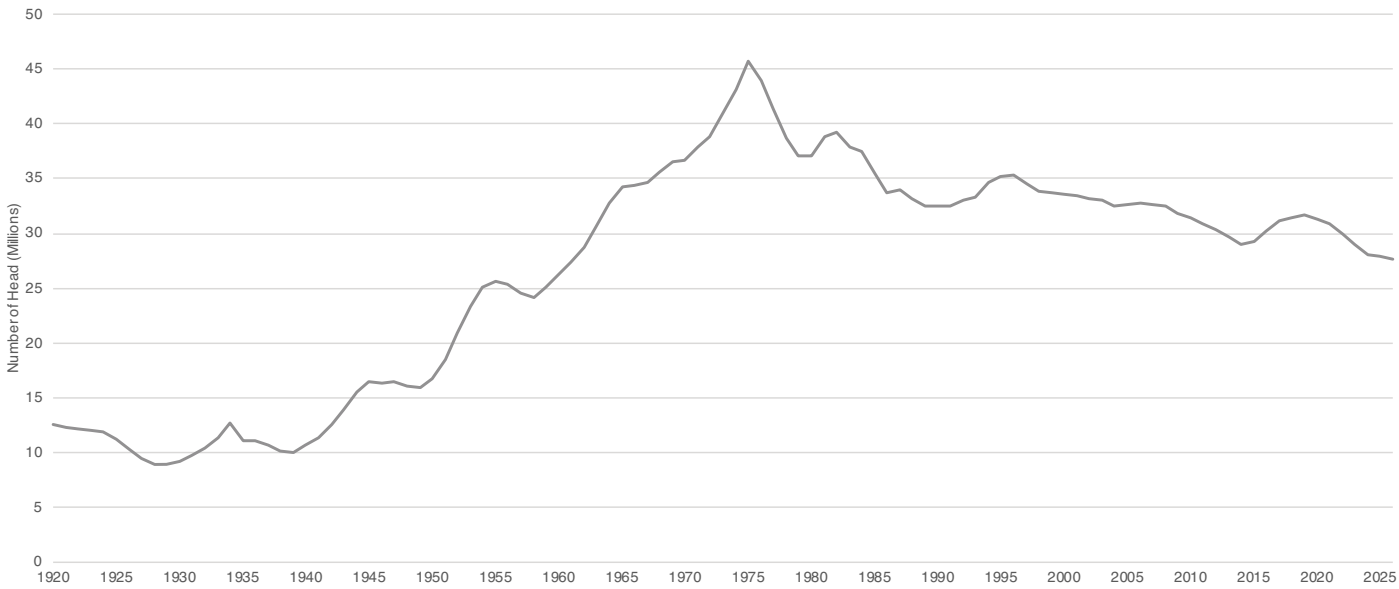

Figure 1: January 1 U.S. Beef Cow Inventory from 1920 to 2026 (million head).
Source: USDA.

Alternatively, periods of lower prices usually precipitate the contraction phase as cow-calf operations reduce the size of their herds through increased cow culling and reduced heifer retention.

It is imperative that cattle producers understand the cattle cycle which is primarily influenced by expectations of incentives (higher profits) and disincentives (lower profits). However, many cattle herd expansion and contraction decisions are made on short-term price information and not long-term fundamentals, which can result in lower profits than anticipated. Thus, the purpose of this article is to outline management considerations and strategies for cow-calf producers and margin operators (stockers, backgrounders, and cattle feeders) while navigating the cattle cycle.

Managing Costs through Expansion and Contraction

The cattle cycle is a major reason why the beef sector tends to have cyclical periods of high profit years and low profit years. It is often said that it is how one manages through the good times that determines how one can manage through the tougher times. This is an accurate statement, especially as it relates to managing costs. In general, cattle producers have more control over their cost structure than over their revenue stream. Thus, it is imperative producers first understand the total cost of cattle production and then evaluate expenditure categories in which cost savings may be possible without negatively impacting production. When considering cost management strategies, it is important not to reduce a cost that will result in more lost revenue than the reduction in cost.

Major cost categories for a cow-calf operation include feed, pasture maintenance, health program, reproduction, marketing, breeding stock depreciation/appreciation and overhead costs such as land, buildings, fencing, and equipment. Margin operators, such as backgrounders and stocker operators, also have the cost of purchasing the animal. Some costs are not easily reduced and often should not be. For instance, it is difficult for producers to reduce costs associated with animal health. Many cattle producers have an established vaccination program to reduce the incidence of health issues, which largely minimizes health costs. Similarly, stocker producers through cattle feeders have established health practices meant to minimize health treatments and thus health costs. Many producers are managing health costs by using preventative methods to reduce the incidence of sickness. Reducing money spent on a preventative health program can make the herd more vulnerable to major health issues and could lead to financial disaster through higher death losses. However, this is a common error that producers make when cattle prices are lower and profit margins are squeezed.

Cow-calf production costs developed by Standardized Performance Analysis of herds in Texas over the 2007-2011 period are contained in Figure 2: Other areas of the South will be different, but this data provides an interesting rundown of costs. This data represents total production costs. The third largest category is purchased feed. Yet, when combined with fertilizer, the two quickly jump to over 20 percent of total costs.

The largest cost categories are usually the easiest to reduce without negatively influencing profits. For most operations, feed costs will be the largest cost category and may include pasture, hay, fertilizer (used in the production of grass/hay for feed), supplemental feed, and mineral. From a feed cost standpoint, mechanically harvested feedstuffs, such as hay, that are typically fed in the winter are usually more expensive than forages harvested by the animals. For the cow-calf and stocker producer, managing cost through improved grazing strategies can be one method of reducing feed costs without negatively impacting production. Grazing strategies to evaluate include rotational grazing, species diversification (cool and warm season perennial grasses), annual forages, and stockpiling. These practices may not work in every production system, but they generally have a lower cost per unit of production than mechanically harvested feedstuffs. Producers should consider ways to increase the number of grazing days per year if those additional grazing days can be added for less than the cost of winter feeding days.

From the cattle finisher standpoint, there is limited flexibility when managing feed costs. Cattle feeders are constantly evaluating least cost rations, but they cannot change rations quickly without negatively impacting production. Rations have to be adjusted slowly for cattle that are already on feed. The only abrupt change that can be made is when cattle are entering the feedlot.

Reproductive costs come in the form of sires to breed females and in the form of a failure to successfully breed animals. The failure to successfully breed females may be the most expensive reproductive cost. Failure to breed can occur for several reasons, but proper health and nutrition for both sire and dam are necessary to ensure that large costs are not incurred in this category. The purchase of a sire is a large expenditure. One sire may be able to breed 25 to 35 cows in a short breeding season. Thus, the cost of the sire minus his expected value when he leaves the herd, should be spread across the number of females bred. For cow-calf operations that retain their own heifers, sires are typically kept for a maximum of two years. In addition to the "depreciation" of the bull, producers should also include the cost of maintaining him when estimating breeding costs for the cow herd. The ability to spread breeding costs across more females reduces the cost per calf marketed. When multiple sires are needed and when they are not fully utilized, the use of artificial insemination or other reproductive technologies can be used to manage breeding costs.

Marketing and land costs are not easily changed. Marketing costs are associated with the method in which cattle are marketed with commission and transportation being the most common components. Marketing costs are a cash cost when a marketing agency is utilized and a labor/management cost if private treaty is utilized. Land costs are associated with rent or the opportunity cost of rent. However, it is difficult to change land costs because obtaining land either through purchase or rent can be difficult.

Good times like the present, often result in new capital purchases that depreciate and sometimes require replacement when prices are lower. These purchases can often saddle the operation with high costs in the future. A careful evaluation of equipment needs is necessary because the second largest cost category in the SPA data is depreciation, at $88 per cow and 14.9 percent of total costs. Depreciation costs are often forgotten about, but are critical to account for in order to be able to replace

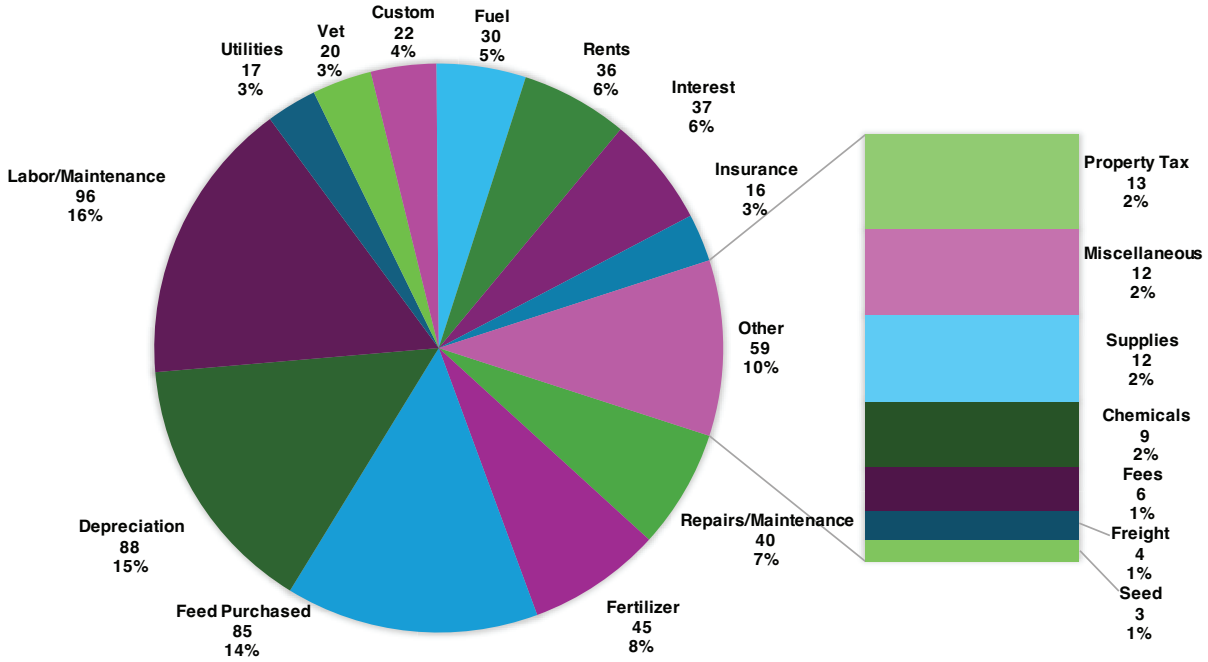

Figure 2: Texas Standardized Performance Analysis (SPA) Breakdown of Expenses per Female and Percent of Total Costs in Each Category, 2007-2011.

assets at the end of their useful life. Depreciation expenses can include equipment like trucks and tractors and also bulls and cows depending on how they are replaced in the herd. These are also costs that are difficult to reduce quickly. But, given that they are not cash expenses, they are often ignored until it's too late.

Building and equipment costs per unit of production usually decline with increases in the size of the operation, thus there are economies of size related to some costs. Most operations have buildings, working facilities, and equipment, but the ability of larger operations to spread those costs over more animals allows them to reduce the overall cost per animal unit. This is an area that should be examined during low price times of the cattle cycle, as putting off major purchases or refinancing existing long-term debt, may improve cash flow until the market improves enough to provide additional capital.

At all points in the cattle cycle, producers are encouraged to manage costs, because this can reduce the negative effects experienced when the cattle herd is contracting and prices are lower. Additionally, it may benefit producers to pay down debts on land and other capital assets during the expansion and higher price phases. Operations that are efficient and have lower cost structures will be in a much better position during times of reduced cash flow.

Cow-Calf Producer Considerations

The cattle cycle has times of high prices (leading to herd expansion) and low prices (leading to herd contraction). When prices are relatively high, producers typically retain or purchase more heifers and retain reproductively sound mature cows past their normal culling age. Producers do this to market more animals in the future and capitalize on high prices. However, over time the retention of more females at the national level results in larger calf crops and more feeder cattle being marketed in future years, which depresses prices. This is further complicated by the fact that breeding stock becomes more expensive when calf prices are high and the demand for reproductive females increases.

In terms of economic production costs, retaining heifers is the same as purchasing those animals for the price for which they could be sold at present. This is the opportunity cost of not selling that heifer at the high price. Thus, a heifer retained during time periods of higher prices is more expensive than a heifer retained in time periods of lower prices and will need to generate a greater return over her productive life to recoup that cost. In practical terms, when the costs of raising one's own heifers is lower than purchasing heifers, then producers retain heifers.

Alternatively, producers generally market more heifers and cows when prices are declining. This is done because the future profitability of a heifer appears bleak given the lower price levels. However, the marketing of more heifers as calves and feeder cattle will eventually result in a smaller breeding herd and small calf crops in subsequent years. The reduction in the number of calves being marketed over time will support calf prices in the future.

The contraction and expansion tendencies previously mentioned result in producers marketing fewer animals when prices are high and marketing more animals when prices are low. This seems contrary to most business operations that try to buy when prices are low and sell when prices are high, but this occurs for two primary reasons. First, a heifer that is weaned in the fall of 2026 would be bred the first time in the spring of 2027 and wouldn't wean her first calf until the fall of 2028. This time lag between heifer retention and the impact on the size of the calf crop is a major reason why we have cattle cycles in the first place. Second, individual producers tend to be small and unable to affect the market. So, responding to profits by retaining heifers makes perfect sense for an individual cow-calf operation. However, when this occurs across the entire industry, supply increases and downward pressure is put on prices.

With the thought of buying low and selling high, it may be advantageous for producers to move opposite of the cycle. Thus, when prices are high, producers may want to market more animals to capitalize on high prices and then retain more heifers and

build the herd when prices are low. This contrary movement can result in cash flow problems during periods of lower prices since prices are low and fewer cattle are marketed. However, revenue management during periods of high prices can help smooth the cash flow situation when prices are lower.

A more common alternative utilized by producers is maintaining the same size herd. This management practice can smooth revenues relative to moving opposite of the cattle cycle which reduces cash flow problems. This practice is fairly common as many cattle producers are fully utilizing forage resources and base production on fully utilizing that asset.

Cow-calf producers have an asset in their breeding stock, which is generally built over time as genetics are improved. Thus, producers with strong genetics are hesitant to decrease herd size because of fear of not being able to replace those animals with comparable or better genetics. The building of perceived value through genetics or other ways can make it difficult for some producers to manage through the cattle cycle, but producers should consider that increased profits provide an increased ability to replace breeding stock.

Margin Operator Considerations

Margin operators, such as stocker producers, backgrounding operations, and feedlots, own animals for a much shorter period of time than cow-calf producers, which results in different management tactics. Since margin operators are buying and selling cattle over shorter time periods, they are more vulnerable to short-term swings in price than the longer-term changes associated with cattle cycles. In truth, they can be profitable when cattle prices are high or low but will be greatly impacted when prices swing drastically between purchase and sale.

When prices are decreasing, margin operators purchase animals on a strong market relative to the market they will sell on. A declining market requires margin operators to place more focus on managing the selling side of the business. The sell price can sometimes be managed by forward contracting cattle or using risk management strategies to lock in a price or set a floor price. Another alternative is for margin operators to reduce the number of animals purchased or stop purchasing animals. This is generally not the best alternative as many margin operators have fixed costs that are incurred regardless of the number of animals purchased. Thus, most producers will continue to purchase animals as long as variable costs are covered.

When prices are increasing, margin operators purchase animals on a relatively weak market and sell cattle on a strong market. This situation is favorable for margin operators from a selling standpoint, but increased management is needed on the purchasing side. Most margin operators purchase cattle to replace those previously marketed. Thus, they are buying animals on just as high of a market as they are selling on. The management of future purchases when prices are increasing can reduce the purchase price of the animal, which provides a larger margin for operators to work with. The risk to this strategy is in relation to the turnaround, where prices go from increasing to decreasing which could result in a producer paying more for cattle.

Margin operator decisions tend to be shorter-term and riskier from a capital standpoint. These decisions have more to do with operating within a phase (contraction, expansion, turnaround) of the cattle cycle rather than navigating the entire cycle. However, the cattle cycle should be considered when purchasing and selling cattle.

Conclusions

The cattle cycle is a major factor in cattle production and producer profitability. The cycle is predictable from the standpoint that there will be periods of expansion with higher prices, contraction with lower prices, and a turnaround on both ends. However, it is also unpredictable as to the timing of these phases and this is primarily where the risk exists. Outside forces, such as weather, can prolong or shorten phases of the cattle cycle. The outside influence then can enhance the effects of the next phase, which increases the complexities of management.

Record high cattle prices have given cow-calf producers the opportunity to prepare for the future and set up the farm and ranch for future success. There is an opportunity to invest to reduce future production costs. This is also the time to build cash to "keep your powder dry" for future opportunities!

The key points are that producers should manage costs through all phases of the cattle cycle, evaluate strategies that can reduce the financial impacts posed by the cattle cycle, and attempt to reduce risks presented during each phase. The cattle cycle has been a constant for many years, and it is likely to influence the business for many years in the future.

Livestock Outlook

Hannah Baker, Kenny Burdine, and Will Secor

Introduction

It is hard to remember a time when there has been more divergence between the crop and livestock sectors of the agricultural economy. While challenges remain, livestock producers are generally enjoying attractive profits across species as a convergence of factors are supporting the livestock sector in 2026. Low inventory levels are a key driver, especially for beef cattle, but that is just part of the story. Livestock operations have also benefited from moderate grain prices and the associated impact on production costs. Additionally, much of the current strength in the livestock sector is also being driven by strong demand for protein. This article will walk through the current state of each of these factors and provide perspective on the livestock outlook for the next several years.

Current State of Beef Cattle Market

The supply of beef cattle in the United States is at historically low levels. Since the cyclical peak in 2019, the U.S. cattle herd (all beef and dairy cattle) has declined to 86.2 million head, which is the smallest it has been since 1951. While growth has been seen in the number of dairy cows, the beef cow herd decreased by over 284,000 head during 2025 and began 2026 at its lowest level since 1961 (see Figure 1). Six out of the top ten beef states saw declines in cow numbers in 2025 ranging from 1%-7%. As cow inventory declined, so did the size of the calf crop. An estimated 32.9 million calves were born in 2025, the smallest total since 1941 (National Agricultural Statistics Service (NASS), January, 2026a).

While tight cattle supplies have gotten a lot of attention, consumer demand for protein has

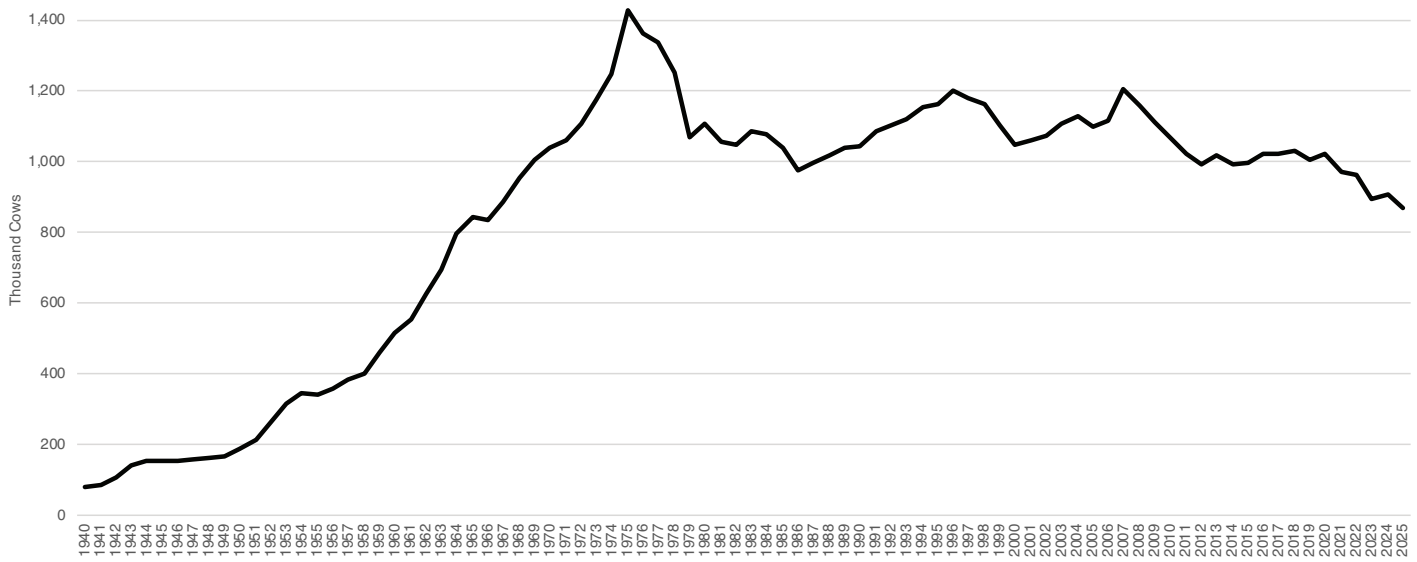

Figure 1: January 1 Beef Cow Inventory (1940 to 2026).
Source: NASS, January, 2026a.

also been very strong. The current state of protein demand is somewhat reminiscent of over twenty years ago when the Atkins and South Beach diets were rapidly growing in popularity. Kansas State's Monthly Meat Demand Monitor has consistently shown increasing willingness to pay for meat and protein products, with price increases of some products exceeding the pace of broad inflation from 2020 to 2025 (Kansas State University – Agricultural Economics, n.d.). Some of the recent increases also stem from growing use of GLP-1s, which is also impacting demand for proteins (Bina *et al.*, 2026).

The annual retail all-fresh beef demand index calculated by LMIC for 2025 was 10% higher than in 2024 and 38% higher than in 2000 (Economic Research Service [ERS], 2026a; Livestock Marketing Information Center [LMIC], 2026). In 2025, the all-fresh average retail price for beef was $8.44/lb., reaching a high of $9.55/lb. in December (ERS, 2026a). Even at record high beef prices, consumers continue to show strong willingness to pay for high-quality beef products. Consumer trends are difficult to predict, but demand for protein is as encouraging as it has been in a very long time.

The combination of tight cattle supplies and strong meat demand has resulted in record-high cattle and beef prices over the last couple of years. Steer calf and feeder steer prices, in early 2026, were 60% and 41% higher year-over-year, respectively (Agricultural Marketing Service [AMS], 2026a; AMS, 2026b; LMIC, 2026). In February 2026, prices for fed cattle were up 22%, year over year, with the 2026 average projection for live cattle being $240/cwt (Office of the Chief Economist [OCE], 2026). Cull cow prices have also been very strong, with prices in the first two months of 2026 running 137% higher than the 2020 to 2024 average.

Despite the market signals to encourage expansion through strong prices, there has been little indication that cattle producers are looking to expand the U.S. cattle herd from its multi-decade low. The number of heifers intended as beef replacements did increase by 0.9% from January 2025 to 2026 but remains just over 17% of U.S. beef cow inventory. At the same time, beef cow slaughter was down more than 500,000 head (18%) in 2025 with the culling rate dropping to 8.4% (NASS, 2025, 2026). Thus far, producers seem to be keeping cows a bit longer, but they do not appear to be retaining enough heifers to see growth of the cowherd.

Starting with the 1967-1979 cattle cycle, each subsequent cyclical cattle inventory peak has been smaller than the previous cycle. With respect to the current cycle, beef cow inventory is down 1.3 million head since the last cyclical low in 2014 and 4 million head smaller than the most recent cyclical peak in 2019. The industry continues the long-running trend of producing more beef with fewer cattle as illustrated in Figure 2: In 2000, average beef production per beef cow was 800 pounds. By 2025, that average had increased to 928 pounds per beef cow. This has largely been the result of improved genetics and feeding management over the past several decades.

This long-term productivity trend has been amplified in recent years by high cattle values and moderate feed prices. For example, cattle dressed weights increased by 27 pounds in 2024, which largely offset the reduction in slaughter levels and kept beef production at about the same level as 2023. The closure of the U.S. border to Mexican feeder cattle was an additional contributing factor to reduced slaughter in 2025. Dressed weights increased another 25 pounds last year, but that was not enough to offset the decrease in slaughter as beef production was down by roughly 4% from 2024. Expectations are for slightly lower beef production in 2026, but this will be largely determined by female slaughter levels and harvest weights. Even if live cattle imports from Mexico were to resume at some point this year, the impact on 2026 production levels would likely be very small.

Long-run Expectations for the Beef Cattle Market

How long these strong cattle prices last will depend on the persistence of demand strength, the timing of expansion that will eventually lead to higher beef production, and the production levels of competing proteins. Despite record-high prices, interest in beef herd expansion has been limited thus far. As of January, the percentage of heifers on feed was 38.7%, which is nearly 2% higher than the

average of the last 20 years (NASS, January, 2026b). Even if heifer retention were to significantly increase in 2026, the initial impact would be a reduction in heifer slaughter that would further tighten cattle supplies in the short run. A heifer retained in 2026 will not calve until 2027 and that calf would not impact beef production levels until 2028-2029.

Despite the strong revenues, there are constraints to expansion of beef cattle inventories including cost of production, interest rates, forage/land availability, an aging farmer base, weather challenges, and political uncertainties. The potential for rapid expansion of the U.S. cow herd seems unlikely, partly because the pool of heifers from which to pull replacements remains small. Plus, after culling the herd deeply for several years due to drought, beef cow slaughter has been down sharply since 2022. This suggests that the cow herd has been getting older and there may not be much room for growth in the herd from additional reductions in cow culling.

Chicken and Pork

While it appears that growth in the U.S. cattle inventory will be relatively slow, chicken and pork production can respond to market signals much faster than beef. But, production increases in those industries have been modest thus far. Broiler production increased by 2.1% during 2025 and current projections are for a roughly 1% increase in 2026, which would be below trend. Pork production was actually lower in 2025, although it is expected to be higher in 2026 (OCE, 2026). Growth will be driven by productivity gains as hog breeding inventory has generally been decreasing since 2019 (NASS, December, 2025).

Finally, one must consider the long-run implications of global protein demand. The last couple of years have somewhat been anomalies with respect to U.S. beef trade. U.S. beef exports were down 14% in 2025, while imports were up 18% (ERS, 2026b), an expected result of strong demand and tight domestic supplies. Trade policies also impacted import and export levels with various trading partners. However, as incomes continue to increase in developing countries, the long-run potential for U.S. beef exports remains encouraging. All things considered, the outlook for the beef cattle section in the coming years is very encouraging.

Potential for Integrated Industries

While profitability in the beef cattle sector has gotten a lot of attention, opportunities exist across

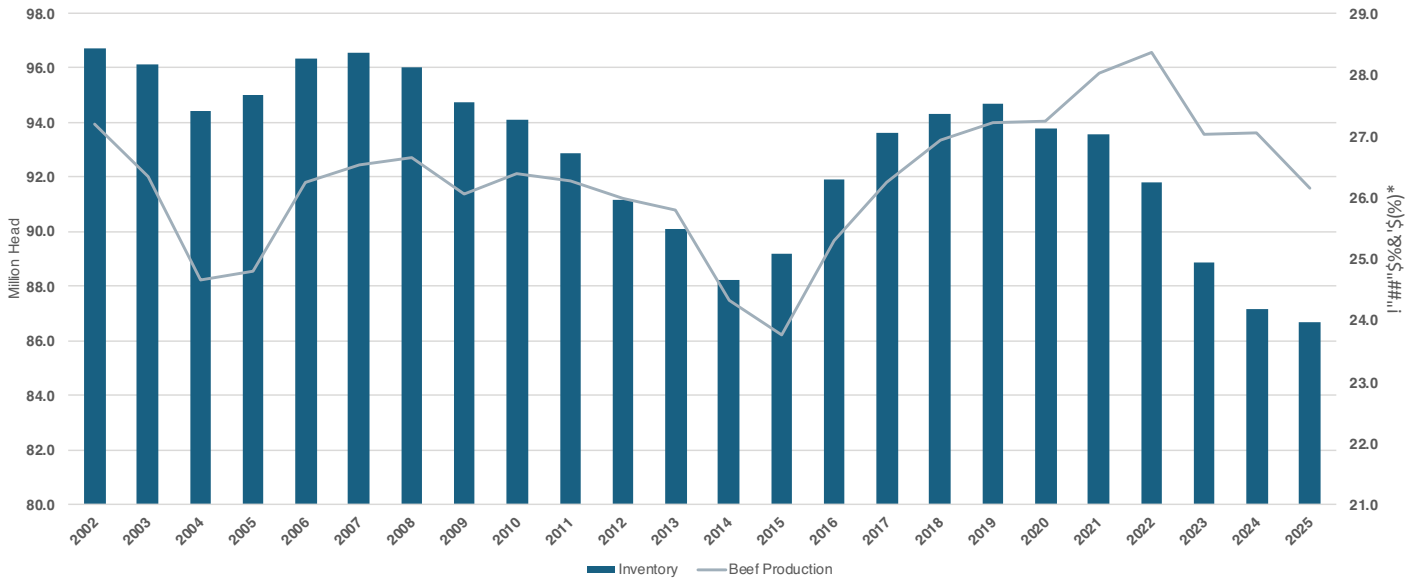

Figure 2: Cattle Inventory and Beef Production (2002 to 2025).
Source: ERS, 2026a; LMIC, 2026.

other species too. Of particular interest are the hog and broiler sectors (integrated industries), which can take advantage of the same trends of strong protein demand and moderate feed costs. Hog and broiler production systems have the potential to increase farm revenue on a relatively small number of acres. Additionally, they can complement other enterprises by allowing combined or more efficient use of labor and creating beneficial inputs such as manure/litter for fertilizer.

Pork and broiler production are highly integrated with production coordinated through processing companies (i.e., integrators). These contracts are structured to incentivize efficient production at the farm level while generally insulating farmers from market risks. Different sectors and integrators will use different mechanisms to push for more efficiency through bonuses and/or penalties. However, the main goal is for farmers to produce as many pounds per dollar of input as possible within the constraints and goals of the production system. Typically, the producer makes long-run capital investments, provides labor and management, and incurs day-to-day operating costs, while the integrator sources and markets the animals, provides feed, medicine, technical support, and bears market risks.

The producer's choice to start an integrated livestock enterprise is largely a capital budgeting decision. Significant investments in housing must be made upfront by the producer. Ongoing expenses of labor, electricity, heating, water, and other operating costs will also be incurred. These initial and ongoing costs must be weighed against projections of revenue based on the integrator contract being considered. Sensitivity analyses of key inputs to these calculations are important given high construction costs, rising wages, significant borrowing expenses, and uncertain energy markets.

Because of the producer's insulation from market uncertainty, overall demand for livestock products (pork or chicken) and integrator profitability are the most important drivers when investigating the prospects of these enterprises. Profitability is currently high in the broiler sector due to strong consumer demand and moderate feed costs. Annual chicken consumption recently exceeded 100 pounds per person and is projected to continue increasing. Chicken is generally considered to be affordable, and the broiler production system is designed to deliver relatively inexpensive protein to the consumer. Prices have moderated somewhat recently as supplies have grown, but interest in integrator expansion continues.

The same strong demand factors, combined with lower feed costs, have positively impacted recent margins in the hog sector. Farrow-to-finish returns reached levels in 2025 that had not been seen since 2021, and projections are for another strong year in 2026. Chicken, beef, and pork are the three primary meats that Americans consume, and their values are related as protein substitutes. While nominal retail prices were discussed previously, Figure 3 shows the relative prices of retail pork and poultry to beef since 2008. Chicken and pork have become less expensive relative to beef over the past few years, which highlights potential for production growth for these species.

Lamb and Goats

Lamb production has been declining for decades in the United States due to increased competition from Australian and New Zealand lamb, rising production costs, predator losses, and reduced demand for wool. But, in recent years, lamb has seen a resurgence in consumer demand. The introduction of hair sheep has eliminated the need for wool breeds where the cost of shearing often exceeded the value of the wool. A growing ethnic market for lamb has led to the rise of a non-traditional market where light weight lambs do not go to feedlots but go straight to slaughter.

Hair sheep breeds have expanded the opportunity for sheep production in the South. Opportunities to graze sheep on solar panel operations has led to increasing numbers of sheep in Texas. Growing ethnic markets and urban populations have provided further opportunities of growth.

Lamb prices have been higher than average in late 2025 and 2026, driving some profits. The sheep flock declined slightly into 2026, cutting into production. Imports have declined slightly compared to

a year ago due to exchange rate issues, tariffs, and record high lamb prices in Australia. U.S. prices in 2026 are expected to be above those of 2025. While consumer demand has been growing, high retail beef prices run the risk of curtailing purchases when compared to much cheaper alternatives.

With respect to goats, there continues to be opportunity for producers. Prices in 2026 have been at record highs for meat goats and are expected to continue to be high. Angora goats that produce mohair have dwindled in number over the last 35 years. Dairy goats have remained relatively steady in number. The vast bulk of the goat inventory are meat breeds. Demand appears to remain solid, especially regionally in ethnic markets, providing opportunity for local smaller producers.

Summary

While risk and uncertainty will always exist in agriculture, current market trends are favoring increased livestock and meat production. Many producers are likely to consider entering livestock production or expanding existing operations. This is a decision that needs to be made carefully as investments in cattle breeding stock and integrated pork and poultry operations are significant long-term investments that may outlast current trends. The profitability of those investments will be determined over many years, and this requires careful planning, detailed budgeting, and development of a risk management plan.

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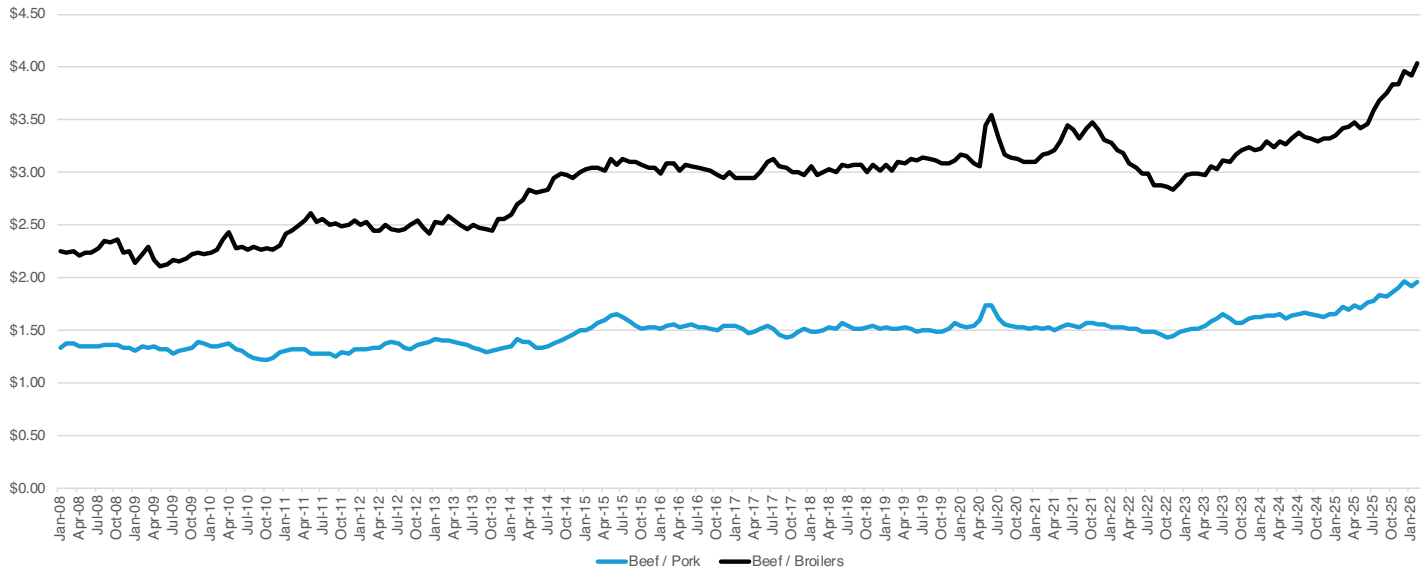

Figure 3: Retail Price Ratios: Beef, Pork, and Broilers.
Source: ERS, 2026c.

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Ag Lending/Credit/ Crop Insurance

Surviving The Economic Downturn: Southern Lending and Credit Conditions

Ryan Loy and Pancho Abello

Lender Sentiment and Credit Conditions

As U.S. farmers navigate another challenging crop year, financing and marketing options remain uncertain. This uncertainty, due in part to unexpected market shocks, increasing trade competition, and shrinking margins, is evidenced by a significant decline in commodity prices while the inputs used to grow them have continued to get more expensive. The early post-pandemic years (e.g., late 2020-2022) saw increases in commodity prices and significantly improved sentiment in agriculture returns and lending. Since late 2022, farmers and lenders have entered an increasingly cautious phase. Lender sentiment has shifted from a positive (or neutral) outlook to stricter credit discipline.

To frame current expectations in the agricultural sector, Figure 1 highlights the agricultural lender sentiment index towards farm income expectations (Federal Reserve Bank of Kansas City, 2026). The Federal Reserve Bank of Kansas City's agricultural survey covers the Tenth Federal District, which focuses mainly on the Central Plains and surrounding states; however, given the similarities in production, input expense pressures, and credit conditions with the Southern region, this index serves as a reliable

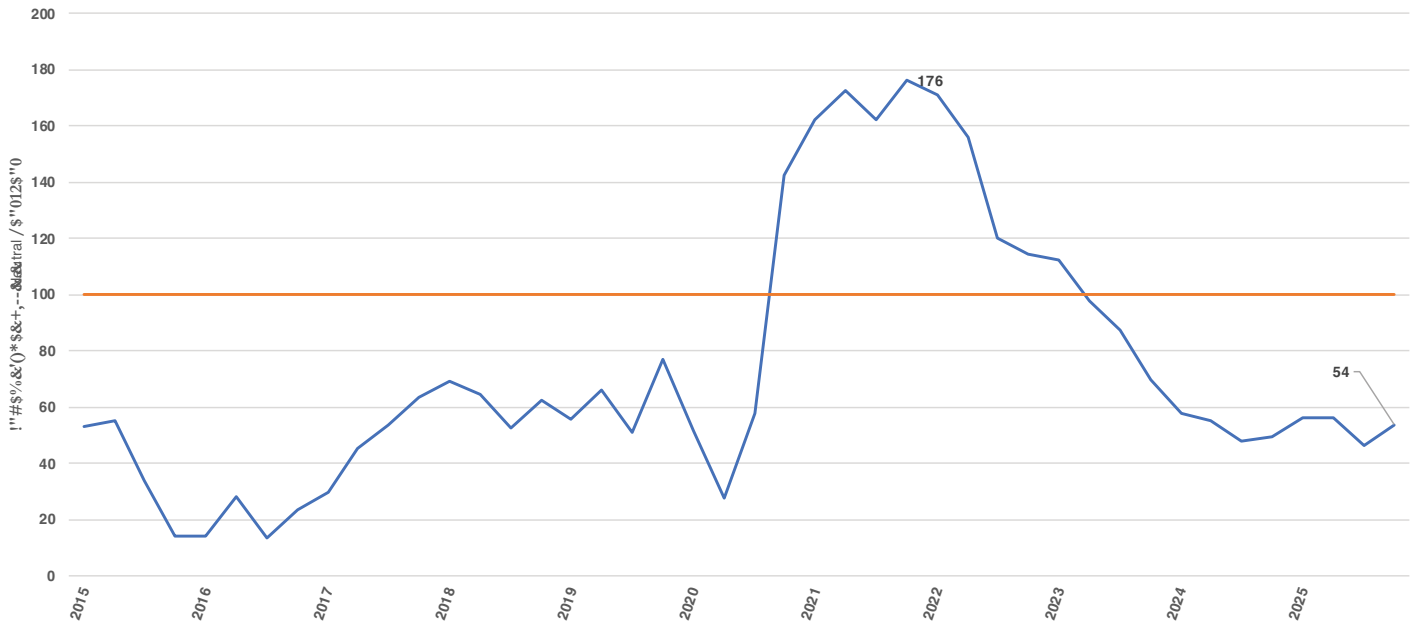

Figure 1: Quarterly Farm Income Sentiment Index (100 = Neutral).
Source: Federal Reserve Bank of Kansas City, Federal Reserve Ag Credit Survey, 2026.

barometer of credit conditions across regions. Agricultural lenders are asked, "Are current conditions better or worse than the previous quarter?" The percent that answered "worse" is subtracted from those that answered "better" and added to 100. In short, an index value below 100 signals weaker sentiment, while an index value above 100 signals stronger sentiment. For the period between 2015 and 2020, lender sentiment was weak due to declining cattle prices, the first China-United States trade war, and the pandemic, which crippled global agricultural supply chains. Sentiment significantly improved in late 2020 due to improving on-farm margins and cash reserves from pandemic-related direct government payments and commodity price increases associated with the Russian invasion of Ukraine. Since then, global tensions, increasing trade competition, and high global commodity stocks have pushed sentiment to its lowest point since the pandemic (Q4 2025 = 54). This decline is consistent with lenders seeing tighter (or non-existent) margins due to lower commodity prices and increasingly expensive input costs, including interest expenses.

One of the clearest signs of tighter financial conditions in U.S. agriculture is the rise in interest expenses (Figure 2). After reaching a peak in the mid-2010s and subsequent decline following the 2008 financial crisis, interest expense measures reflected a lighter debt burden. This changed following the pandemic era leading to a higher short-term interest rate environment, with total interest expenses increasing sharply (FRED, 2026). While short-term interest rates have moderated over the last two years, total interest expense has increased from $540 million in 2021 to over $950 million in 2024 (USDA-NASS, 2026). Farmers are carrying a larger debt burden and possibly financing a larger share of their enterprise. Interest, as a percentage of total production expenses, increased only modestly from 1.4 to 1.9 percent during the same period. This could suggest that total production expenses have grown substantially, keeping the relative share of interest expense lower even as interest expense has grown. The persistence of these conditions over several years increases lending risk for farmers due to tighter cash-flow margins and accelerates the burn-down of on-farm capital and reserves. From a

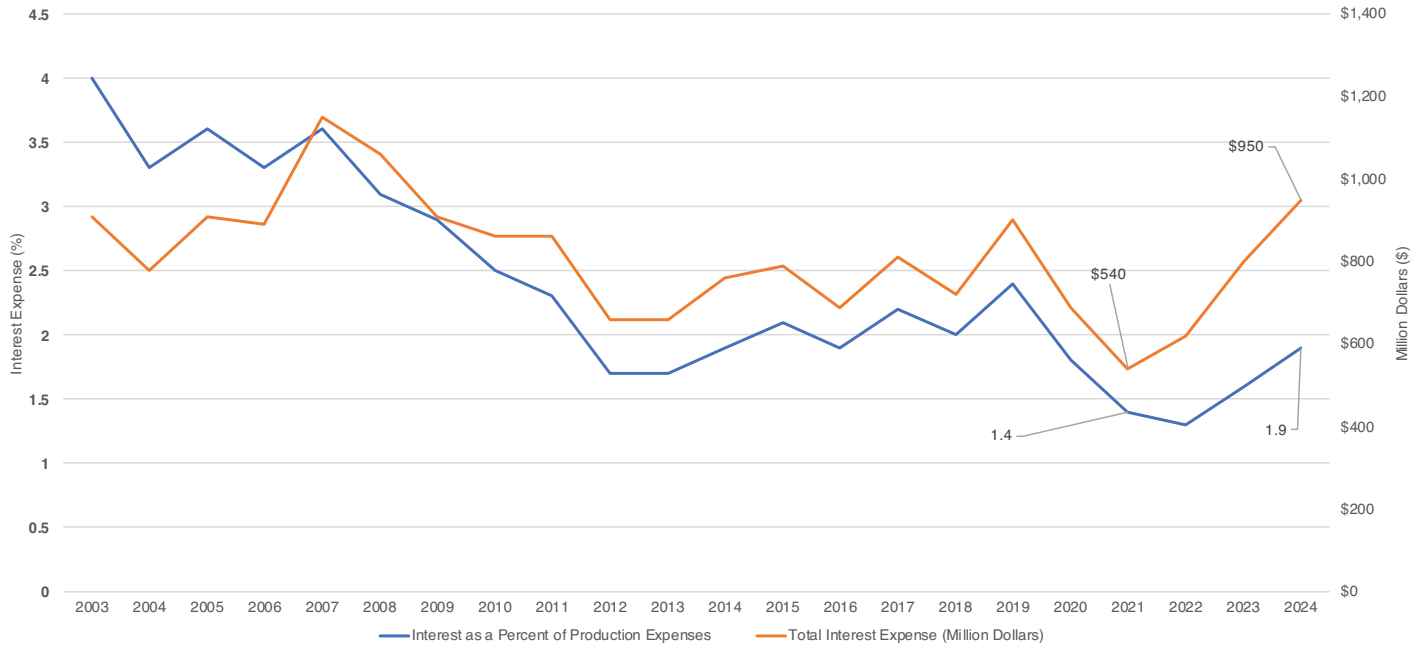

Figure 2: Interest as a Percent of Agricultural Production Expenses and Total Interest Expense, 2003 – 2024.
Source: USDA, National Agricultural Statistics Service, Quick Stats, 2026.

lending perspective, the combination of higher interest expense and tighter cash flow translates into a more cautious outlook that emphasizes liquidity, stricter loan terms, and closer review of carryover debt.

Loan Demand and Repayment

Loan demand within the row crop sector has remained elevated in recent years, but the mix of borrowing is an important credit signal (Figure 3). Operating expense loans represent the largest share of loan demand and have increased from about $48 billion in 2023 to approximately $72 billion in the last quarter of 2025 (K.C. FED, 2026). This pattern follows the increasing cost of production (e.g., seed, chemicals, fuel, repairs, and labor), which has forced farmers to borrow more through short-term credit. From a lender's perspective, these larger operating lines also increase cash-flow risk because they must be repaid from harvest revenue, resulting in tighter margins that require farmers to roll debt balances into the next year or delay their planting and investment decisions. Notably, since late 2023, loans for machinery and equipment and "other" categories have made up a smaller share of total borrowing, indicating that farmers may be making fewer expansionary purchases. They are placing a greater emphasis on financing crops and maintaining liquidity rather than adding on-farm capacity.

Lender sentiment on loan repayment reinforces this idea as indicated by the Quarterly Loan Repayment Index (Figure 4). The index is centered at 100 (neutral). Values above 100 indicate that lenders are observing stronger repayment conditions on average, while values below 100 indicate weaker repayment conditions, leading to tighter financing requirements. In recent years, the repayment index peaked at around 146 in Q3 2021, fell to 68 in early 2025, then improved to 91 in Q4 2025 (K.C. FED, 2026). This suggests that credit is still available to most growers, but renewals and loanable funds will be closely tied to current budgets, margins, on-farm liquidity, and clear repayment plans, especially given the ongoing uncertainty surrounding input and commodity markets. Ad hoc assistance from the federal government is also playing a key role.

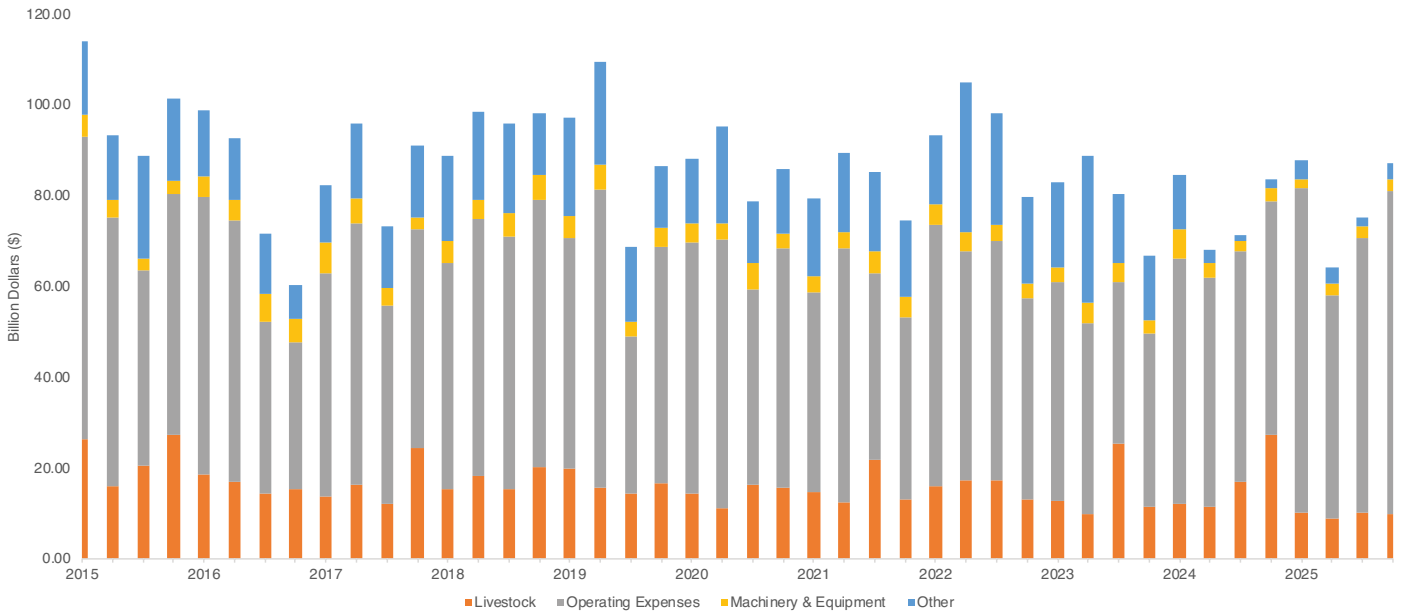

Figure 3: Non-Real Estate Farm Loans by Category, 2015 – 2025.
Source: Federal Reserve Bank of Kansas City, National Survey of Lending Terms, Q4 2025.

Interest Rates

Prevailing market interest rates remain a central driver of credit conditions, as they directly impact operating loan pricing and annual interest expense obligations. Figure 5 plots the federal funds rate (overnight bank-to-bank interest rate) and the average fixed interest rate for non-real estate operating loans from 2015-2026. The federal funds rate rose sharply from near-zero (2020-2022) to a peak of 5.33% in 2023 and has since eased to 3.72% following the most recent Federal Open Market Committee (FOMC) rate cut in December 2025 (FRED, 2026). Operating note interest rates follow the behavior of the federal funds rate, peaking at 8.81% in 2023 and easing modestly to 7.65% recently. The federal funds rate serves as the baseline borrowing cost, and agricultural operating loans are priced above it to account for lending risk, administrative costs, and profit margins. The roughly 3-3.5 percentage point spread between the two rates is consistent with historical norms.

Expectations for further rate cuts this year remain bleak. The FOMC has held the target range at 3.5%-3.75% at the January, March, and April 2026 meetings. This decision comes after three consecutive cuts in September, October, and December 2025. For farmers, this suggests minimal interest expense relief, while lenders remain cautious.

Summary and Conclusion

Overall, agricultural credit conditions have shifted from an optimistic post-pandemic period into a more cautious, risk-management-focused environment. The agricultural lender survey indices show that farm income expectations have continued to weaken. Repayment expectations have improved modestly but will continue to struggle amid the declining margins many farmers currently face. At the same time, higher input costs have sharply pushed up operating loan demand, increasing on-farm financial risk exposure. Although operating loan interest rates have eased since the post-pandemic peaks, they remain elevated, and market expectations forecast little relief in 2026. It's also worth noting that commercial banks are not the only source of agricultural credit. Farm implement dealers and input suppliers also provide a significant layer of financing to agricultural operations. As conditions

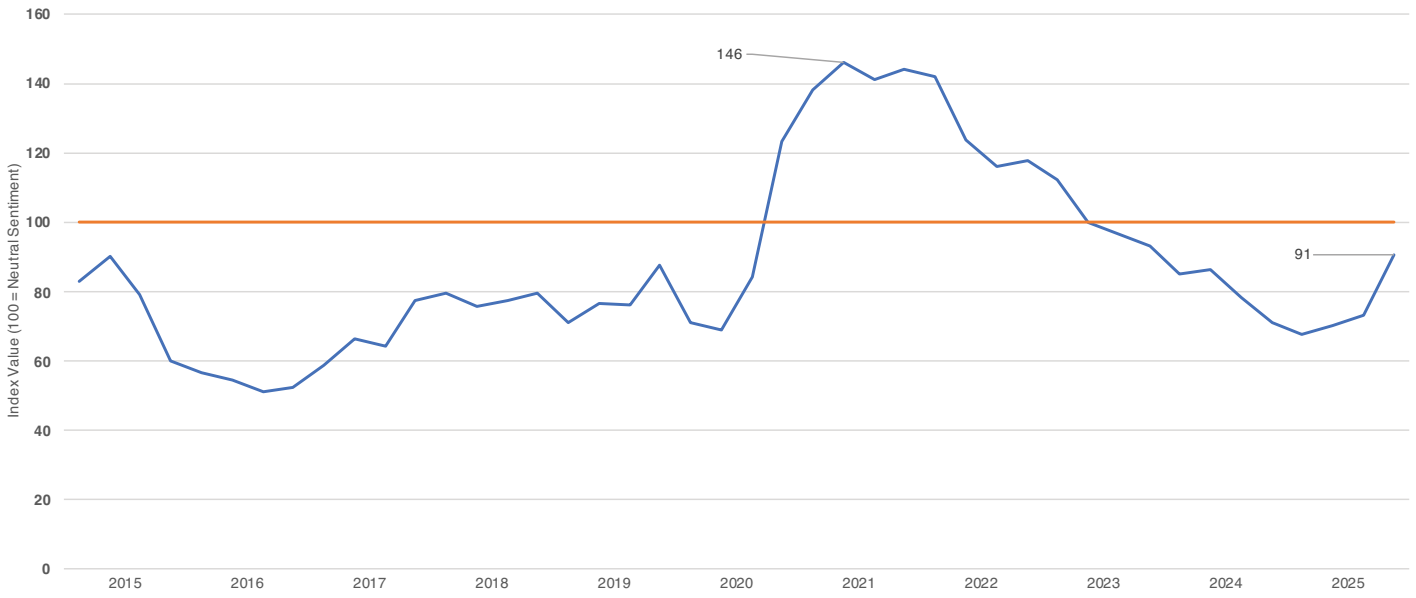

Figure 4: Quarterly Loan Repayment Lender Sentiment Survey, 2015 – 2025.
Source: Federal Reserve Bank of Kansas City, Federal Reserve Ag Credit Survey, 2026.

tighten, the stress on these non-traditional credit relationships becomes equally important to monitor since suppliers may also begin tightening terms or reducing credit availability. As a result, agricultural lenders will continue to be cautious regarding loans. For borrowers navigating this environment, moving forward will require deliberate financial planning, such as strengthening capital reserves and liquidity, and providing realistic budgets with clear repayment plans that keep potential losses shallow if conditions continue to deteriorate.

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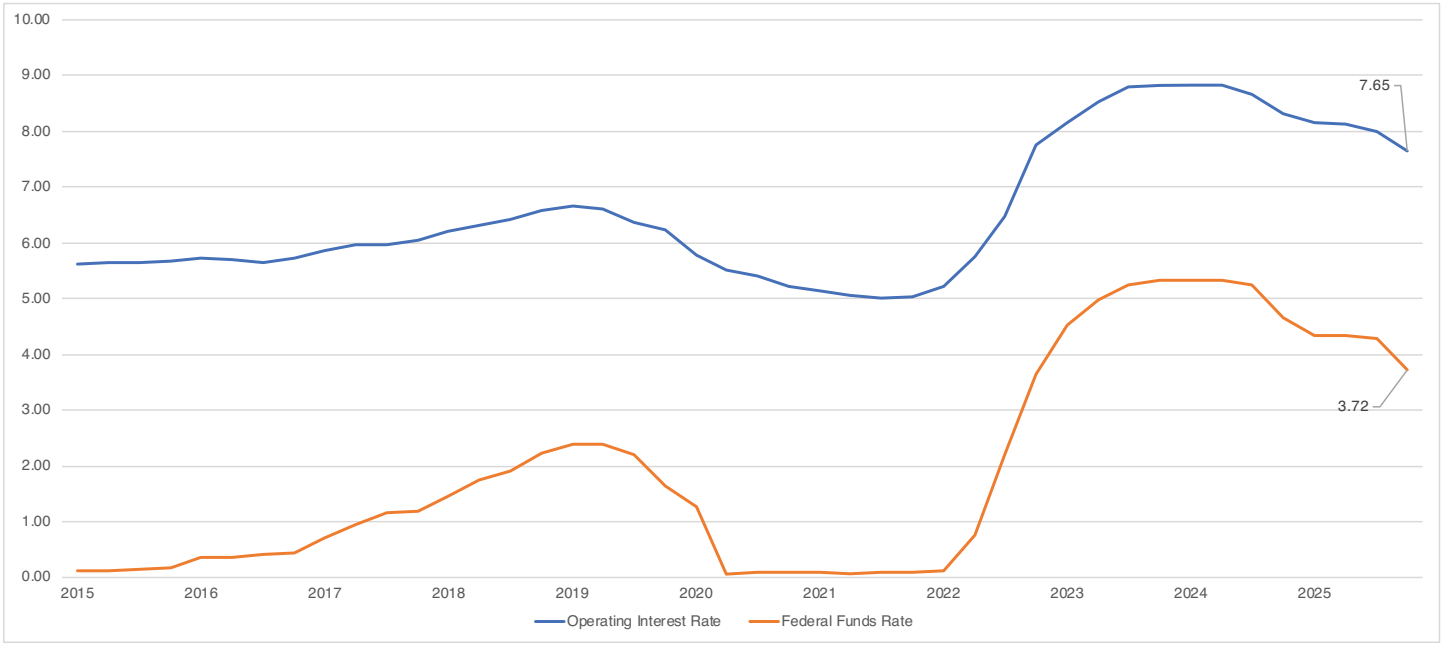

Figure 5: Federal Funds Rate and Fixed Operating Loan Interest, 2015 - 2026.
Source: Federal Reserve Bank of St. Louis, FRED Database – Effective Federal Funds Rate, 2026.

Accessing Credit with Farm Service Agency (FSA) Loan Programs

Derek Farnsworth and Ryan Loy

Introduction

Access to credit is necessary for effective agribusiness management because operations commonly require financing for land, equipment, and input purchases. Credit can also be necessary to navigate economic downturns, crop failures, natural disasters, and seasonal cash flow issues. Agricultural producers often face barriers to commercial borrowing, such as limited credit history, insufficient collateral, or post-disaster financial setbacks. The U.S. Department of Agriculture's Farm Service Agency (USDA-FSA) facilitates access to credit by offering loan programs intended to help agricultural producers start, expand, sustain, or rebuild family farm operations when commercial credit is limited or unavailable. Each year, a portion of loan funds are targeted to assist beginning and socially disadvantaged farmers.

Background and Loan Options

FSA's Farm Loan Program is designed to increase access to credit while promoting a long-run transition to commercial lending. FSA loans operate through two main channels: direct loans are made and serviced by FSA using federal funds, while guaranteed loans are made and serviced by commercial lenders with FSA providing a partial guarantee against loss. In most cases, FSA guarantees up to 90% of loss of principal and interest, though the actual percentage may vary depending on the case (USDA-FSA, 2025b).

FSA offers different loan types to serve a variety of common farm financing needs. Farm Ownership Loans are used to purchase or expand a farm, construct or improve structures, pay closing costs, and for conservation projects. Farm Operating Loans are used for operating expenses, machinery and equipment, minor repairs or improvements, and refinancing debt. There are also Emergency Loans, Conservation Loans, Direct Down Payment Farm Ownership Loans, Land Contract Guarantees, and Youth Loans. The Direct Down Payment Farm Ownership Loan and Land Contract Guarantee are targeted towards beginning and socially disadvantaged farmers (USDA-FSA, 2025b; Ware and Loy, 2025).

Table 1 provides a brief overview of the loans through the FSA Farm Loan Program. Note that this is not an exhaustive list of all the different types of loans provided by the FSA. Current FSA loan interest rates are updated at https://www.fsa.usda.gov/tools/informational/rates/current-fsa-loan-interest-rates. More detailed information about these loans can be found in the following FSA resources:

- **Farm Loans Overview** - https://www.fsa.usda.gov/tools/informational/fact-sheets/farm-loans-overview-2024pdf
- **Farm Loan Information Chart** - https://www.fsa.usda.gov/tools/informational/fact-sheets/farm-loan-information-chart-2024pdf
- **Your Guide to FSA Farm Loans** - https://www.fsa.usda.gov/sites/default/files/documents/your_guide_to_farm_loans.pdf

Table 1: Overview of FSA Farm Loans.

Loan Program	Maximum amount (2026)	Notes
Direct Farm Ownership	$600,000 ($50,000 for microloan)	• Up to 40-year term (25-year term for microloan) • Lower rate if at least 50% of loan amount from other lender
Direct Operating	$400,000 ($50,000 for microloan)	• 1 to 7-year term
Direct Emergency	$500,000 (capped at physical losses)	• Real estate up to 40-year term • 1 to 7-year term otherwise
Guaranteed Farm Loans • Farm Ownership • Operating • Conservation	$2,343,000 ($100,000 for EZ Guarantee)	• Rate negotiated with lender • 1.5% loan guarantee fee
Direct Down Payment Farm Ownership	$300,150	• 20-year term • 5% downpayment • Maximum 45% of purchase price or appraised value • For beginning farmers
Land Contract Guarantee	$500,000 (and market-value limits)	• Minimum 20-year term • 5% downpayment • For beginning farmers
Direct Youth Loans	$10,000	• Age 10-20 with project advisor

Source: USDA-FSA, 2025a.

Applying for a Direct or Guaranteed Loan

The FSA's Loan Assistance Tool - https://lat.fpac.usda.gov - is designed to help potential borrowers navigate loan requirements and eligibility. While procedures vary by loan type, the application process generally involves (a) selecting the appropriate program, (b) documenting eligibility, and (c) demonstrating repayment ability through a feasible plan (USDA-FSA, 2019).

Direct loan applicants work with local FSA offices. Eligibility commonly includes being a family farmer, having acceptable credit history, and being unable to obtain sufficient credit elsewhere at reasonable rates and terms. The application materials often require financial histories, current balance-sheet information, and cash-flow planning (USDA-FSA, 2019). Borrowers are typically required to obtain written declinations from commercial lenders to demonstrate inability to obtain commercial credit.

For guaranteed loans, the commercial lender is the primary applicant to FSA. In this situation, FSA's role is to approve eligible guarantees and oversee lender activities. FSA reviews the lender-submitted package for completeness and then evaluates eligibility, repayment ability, and security (USDA-FSA, 2019).

How FSA Loans Differ

There are several benefits to obtaining a loan through the FSA's Farm Loan Program. The most direct benefit is the ability to obtain a loan despite not qualifying for commercial credit. FSA loans also have competitive interest rates that are often similar to or lower than commercial lenders. Further, a loan guarantee from the FSA enables the commercial

lender to charge a lower interest rate than would otherwise be the case due to the FSA securing the loan and guaranteeing payment.

Working with the FSA can provide useful guidance for business reporting and how to communicate your operating and strategic plans with your creditor. At the end of each business cycle, your FSA loan officer will meet with you to review records, plan for the following year's operation, and help review your business plan. In addition, the FSA offers several servicing options to help avoid or resolve delinquent loan payments. The FSA's disaster set-aside program can let you move one annual payment to the end of your loan under certain disaster circumstances. The FSA's primary loan servicing (PLS) program may allow you to restructure your loan if you are unable to make payments due to circumstances outside your control (USDA-FSA, 2019).

There are some potential drawbacks associated with obtaining an FSA loan. First, the reporting and compliance requirements may be more stringent than with commercial loans. For example, you may be required to report a variety of performance metrics and attend financial training classes. Second, the purpose of the loan is to provide temporary credit to agricultural producers who cannot obtain commercial loans. Thus, when you can operate without FSA assistance, you may be required to refinance your FSA loans with a commercial lender. Third, FSA loans may not be large enough to support your operation. The maximum loan amount is typically not sufficient to meet the credit needs of larger commercial farms (Dodson and Ahrendsen, 2016). Notably, the draft farm bill proposes to significantly increase the loan and guarantee limits. Lastly, application timing or delays may cause issues with obtaining a loan. Congress allocates money for FSA farm loans, but these funds may run out before the end of the fiscal year and cause a waiting list to form. The fiscal year begins in October, so that is often the best time to apply (USDA-FSA, 2019).

FSA loans can serve as a useful financing tool during difficult economic periods. FSA direct loans may offer competitive rates or terms that a commercial lender may not be able to offer. FSA loan guarantees are also worth exploring with commercial lenders, as the loan guarantee may enable the lender to expand their financing options. A supplemental FSA loan may further provide an opportunity to restructure existing debt, as refinancing into a loan with a longer repayment term can help address near-term cash flow challenges.

Summary

FSA's Farm Loan Program expands access to agricultural credit through two complementary pathways: direct lending for applicants who cannot obtain reasonable commercial credit, and guaranteed lending that supports access to commercial credit by reducing lender risk. Overall, the program aims to support farm entry, continuity, and recovery while encouraging a long-run transition to commercial credit. These objectives are particularly relevant during economic downturns when agricultural producers become even more reliant on alternative sources of credit.

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Managing the Borrower – Lender Relationship

Steven Klose and Jordan Shockley

In the recent decline of commodity markets and the increasing squeeze on agricultural producer profit margins, credit and financing problems have yet to become widespread. Certainly, problems exist, and signals of a credit crunch have been on the rise for the past couple of years, with struggles developing at varying pace and intensity by region and commodity. But, industry-wide, previously built liquidity and solvency have managed to survive at least above the threshold where we see severe problems in the agricultural loan portfolio. However, the current outlook for commodity prices remains dim, and the eventual outcome along that path is exhausted liquidity, declining loan repayment capacity, and increased loan demand.

None of this discussion is meant to spread gloom and doom but rather to highlight the importance of the borrower-lender relationship in agriculture. Tighter producer margins will stress farmers and ranchers' ability to cash flow and stay current on debt payments. Increased demand for loan funds, reduced repayment capacity, and reduced loan security will stress lending institutions and regulators. Tension is sure to arise between borrower and lender. There is no doubt some borrowers will lose access to credit.

Ag producers and lenders alike must recognize that their individual success is tied to the success of the other. An unproductive attitude of isolating your own business interests can destroy necessary working relationships, eventually limiting your own success. Whether times are difficult or the industry is soaring, the producers and lenders who continue to thrive and/or keep their heads above water are the ones who work together as partners.

Borrower-Lender Partnership

The borrower-lender relationship can be a confusing one. In one sense, the borrower is a customer needing to purchase access to capital. In another sense, the bank can be the customer, pursuing "investment" opportunities in borrowers' businesses in order to secure a return. Given that it works both ways, the best relationship is one that both consider a partnership. If the partnership is positive and productive, a lender can assist a producer in taking advantage of opportunities to push ahead during good times as well as survive those inevitable downturns in the market. A good borrower-lender partnership consists of many of the same elements found in any good partnership. The following are some characteristics important to a borrower and lender working well together.

Honesty and Full Disclosure

Both parties need to be upfront and honest in their dealings. No one wants a partner who cannot be trusted. For the producer, full disclosure means sharing all the details of operating plans. Typical financial statement information is a given, but a producer also needs to disclose less obvious components such as outside partnerships, agreements, or contractual obligations. Any new business ventures, obtaining credit from other sources, significant capital purchases, or sales should also be discussed. A producer should allow and even encourage their lender to see their operation firsthand.

A similar level of disclosure should be expected of the lender. While there may be situations that would legally prevent disclosing some information, a lender should openly help their borrowers under-

stand the lending business and incentives that keep the bank profitable and a stable source of credit. Lenders should openly discuss issues of credit scoring, borrower ratings, timing of decisions, and avoid making unrealistic commitments.

Communication

A solid borrower-lender partnership will include continuous communication. Too often, producers see borrowing as a single event where, if all goes as planned and you continue to make payments on time, you don't need to talk to the bank again. While that may be true of your car loan or home mortgage, any business loan is much more involved. Even when things are going according to plan, periodically checking in with your lender is time well spent. It reinforces the concept of a partnership, and it can't hurt to make sure things are going according to plan with the bank. Most importantly, the partnership is supported when you make sure to have positive conversations. You don't want the only time you talk to be when something went wrong or when a problem needs to be solved.

It's important to remember that effective communication is not simply an ongoing conversation. Both parties must be prepared to hear and account for the advice, knowledge, and expertise the other party brings to the table. During periods of financial stress or hardship, lenders may recommend "belt-tightening" measures, such as adjusting current production practices or reducing living expenditures. If this sound advice is ignored, it can be detrimental to both businesses. At the same time, the producer may explain that certain practices or costs of production cannot be adjusted without risking the entire operating plan. Likewise, if the farmer's sound production knowledge is ignored, it can be detrimental to both businesses. Effective communication requires the active compromise of ideas toward a solution. While these types of give-and-take conversations may be difficult, they are critical to staying away from significant losses that both borrower and lender hope to avoid.

Proactive

A producer should develop management plans, particularly financing plans, well in advance. The casual "just checking in" conversations can be used to bring up potential plans and things a producer is considering. The lender's opinion should be sought regarding strategic changes well before the time to obtain financing. In fact, more than just opinions, it is often best if plans and strategies are developed through coordination with the lender, taking advantage of his/her expertise. These actions help the lender understand the manager is one who thinks things through, and when it does come time for financing, the lender will know that plans have been thoroughly evaluated. Contrast the proactive borrower with one that springs new ideas on the lender at the last minute and expects the bank to make a quick turnaround decision on a loan. Which borrower is a more attractive partner to the lender?

Trustworthy

A critical key to any partnership is that both parties trust one another. While the capital purchase plans and operating plans upon which a loan is based are not necessarily full contractual obligations, there is an expectation that both will stick to the plans. A lender is not interested in working with a borrower who routinely makes drastic departures from his original cash flow budget that impact his repayment capacity. By the same token, a producer would not want to work with a lender that changed his access to an agreed operating line of credit halfway through the growing season.

Knowing and Communicating Your Business

In addition to the characteristics above, one of the things that makes an attractive borrower is the extent to which they know their own business. It indicates that a producer is making and will continue to make sound financial decisions, which, in turn, limit the lender's risk. The beginning of that for most lenders is looking for a borrower who has a good understanding of their own financial statements. Too often, these documents either don't exist, or they exist because the loan officer creates them.

More appropriate is the borrower who can communicate the story of his/her operation through historical financial statements and *pro forma* estimates of future plans. A sound cash flow budget effectively communicates an operating plan, the timing associated with accessing an operating line of credit and estimates of repayment capacity. A complete and accurate balance sheet illustrates your overall solvency position, other debt obligations, and current liquidity position. Several years of recent income statements will demonstrate a track record of performance for an operation. Each of these financial statements should be updated frequently as a standard management practice to monitor a business, but it is also important to share updates with the lender, indicating progress or deviation from an original plan.

It is often the case in the current agricultural lending environment that while the lender may be financially or business savvy, he/she may not have an agricultural background or be well-versed in specific agricultural enterprises. This is especially true for less common commercial agricultural enterprises such as horticultural crops and niche livestock operations. Therefore, in addition to providing a financial understanding, it is incumbent on the borrower to educate the lender on enterprise-specific production practices. It is essential that the lender comprehends technical elements of the operation beyond the simple dollars tied to loans and loan repayment.

In line with the earlier discussion of being proactive, a necessary part of having a solid grasp on a business is planning ahead for credit needs. Planning appropriately for credit needs means having a constant eye on the future and having realistic financial and operating expectations. Overly optimistic commodity prices, crop yields, or undervalued costs of production may look good on paper at the beginning of the season. However, poor credit planning will usually lead to a position of insufficient credit availability and a strained partnership with the lender. A producer who consistently makes credit plans that do not need to be adjusted is the customer the bank is most interested in keeping. Planning for credit needs also means simply keeping surprises to a minimum. Capital purchases or third-party debt shouldn't be made without some discussion with the primary lender. When plans begin to fall apart, getting the lender involved as soon as possible will demonstrate that the borrower is on top of the situation, as well as allowing time for the lender to help plan a solution.

Major concerns for agricultural producers and lenders alike are risk management strategies and tools available to producers. Crop insurance and price risk management tools have become increasingly critical from a lender's perspective. However, the many crop insurance and marketing choices available can be an area of contention between borrowers and lenders. For example, the level of crop insurance a farmer buys is determined by a balance between premium cost and risk tolerance. In some situations, an operating loan may be made contingent on the producer buying specific levels of coverage to ensure repayment capacity. From the farmer's perspective, higher premiums may cut too deeply into profits, and they would prefer to take the risk the banker is not willing to take. Of course, the lender would like to see coverage levels approaching a guarantee on at least the operating line of credit extended for the crop. The lender's interest in crop insurance choice can vary from suggestion to requirement, depending on the financial condition of the borrower and the relative strength of the borrower/lender partnership.

Marketing opportunities and price risk management can also be a source of friction between borrower and lender. Once again, managing the balance between producer and lender profit/risk motives requires a proactive plan that both parties understand and are willing to follow through. Bankers often express frustration with producers when they fail to take action to lock in an available price that would accomplish their operating cash flow plan. Conversely, some elaborate pricing tools can leave a lender wary, especially if they do not understand the tools. If a specific plan involves credit needs for upfront premium costs or potential margin calls, it is critical to have a lender that understands and is willing to commit to the financing necessary to carry out the plan under a variety of possible outcomes.

A bigger picture, long-term strategy is also critical for a successful credit partnership. Experience in agricultural production reminds us that everything comes in cycles. Short-sighted optimism can be a problem for both borrower and lender. During market highs, some people will assume the industry has reached and will sustain a new plateau. Producers and lenders alike may be willing to overextend credit based on solid collateral values and repayment capacities. Similar conditions in the 1970s certainly contributed to the 1980s credit crisis. It is important to use the more profitable peaks of the cycle to first repair and strengthen one's financial condition in preparation for the next downturn. During times of depressed prices or challenging weather, operating shortfalls or unmet debt obligations may be extended into term debt to help a producer manage the cycle lows. Throughout the ups and downs of industry cycles, it is critical that borrower and lender work together toward a common long-term strategy.

Understand the Bank Business

(*Throughout the article we use "bank" as a generic reference meant to be inclusive of a wide variety of creditors and lending institutions*) As with any partnership, it's important to put yourself in the other's shoes and understand their business incentives. A lending institution's profit motives, incentive structure, rules, and regulations will all impact the credit decisions critical to a farmer's continued success. Every detail of a bank's financial condition may not be necessary or even available, but a borrower should ask questions and be relatively familiar with the stability and strength of their bank. It is also important to understand the bank's portfolio of deposits and lending business. For example, if a bank is well diversified, lending to a variety of industries and/or a variety of agricultural commodity production, it may be less likely to panic when one industry or commodity market is going through a downturn. At the same time, a producer would want his lender to have enough investment to demonstrate a commitment to their industry.

A borrower should also understand the process by which the bank makes lending decisions. Answers to the following questions will give the borrower an appropriate working knowledge of the loan process:

- Who are the key players in a loan decision?
- What is the role of the loan officer, credit analyst, and others?
- Is there a loan approval board? Who makes the final lending decision?
- How does the size or type of loan affect the approval process?
- How long will various types of loan decisions take?
- How are rates determined for different term, size, and types of loans?
- Under what circumstances might a loan be called?
- How do bankruptcy, homestead protection, and other borrower protection laws affect a loan?
- How do regulatory oversight and bank examination standards affect a loan?

A good lending partner should be as comfortable answering these types of questions as they are asking questions regarding the borrower's business.

When it comes to understanding your lender's business, another important factor to remember is that the bank's willingness to loan funds does not always mean it is a loan you should take. There may be times when the risk and terms of a loan make it a good business decision for the bank, but not the best business decision for the borrower. The final decision on whether to borrow or not rests within what the producer believes to be his/her best interests, and it is the producer's responsibility to financially vet those decisions.

When is it time to shop for a new lender?

Both borrower and lender do well to remember their partnership is first and foremost a business relationship. It can be a difficult line to walk, but it should not become personal. With that understanding, when is it time to shop for other creditors? Very simply, a good business manager is always on the

lookout for the best business opportunities. You stay informed regarding seed varieties, chemical input options, and services, including learning about neighbors' opinions of various providers based on their experiences. It is no different with understanding the rates, products, and services offered by competing financial institutions. A competent lender understands your need to be informed about the market for financial services. It is, in fact, a sign that you are a good manager, which makes you a good customer. If your lender begrudges your need to evaluate alternative institutions, or if your banker falls short of the areas described throughout this article, those may be signals that it is time to shop more seriously. However, be careful not to chase one or two pieces of the bigger picture, like the best interest rate. Remember, it is the full package of products, services, and partnerships that make the best creditor.

In the end, the strength of the borrower-lender relationship is critical to both parties. A good borrower must first be a good manager of his/her own business and then be able to effectively communicate business plans to the lender. Likewise, a good lender must first be a good manager of his/her own business. They then must be able to help the borrower navigate and understand the lending process while committing themselves to understanding the industry and production practices of their borrower. Both must have open lines of communication. They must think proactively together as partners and be able to trust and depend on one another for the benefit of both businesses.

Crop Insurance: Basic Producer Considerations

Hunter Biram

Introduction

In this chapter, we provide a broad overview of risk protection tools provided by the Federal Crop Insurance Program (FCIP). We begin by discussing the primary types of crop insurance which includes individual, farm-level insurance and area-wide, county-level insurance. We then move into a discussion on how to insure land under alternative unit structures and associated differences in premium expense. A discussion on the differences between individual yield and revenue insurance policies follows. We conclude with information on the forms typically needed to make crop insurance decisions.

Types of Federal Crop Insurance Products

In this article, we focus on two types of crop insurance policies administered by the USDA's Risk Management Agency (RMA) – individual and area plans. Individual plans are designed to protect farm-level risk exposure by using a producer's Actual Production History (APH) to establish coverage guarantees. APH is typically based on 4-10 years of historical yield data and reflects the unique production characteristics of a specific crop on a specific farm. If at least four years of farm-level yields are not available, a Transitional Yield (or T-Yield) will be used as a substitute. Yield Protection (YP) and Revenue Protection (RP) are the most common examples of individual plans. These products allow producers to select coverage levels, generally ranging from 50% to 85%, that determine the proportion of expected production or revenue that is insured. Importantly, the premium expense is greater for higher levels of coverage since there is a greater chance of loss (or indemnity). With that said, the federal government shares in the cost of the premium, with the government's share decreasing as the chosen coverage level increases (see Table 1).

In contrast, area plans are based on county-level or grid-level aggregate outcomes rather than individual farm performance. These products are structured around the concept of area- or index-based

Table 1: Subsidy Rates for Individual Products Administered by USDA-RMA.

Coverage Level	Basic and Optional Subsidy	Enterprise Unit Subsidy
50%	67%	80%
55%	69%	80%
60%	69%	80%
65%	64%	80%
70%	64%	80%
75%	60%	77%
80%	51%	68%
85%	41%	53%

Source: *The Fundamentals of Federal Crop Insurance*.
Note: The percentages indicate the portion of total premium paid by the federal government.

Table 2: Individual and Area Crop Insurance Products with Associated Indemnity Triggers and Status as a Standalone Product.

Product	Type	Trigger	Standalone?
Yield Protection (YP)	Individual	Farm Yield	Yes
Revenue Protection (RP)	Individual	Farm Revenue	Yes
Revenue Protection, Harvest Price Exclusion (RP-HPE)	Individual	Farm Revenue	Yes
Supplemental Coverage Option (SCO)	Area	County Yield or County Revenue	No
Enhanced Coverage Option (ECO)	Area	County Yield or County Revenue	No
Area Risk Protection (ARP)	Area	County Yield	Yes
Margin Protection (MP)	Area	County Margin	Yes
Margin Coverage Option (MCO)	Area	County Margin	No
Stacked Income Protection (STAX)	Area	County Revenue	Yes
Pasture, Rangeland, Forage - Rainfall Index (PRF-RI)	Area	Grid Cell-specific Rainfall	Yes
Hurricane Insurance Protection - Wind Index (HIP-Wi)	Area	Hurricane or Tropical Storm Incidence and Wind Speed	No

Source: *The Fundamentals of Federal Crop Insurance*.

insurance and introduce what is commonly referred to as "basis risk." Triggers for area-based insurance include county yield, county revenue, or a rainfall index. Basis risk arises when an individual farm experiences a loss but the broader geographic area does not register losses sufficient to trigger an indemnity. While area plans may reduce administrative complexity and sometimes offer lower premiums due to broader risk pooling, they sacrifice farm-level precision. Area plans may function either as stand-alone products or as endorsements layered on top of individual coverage. Examples of area plans that function as stand-alone products include Area Risk Protection (ARP), Margin Protection (MP), Stacked Income Protection (STAX) for cotton, and Pasture, Rangeland, and Forage – Rainfall Index (PRF-RI). Area plans that function as an endorsement, or must be tied to some level of individual underlying insurance (e.g., YP), include the Supplemental Coverage Option (SCO), Enhanced Coverage Option (ECO), and Hurricane Insurance Protection – Wind Index (HIP-WI). We provide a table summarizing these products (see Table 2).

In summary, individual plans align more closely with farm-specific losses but may carry higher premiums. Area plans, on their own, offer cost efficiency and supplemental risk smoothing but expose producers to potential mismatch between personal loss experience and indemnity payments. Importantly, we note that with enhancements to the premium subsidy percentage for both individual and area products in the *One Big Beautiful Bill Act* (OBBBA), with SCO and ECO subsidy percentages set at 80% of total premium, bundling area with individual plans is more affordable than ever. Further, the OBBBA rescinded the rule that restricted acres from being in both the Agriculture Risk Coverage – County (ARC-CO) program and SCO, which allowed for further integration of risk management tools from both the Farm Service Agency (FSA) and RMA (see Figure 1). Producers must therefore evaluate their historical yield variability, financial condition, and risk tolerance when selecting between these insurance structures.

Figure 1 shows the various portions of expected yield or revenue covered by individual insurance

at the 75% coverage level, SCO, ECO, which are all administered by USDA-RMA, and the ARC-CO program, which is administered by the USDA-FSA. Prior to the passage of the *One Big Beautiful Bill Act*, farmers could not enroll the same acres in SCO and ARC-CO. The hash marked portion is the additional SCO coverage for the 2027 crop year. The solid blue portion is the coverage band for the 2026 crop year. Importantly, while ARC and SCO appear to perfectly overlap in this stylized example, they pay on different acres (i.e., ARC pays on base acres while SCO pays on planted acres) and they utilize different prices (i.e., ARC uses the marketing year average price and SCO uses the futures price). As a result, the extent to which they overlap depends on the circumstances.

Insurable Unit Structures in Federal Crop Insurance

Now that we have described available crop insurance products, we discuss the role of insurable unit structures in shaping the distribution of risk, premium cost, and indemnity outcomes under federal crop insurance. Unit structure determines how acreage is grouped for insurance purposes and directly affects both actuarial performance and producer incentives. The chapter outlines four primary unit types: optional units, basic units, enterprise units, and whole farm units.

Optional units allow producers to insure separate parcels independently, typically based on section lines and differing ownership arrangements. This structure can increase the likelihood of indemnities when localized losses occur, as losses are measured at the smaller unit level. However, optional units generally carry higher premiums and reduced premium subsidy due to reduced risk pooling since insured land is the least aggregated under these units. Basic units aggregate acreage by crop and ownership share within a county and represent the default grouping in many cases. Basic units can be thought of as aggregating multiple optional units into one basic unit solely based on the rental agreement and will span multiple sections.

Enterprise units significantly expand the degree of aggregation by combining all acreage of

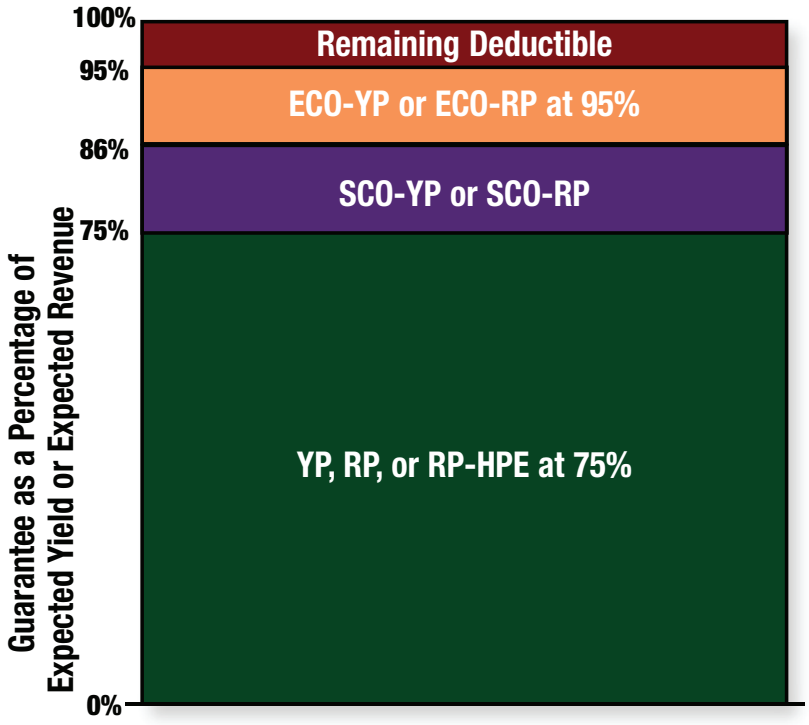

Figure 1: The Jointness of Individual and Area Products using 75% Individual Insurance Coverage, SCO, and 95% ECO Coverage as Examples.
Source: *The Fundamentals of Federal Crop Insurance*.

a specific crop within a county, regardless of land tenure agreement (i.e., own, cash rent, crop share). Because enterprise units pool risk across larger acreages, they benefit from premium discounts and additional premium subsidy. The increased pooling of smaller units into one large unit reduces actuarial variability but will likely decrease the probability of indemnities when losses are isolated to specific fields. For example, an enterprise unit that includes a section of land in a flood plain may not trigger an indemnity despite crop loss due to excess precipitation. This is because the loss is essentially "averaged-out" when combined with production on more productive and less risky land. Whole farm units extend aggregation even further by combining multiple crops across counties into a single insurance unit. This structure is particularly relevant for diversified or specialty crop operations.

Consider when a farmer wants to insure multiple crops under multiple ownership structures in a county (see Figure 2) In this example there are seven Optional units, five Basic units, three Enterprise units, and one Whole Farm unit. We provide a breakdown of how the number of each type of unit is determined below.

Optional Units: 7 units

1. Corn Farm 1 (Owned, Section 2) + Corn Farm 2 (Cash Rent, Wilson, Section 2)
2. Corn Farm 3 (80-20 Crop Share, Davis, Section 1)
3. Corn Farm 4 (80-20 Crop Share, Davis, Section 11)
4. Soybean Farm 1 (Owned, Section 11)
5. Soybean Farm 2 (Cash Rent, Wilson, Section 12)
6. Rice Farm 1 (50-50 Crop Share, Clark, Section 1)
7. Rice Farm 2 (80-20 Crop Share, Davis, Section 11)

Basic Units: 5 units

1. Corn Farm 1 (Owned, Section 2) + Corn Farm 2 (Cash Rent, Wilson, Section 2) + Corn Farm 4 (80-20 Crop Share, Davis, Section 11)
2. Corn Farm 3 (80-20 Crop Share, Davis, Section 1)

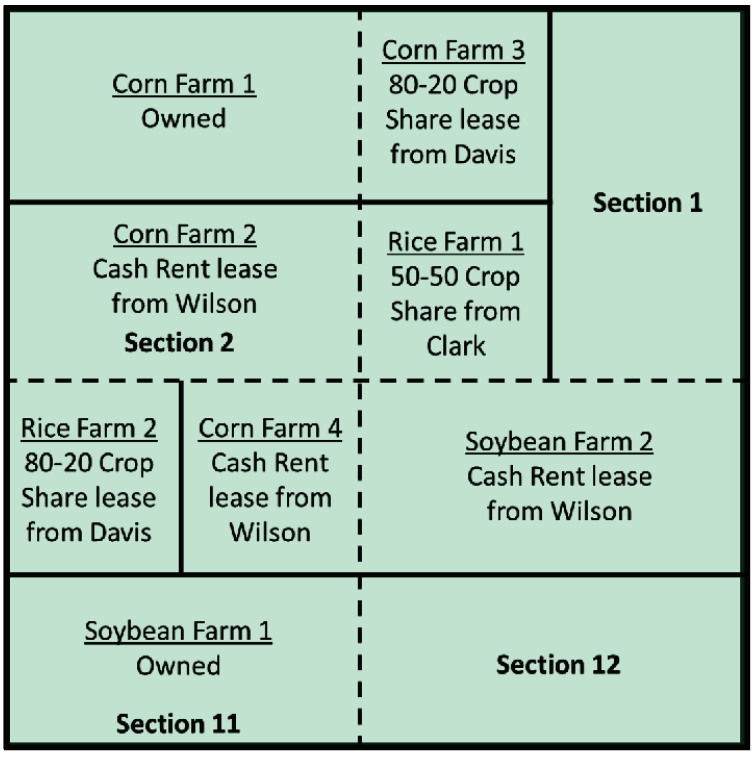

Figure 2: Example Plat Map for Multiple Crops.
Source: *The Fundamentals of Federal Crop Insurance.*

3. Soybean Farm 1 (Owned, Section 11) + Soybean Farm 2 (Cash Rent, Wilson, Section 12)
4. Rice Farm 1 (50-50 Crop Share, Clark, Section 1)
5. Rice Farm 2 (80-20 Crop Share, Davis, Section 11)

Enterprise Units: 3 units

1. Corn Farm 1 + Corn Farm 2 + Corn Farm 3 + Corn Farm 4
2. Soybean Farm 1 + Soybean Farm 2
3. Rice Farm 1 + Rice Farm 2

Whole Farm Units: 1 unit

1. All eight farms

This chapter underscores the important considerations that factor into unit selection. Producers must balance premium savings from greater aggregation against the possibility that localized losses may not generate payments. The interaction between yield variability over a larger space and premium subsidy percentages makes unit choice an important component of whole-farm risk management planning.

Individual Crop Insurance: Yield and Revenue Protection

We now move into a discussion of YP and RP, the foundational individual insurance products available through the FCIP, and provide examples of how indemnities are triggered under these plans. YP focuses exclusively on production risk and guarantees a specified percentage of a producer's historical average yield. The guarantee is calculated by multiplying the APH by the selected coverage level and by the projected price established prior to planting. If the actual harvested yield falls below the guaranteed yield, an indemnity payment is triggered. The indemnity is calculated as the difference between the guarantee and actual production, multiplied by the projected price. Importantly, while the projected price determines the value of indemnity payments, YP does not protect against price declines at harvest. As such, YP isolates yield risk from market price risk.

We now provide scenarios which show when a YP indemnity would be triggered in an example growing season. We will use corn prices and yields from the 2025 growing season and provide per-acre returns over cost. We assume an APH yield of 187 bushels per acre which is the 2025 national-average corn yield reported by USDA. The projected price comes from the USDA-RMA Price Discovery Tool (https://public-rma.fpac.usda.gov/apps/PriceDiscovery), the farm-gate cash price is based on the current 2025/2026 USDA Marketing Year Average price. We will assume this producer is choosing to insure their land in optional units. The producer paid premium for YP is found using the USDA-RMA Cost Estimator (https://ewebapp.rma.usda.gov/apps/costestimator/Estimates/DetailedEstimate.aspx) for Trigg County, Kentucky which is representative of the average range of premium rates across the southeast and is located in Kentucky, which had over 1.5 million acres of corn planted representing 40% of the all planted acreage in the state (USDA-NASS Quick Stats).

Scenario 1: No Crop Insurance

In this scenario, a producer faced a yield loss and the final harvest yield was 140 bushels per acre. The producer chooses to take the spot price at the local grain elevator for their corn and revenue would be $574.00/ac (140 bu/acre X $4.10/bu).

Scenario 2: 80% YP Crop Insurance

- APH Yield = 187 bushels / acre
- Projected Price (USDA-RMA) = $4.70/bushel
- Yield Guarantee (APH Yield X 80% Coverage Level) = 150 bushels/acre
- Realized Yield = 140 bushels/acre
- YP Indemnity ((Yield Guarantee – Realized Yield) x Projected Price) = $47/acre
- YP Producer Premium = $28.00/acre
- Indemnity net of Premium (Indemnity - Premium) = $19/acre
- Revenue with Net Indemnity = $593/acre [(140 bu/acre X $4.10/bu) + $19/ac]

In this scenario, YP at 80% coverage would provide a producer with more revenue compared to the case with no insurance coverage.

We now move into a discussion of RP which integrates both yield risk and price risk into a single coverage framework. The revenue guarantee is calculated as APH multiplied by coverage level and by the greater of the projected price or harvest price. This "price discovery" mechanism ensures that the guarantee increases if harvest prices rise above preseason expectations. The inclusion of the harvest price escalator is a defining feature of RP. In years where yields are low but market prices increase, the producer's revenue guarantee rises accordingly, offering stronger financial protection. This mechanism is particularly valuable for producers who pre-harvest market a portion of their expected production, as it reduces exposure to upward price risk on contracted bushels.

The Harvest Price Exclusion option of RP (RP-HPE) modifies this structure by fixing the guarantee at the projected price, even if harvest prices increase. While this reduces premium cost, it removes the upside price protection embedded in standard RP policies.

We now provide scenarios which show when RP and RP-HPE indemnities would trigger in an example growing season. We will use the same parameters from the YP example.

Scenario 1: Harvest Price falls relative to Projected Price to $4.22/bushel

- RP Revenue Guarantee (APH Yield x Projected Price x 80% Coverage Level) = $703.12/acre
- RP-HPE Revenue Guarantee (APH Yield x Projected Price x 80% Coverage Level) = $703.12/acre
- Realized Revenue (Realized Yield x Harvest Price) = $590.80/acre
- RP Indemnity (RP Revenue Guarantee – Realized Revenue) = $112.32/acre
- RP-HPE Indemnity (RP-HPE Revenue Guarantee – Realized Revenue) = $112.32/acre
- RP Producer Premium = $37.00/acre
- RP-HPE Producer Premium = $28.00/acre
- RP Net Indemnity = $75.32/acre
- RP-HPE Net Indemnity = $84.32/acre

Scenario 2: Harvest Price increases relative to Projected Price to $5.08/bushel

- RP Revenue Guarantee (APH Yield x Harvest Price x 80% Coverage Level) = $759.97/acre
- RP-HPE Revenue Guarantee (APH Yield x Projected Price x 80% Coverage Level) = $703.12/acre
- Realized Revenue (Realized Yield x Harvest Price) = $590.80/acre
- RP Indemnity (RP Revenue Guarantee – Realized Revenue) = $169.17/acre
- RP-HPE Indemnity (RP-HPE Revenue Guarantee – Realized Revenue) = $112.32/acre
- RP Producer Premium = $37.00/acre
- RP-HPE Producer Premium = $28.00/acre
- RP Net Indemnity = $132.17/acre
- RP-HPE Net Indemnity = $84.32/acre

The scenarios comparing RP and RP-HPE warrant further discussion. Scenario 1 reflects what happened in 2025, when the Harvest Price fell to $4.22/bushel, which was less than the Projected Price of $4.70/bushel. Since RP uses the higher of the Projected and Harvest Prices to determine the revenue guarantee, the Projected Price of $4.70/bushel was used. Interestingly, the RP-HPE revenue guarantee also used the Projected Price but only because of the inherent nature of the product (i.e., harvest price exclusion). Scenario 2 reflects what would have happened if the Harvest Price increased relative to the Projected Price. In this scenario, RP would use the Harvest Price to set the revenue guarantee since it is the higher of the two prices. This results in a much higher revenue guarantee and, therefore, a greater net indemnity than that of RP-HPE. While RP faces a slightly higher premium expense (i.e., in this case, 33% more), the indemnity may be noticeably higher in a year where the price increases (i.e., in this case, 51% more). We provide a graph showing the difference in Projected and Harvest Prices for states with a Sales Closing Date (SCD) of February 28th over the previous 10 years in Figure 3 below. We use an SCD of September 30th for winter wheat.

Table 3: Producer Premium Expense under Alternative Crop Insurance Coverage Scenarios.

Underlying Coverage Level	Underlying Only	Underlying + SCO	Underlying + ECO (90%)	Underlying + ECO (95%)	Underlying + SCO + ECO (90%)	Underlying + SCO + ECO (95%)
50%	$6.39	$8.31	$7.77	$10.37	$9.69	$12.28
55%	$7.40	$9.32	$8.78	$11.38	$10.70	$13.29
60%	$9.10	$11.01	$10.48	$13.07	$12.39	$14.98
65%	$12.96	$14.86	$14.34	$16.94	$16.24	$18.84
70%	$17.52	$19.39	$18.90	$21.50	$20.77	$23.36
75%	$26.30	$28.05	$27.68	$30.28	$29.43	$32.03
80%	$38.75	$40.09	$40.13	$42.72	$41.47	$44.06
85%	$46.97	$47.26	$48.35	$50.95	$48.65	$51.24

Area Crop Insurance: Supplemental and Enhanced Coverage Options

After being authorized in the 2014 Farm Bill, the SCO endorsement was first made available for the 2015 crop year. The SCO endorsement provides additional coverage for a portion of the producer's underlying individual insurance deductible. There is only one coverage level available for SCO at 86% with a maximum payment rate equal to the difference between 86% and the coverage level of the underlying individual policy. For example, if the underlying policy had a 75% coverage level, the maximum payment rate for SCO is 11% of expected revenue or yield. Further, SCO liability is a function of the underlying individual plan of insurance (i.e., YP, RP or RP-HPE). For example, the SCO liability[1] of a producer with RP crop insurance at the 75% cover-

[1] More specifically, the farm-level expected revenue is the product of APH and RMA price. The individual policy (e.g., RP) insures 75% of the expected revenue with indemnities paid based on farm-level loss while the SCO policy insures 11% of the expected revenue with indemnities paid based on county-level loss.

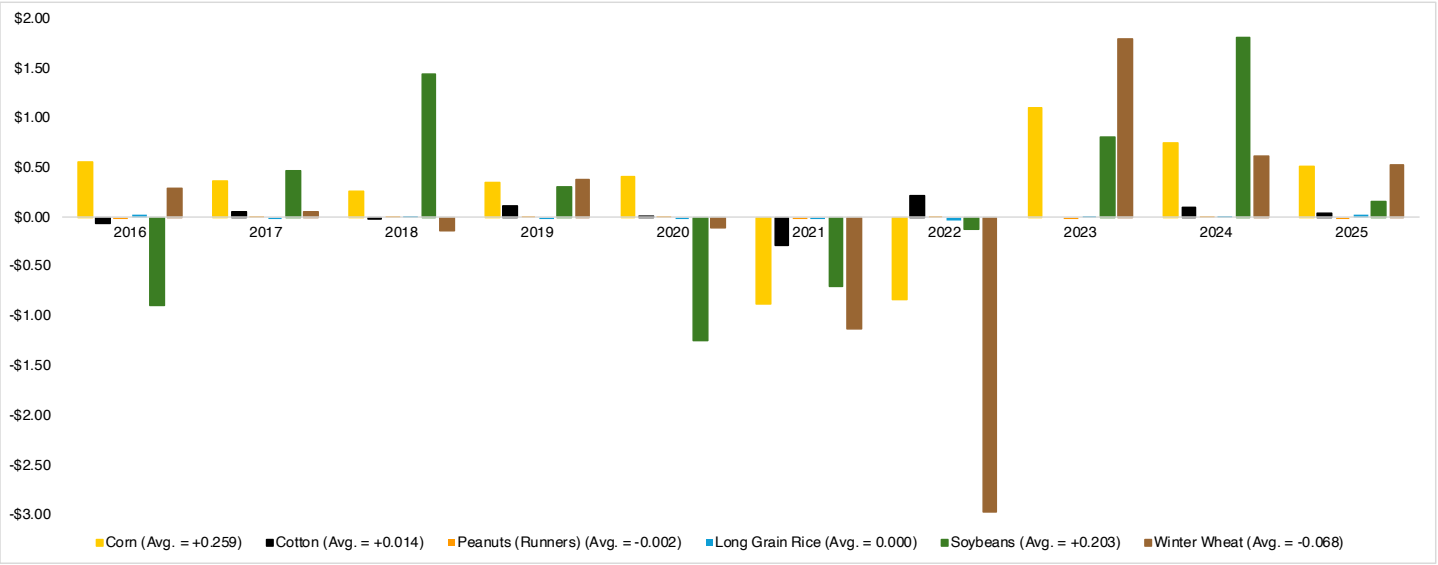

Figure 3: The Difference between the USDA-RMA Projected Price and Harvest Price (2016-2025).
Note: In years where the difference is positive, the Projected Price was greater than the Harvest Price while the difference is negative in years where the Projected Price was less than the Harvest Price. The average price difference over this 10-year span is given in parentheses in the legend.
Source: USDA-RMA Price Discovery Tool.

age level is 11% x APH x RMA projected price. Importantly, under OBBBA, the coverage level for SCO was increased to 90%.

The privately developed ECO endorsement offers coverage levels of 90% and 95% of expected revenue. ECO, like SCO, is subject to a maximum payment rate which is the difference between either 90% or 95% and 86%. This feature allows ECO to be purchased with SCO by stacking coverage bands (see Figure 1). ECO is also like SCO in that the liability is based on the same yield and price variables used to determine liability for underlying individual plans. Importantly, a producer must purchase an underlying individual plan of coverage to be eligible to enroll in either SCO or ECO. A producer does not need to be enrolled in SCO to purchase ECO, and enrollment in both at the same time is allowed. From 2015-24, the Federal Government subsidized 65% of the SCO premium and for the case of ECO 51% for YP/APH and 44% for RP/RP-HPE. Under the OBBBA, the premium subsidy rate for both SCO and ECO is 80% across all coverage levels. A table of sample premium expenses for alternative combinations of RP, SCO, and ECO for soybeans in Jackson County, Arkansas[2] is provided in Table 3:

The underlying crop insurance product used in this example is RP. The APH yield is 50 bushels/acre, and the Projected Price is $10.80/bushel.

Documentation and Application Requirements

We end this chapter by shifting gears from product structure to implementation, outlining the documentation and procedural requirements necessary to enroll in federal crop insurance. Producers must provide detailed acreage reports, typically documented through FSA-578 forms, which specify planted acreage by crop and farm number. Accurate production history records are required to establish APH yields. Tax documentation, such as Schedule F filings, will be necessary for whole-farm policies. Conservation compliance certification (Form AD-1026) is required to maintain eligibility for federal premium subsidies. The Assignment of Indemnity (AOI) form allows lenders to receive indemnity payments directly when crop insurance serves as collateral for operating loans. Because crop insurance is integrated into agricultural finance systems, coordination between producers, agents, and lenders is often essential. We provide a crop insurance purchase checklist in the appendix.

References

Biram, H. D., Coble, K. H., Connor, L., (2024). The Fundamentals of Federal Crop Insurance. University of Arkansas, Cooperative Extension Service.

Biram, H.D., and Mills, B. (2023). Insurable Unit Structures in Crop Insurance. University of Arkansas System Division of Agriculture, Cooperative Extension Service Fact Sheet No. FSA77.

[2] Arkansas led the southern region in soybean planted acres with 2.6 million acres in 2025, and Jackson County faces a crop insurance premium rate representative of the southern region.

Appendix: Crop Insurance Application Checklist

- ☐ Name: Farming as: Sole Proprietor, S-Corp, etc.
- ☐ Physical farm address and mailing address
- ☐ Email address
- ☐ Telephone: home and mobile
- ☐ Social Security, EIN, and Tax ID numbers for producer, spouse, and all members included on the application if the insured is an entity.
- ☐ Partnerships require valid Partnership Agreements to be submitted, so it is important to have your Partnership Agreement up to date.
- ☐ What counties do you farm in?
- ☐ What crops do you plant?
- ☐ Do you have any crop share rental agreements?
- ☐ Do you have any cash lease rental agreements?
- ☐ Be prepared to provide five years of Schedule F, Schedule of Insurance (SOI), and Production Records for the previous insurance year (applies to Whole Farm and Micro Farm).
- ☐ Do you plan on using an Assignment of Indemnity to a financial institution?
- ☐ Are you going to plant any crops you have not planted before?
- ☐ What is the irrigation practice associated with the crop you plan to insure? Irrigated? Nonirrigated?
- ☐ Are you a new producer? In other words, have you produced or insured crops in the county you plan to grow and insure in for more than two years?
- ☐ How many acres do you plan to farm this year?
- ☐ Have you signed an AD-1026? You must have FSA Conservation Compliance to receive the premium subsidy.
- ☐ Are you enrolled in Agriculture Risk Coverage (ARC) or Price Loss Coverage (PLC) with FSA? This will impact your eligibility to enroll in Supplemental Coverage Option (SCO),Enhanced Coverage Option (ECO), and Stacked Income Protection (STAX).
- ☐ Do you have Noninsured Disaster Assistance Program (NAP) or Catastrophic Risk Protection (CAT) coverage on a different multi-peril crop insurance policy? While participating in these products does not exclude a producer from purchasing WFRP and WFRP-MF in 2024 and subsequent years, NAP and CAT payments may impact Revenue to Count4 and indemnities received.
- ☐ Have you paid your previous premiums for the previous insurance year? If you have not paid your crop insurance premium in full by the sales closing date of the following year, you will be placed on the Ineligible Tracking System (ITS) list which prevents you from purchasing crop insurance.
- ☐ Are you adding any land in the current year relative to the previous year?
- ☐ When do you file your taxes? Does your tax year follow the Calendar Year (i.e., January 1 – December 31), Early Fiscal Year (August 1, 2023 – July 31, 2024), or Late Fiscal Year (September 1, 2022 – August 31, 2023)?
  - Calendar Year is the most common. If your tax year is the Calendar Year or Early Fiscal Year, then all applicable forms must be submitted on or prior to the Sales Closing Date which falls in the year which begins your tax year. If your tax year is the Late Fiscal Year, then all forms must be submitted on or prior to November 20 in the year prior to the policy year you plan to insure in. See Biram and Rainey (2023c) for more information.
- ☐ Do you understand the differences between insurable units (e.g., Optional, Basic, and Enterprise)? Are you aware of the tradeoffs between units? See Biram and Mills (2023) for more information on insurable units in federal crop insurance.

Bankruptcy as an Option for Financial Recovery

Adam Rabinowitz, Paul Goeringer, Jonathan Shepherd, and Will Secor

Farmers struggling to keep up with debt payments are not alone. Options are available that can help provide a path forward. Financial pressures can come from many sources, such as farm-related debt, insufficient farm income, or family financial challenges, such as loss of off-farm employment or significant medical or credit card debt. Whatever got a farmer to this point, it's important to know that options exist to assist them in achieving financial recovery.

When non-legal options have been exhausted, the U.S. Courts offer a legal process to discharge debts through bankruptcy. Bankruptcy is governed by Title 11 of the U.S. Code (U.S.C.). Different bankruptcy chapters apply depending on specific situations and goals. Here we discuss Chapters 7, 11, 12, and 13, all of which are relevant to farmers.

If a farmer runs a business and needs to close it down, but is unable to satisfy all of their debt, Chapter 7 would allow them to liquidate the business and settle outstanding debts for less than the full amount owed (11 U.S.C. Chapter 7, 2024; Administrative Office of the U.S. Courts, n.d.b). If the farmer wants to keep running the business and reorganize what they owe, Chapter 11 may be a better fit (11 U.S.C. Chapter 11, 2024; Administrative Office of the U.S. Courts, n.d.c). Farmers filing for bankruptcy as an individual, instead of a business, may also use Chapter 7 if they wish to liquidate their assets (11 U.S.C. Chapter 7, 2024; Administrative Office of the U.S. Courts, n.d.b). Alternatively, Chapter 13 lets farmers filing as individuals hold onto assets if they have enough income to work through a structured repayment plan (11 U.S.C. Chapter 13, 2024; Administrative Office of the U.S. Courts, n.d.e). None of Chapters 7, 11, or 13 are unique to farmers, but Chapter 12 is specifically targeted towards family farmers and fisherman. Under the right conditions, Chapter 12 allows farmers to restructure debt and keep the operation running, giving them breathing room to get back in financial shape (11 U.S.C. Chapter 12, 2024; Administrative Office of the U.S. Courts, n.d.d).

Before filing for bankruptcy, farmers should take a moment to think about what they actually want for their family and the operation. Table 1 lists a number of items that farmers should consider before filing for bankruptcy. Bankruptcy is a tool and not an end in itself. It's a process that helps individuals and businesses facilitate a broader goal – such as

Table 1: Considerations Before Filing for Bankruptcy.

• Evaluate the individual and farm financial situation	• Consider expected windfalls
• Stop the accumulation of additional debt	• Look for assets that can be liquidated
• Communicate with existing creditors	• Engage with an attorney
• Seek credit counseling	• Avoid filing bankruptcy without an attorney
• Protect retirement funds	• Understand allowed exemptions
• File all tax returns	• Do not make preferential payments to selected creditors

helping their business to succeed long-term, reducing debt obligations for a start fresh, and protecting ownership of family assets. Knowing the broader goals prior to pursing bankruptcy can help when assessing the pros and cons of bankruptcy options.

The remaining parts of this chapter provides farmers with helpful background information about bankruptcy – eligibility, process, and outcomes. It concludes with a discussion of tax implications and what the farm will look like after bankruptcy. The information contained here will help farmers become more aware and informed about bankruptcy as a tool in their financial management toolbox.

Chapter 12 Bankruptcy Overview

Chapter 12 was created to assist family farmers and fishermen in financial difficulty (Walker *et al.*, 2020). This section discusses key features that offer farmers protections, including an automatic stay, a cramdown, and the opportunity to restructure debt beyond a three- to five-year bankruptcy plan. Definitions of key terms are in the adjacent text box and more details are presented in the next section.

If you are following the agricultural news, you may be wondering how farmers are faring financially. The trends in Chapter 12 filings tell an interesting story. Figure 1 provides a chart of Chapter 12 bankruptcy filings each year since 2001. During times of lower farm income (e.g., 2002; 2018-2019) or broader macroeconomic downturns (e.g., 2010), Chapter 12 bankruptcies tend to rise. It often takes more than one year of difficult conditions before farmers reach the point of seeking bankruptcy protection. For example, the dip in net cash income in 2002 contributed to a rise in filings in 2003, and sustained low farm income in 2006-2009 drove bankruptcy filings higher in 2009-2012. The decision to file for bankruptcy is not made overnight and often occurs after a long period of trying to hold on and make things work. It's important to note that financial outcomes specific to agricultural sectors may cause regional differences to emerge in Chapter 12 filings (e.g., Southern states and cotton production).

COVID-19 in 2020 also introduced a different chapter in this story of farm bankruptcy filings. Many support programs, such as federal stimulus (Economic Impact Payments) for individuals, the Paycheck Protection Program (PPP) for businesses, the Coronavirus Food Assistance Program (CFAP and CFAP 2) for agricultural producers, moratoriums on foreclosures, and various loan forbearance programs created a lifeline for farm families (Congressional Research Service, 2020; United States Department of Agriculture, n.d.; United States Small Business Administration, n.d.). Add to this mix a temporary increase in the debt limit for small businesses filing Chapter 11 Subchapter V bankruptcy (Executive Office for U.S. Trustees, 2024). All of

Key Terms

- *Liquidation* - The business ceases to operate and its assets are sold. Liquidations may occur outside of bankruptcy (e.g., estate sales or auctions) or within bankruptcy proceedings (e.g., Chapter 7).
- *Restructure Debt* - Debt is restructured when key components of the lending terms (e.g., amount owed, interest rate, maturity, payment frequency) are changed. This may occur through direct negotiations with creditors outside of the courts or within bankruptcy proceedings (e.g., Chapter 12).
- *Bankruptcy Plan* - Court-approved plan for the debtor's restructuring and repayment of debt obligations. Sometimes also referred to as a repayment plan or chapter plan.
- *Automatic Stay* - Protection provided by the bankruptcy process that prevents creditors from taking possession of collateral tied to debt obligations and stops most collection activities.
- *Cramdown* - Process in Chapter 12 bankruptcy in which debt obligations that exceed the market value of the underlying collateral (e.g., farmland) are reduced to match or fall below the market value of the collateral.

these contributed to the steep decline and low levels of Chapter 12 bankruptcies in 2021-2023.

It is important to put these numbers into context as farmers think about their farm and situation. Chapter 12 only represents a segment of farm bankruptcies that fit a specific criterion. There are more farm bankruptcies that do not qualify for Chapter 12 that exist beyond what these numbers show. There are farmers who face equally serious financial challenges but don't qualify for Chapter 12, and others who work through their difficulties without ever involving the courts and thus do not show up in the data. So, while the filing trends in Figure 1 are a useful indicator of broader farm financial stress, they don't tell the whole story. Similarly, these statistics do not capture cases where solvent farms simply go out of business to avoid further equity erosion. The financial pressure facing farm families across the country is very likely greater than any bankruptcy statistic can show.

Available Bankruptcy Options and Eligibility Requirements

Chapter 12 bankruptcy emerged from the financial struggles many farmers faced during the 1980s farm crisis (Walker *et al.*, 2020). At its core, Chapter 12 allows family farms and family fishermen to reorganize rather than face foreclosure and be forced to sell assets. Congress added Chapter 12 to the Bankruptcy Code as a temporary provision that was later made permanent (*Bankruptcy Abuse Prevention and Consumer Protection Act of 2005*).

For many family operations, this provision of the Bankruptcy Code allows them to continue farming and fishing while they face financial challenges. Instead of shutting down, it allows producers to restructure their debts and continue operating during that process (Walker et al., 2020).

To qualify for Chapter 12, a debtor must meet specific eligibility requirements designed for family farms or fishermen. For individuals or married couples, the debtor must be engaged in a farming operation, such as crop production, livestock, dairy farming, or similar agricultural activities. Total debts must be less than $12,562,000 for farms ($2,568,000 for fisherman); a limit that increases every three years in April (11 U.S.C § 104(a), 2024).

Because the focus is on family farming operations, the law is designed to ensure that farming is the primary business of the farm. This means that at least 50 percent of the debts must arise from the farming operation (80 percent for fisherman), and more than 50 percent of the debtor's gross income must come from farming or commercial fishing operations in the preceding tax year, or for farming only in the second and third preceding tax years.

At the same time, Chapter 12 has provisions to allow those farms using a business entity to qualify. Family farms using business entities such as cor-

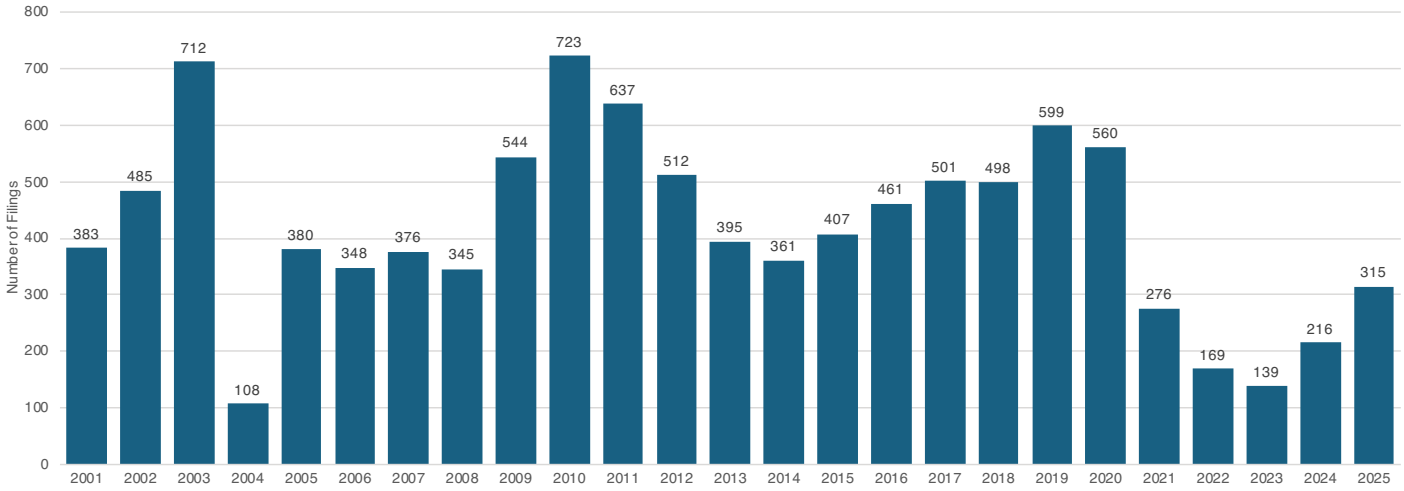

Figure 1: Chapter 12 Bankruptcy Filings (12-months ending December 31), United States
Source: Data obtained from Administrative Office of the U.S. Courts, *Bankruptcy Filings* 2001-2025.

porations, partnerships, and cooperatives may also qualify if they are closely held by a family, the family conducts the farming operation, and the entity meets additional requirements. These additional requirements include deriving at least 80 percent of its value from farm-related assets, having aggregate debt below the statutory limit, and having at least half of its debt arising from the farming operation, while not issuing publicly traded stock (Walker *et al.*, 2020).

Chapter 12 is not the only option, especially if the farm does not meet the requirements. Farms can also look at other chapters, including, Chapters 7, 11, and 13. However, these chapters differ from Chapter 12 in that they are not designed specifically for agriculture. Regardless of the chapter of bankruptcy, all individuals must complete an approved credit counseling course within 180 days before filing. This is an important part of the process and worth planning for early. The U.S. Courts provides information on approved credit counseling organizations and debtor education courses on their website: https://www.uscourts.gov/court-programs/bankruptcy/credit-counseling-and-debtor-education-courses.

If the farm is looking for an alternative reorganization to Chapter 12, then Chapter 11 might be an option. Chapter 11 allows the farm to reorganize and pay creditors over time. Chapter 11 provides flexibility in qualifying for individuals, business entities, and sole proprietors seeking to reorganize their debts and continue operating rather than liquidating assets (11 U.S.C., Chapter 11, 2024). Chapter 11 does not have debt limits that are specific to farming operations, but the farm loses the features of Chapter 12, which are more tailored to agricultural operations.

Within Chapter 11, there is also a newer option that may work for the farm, Subchapter V. To qualify under Subchapter V, the farm would need to fit into the statutory definition of a small business debtor. This means the farmer is actively engaged in commercial or business activities and their aggregate noncontingent liquidated secured and unsecured debts fall under the statutory debt limit, currently at $3.4 million, not including debts owed to affiliates or insiders. This debt limit is also adjusted every three years (11 U.S.C. § 104(a), 2024).

There is also a requirement that at least half of the total debt comes from the commercial or business activities. These eligibility requirements ensure that Subchapter V remains available to smaller businesses seeking a streamlined, more cost-effective path to reorganize their debts while continuing operations (Jones and Goeringer, 2026).

Another option the farmer may hear about is Chapter 13. Chapter 13 is also a reorganization bankruptcy. This chapter is geared towards individuals and not businesses. Chapter 13 is referred to as the "wage earner's plan," because it is limited to individuals with regular income who can propose a repayment plan over three to five years. The key feature of a Chapter 13 plan is that it depends on future income. The farm would need to demonstrate sufficient and stable income to make the required payments while complying with bankruptcy court procedures (Administrative Office of the U.S. Courts, n.d.e).

Chapter 7 takes a very different approach to bankruptcy compared to the other chapters. Instead of offering a reorganization that can be used to pay creditors off over time, Chapter 7 provides for the liquidation of assets to pay off debts. Liquidation means that the farm's property that is not exempt from the bankruptcy is sold to pay back the debts. If the farm is considering Chapter 7, the first question is really whether the farm is prepared for that tradeoff. In exchange for discharging certain debts, the farm may have to give up property that is not exempt under the law.

Eligibility for Chapter 7 generally extends to individuals and business entities. For individuals with primarily consumer debts, eligibility is typically determined through a "means test," which compares the debtor's income to the median income in the debtor's state to assess the debtor's ability to repay creditors. If income is too high, the debtor may instead be directed toward Chapter 13. Businesses and individuals, such as family farms, with primarily business debt, are generally eligible, regardless of income level (Legal Information Institute, n.d.).

Exemptions

No matter which type of bankruptcy the farm is considering, the farm will not lose everything.

The law sets aside property that is exempt, meaning the farm gets to keep it even after filing. These exemptions are there to protect the basics, things like a portion of home equity, retirement accounts, personal belongings, and the tools needed for employment. The idea is pretty straightforward: even in bankruptcy, one should still be able to maintain a basic standard of living and keep earning income. Under the Bankruptcy Code, exemptions listed in 11 U.S.C. § 522 (2024) may be claimed by the filer, although states may opt out of the federal exemptions and require the farm to use state-specific exemptions instead. At the same time, states can choose not to opt out of federal exemptions but instead allow the farm to choose between state exemptions or federal exemptions without mixing and matching exemptions.

The Process of Filing for Bankruptcy and Moving through the Courts

The first interaction with the courts in the bankruptcy process is to file the voluntary petition and related schedules. This includes the schedules of assets and liabilities, a schedule of current income and expenditures, a schedule of executory contracts and unexpired leases, and a statement of financial affairs. Listed on the schedules of liabilities are all creditors, classified by the type of debt that is owed, including secured, unsecured priority, and unsecured nonpriority. See the adjacent text box for definitions of the different types of debt. From here, each chapter of bankruptcy is treated somewhat differently, and thus we focus on an overview of the Chapter 12 process.

After the Chapter 12 case has been filed with the court, a trustee is appointed to administer the case. The trustee is an impartial party that evaluates the bankruptcy case, collects payments from the debtor and makes disbursements to creditors. About 3-4 weeks after filing, the trustee holds a "meeting of creditors", where the debtor is under oath and is asked questions by the trustee and creditors pertaining to their finances and the proposed repayment plan.

After the meeting of creditors, a Chapter 12 plan is submitted to the court for approval, detailing the fixed payments that are to be made to the trustee for disbursement to creditors. Most Chapter 12 plans last three to five years and allocate the filer's disposable income to various debts. Disposable income is the amount of income left after providing for reasonable support of the debtor, dependents, and preservation and operation of the farm business. Secured claims are either paid in full during the repayment period or brought up to date with an agreement for a longer time period of payments. While secured debt is not dischargeable, the terms of the repayment period can be extended to last beyond the length of time the case is in the court, interest rates can be reduced, and principal may be adjusted through a cramdown. Restructuring the terms of debt is an important part of Chapter 12 that

Types of Debt

- *Secured* – Debt that is secured by collateral such as land, vehicles, machinery, and equipment. Secured debt is not dischargeable, but can be reduced to the current market value of the collateral.
- *Unsecured Priority* – Debt that is not secured by collateral but is given a higher priority for repayment. This includes debt to government entities (e.g. taxes), child or spousal support, as well as other court ordered obligations. While these debts are generally not dischargeable, they are sometimes negotiated for lesser amounts.
- *Unsecured Nonpriority* – Debt that is not secured by collateral and is the lowest priority for repayment. This category includes credit card debt, medical expenses, collections, and other loans. These are considered dischargeable debts.
- *Dischargeable Debt* – Debt that can be legally eliminated through bankruptcy and the debtor no longer has an obligation to repay.

can help a farmer reorganize their debt into an annual payment amount that is more in line with their current farming operation and expected revenue.

Priority unsecured claims may be paid in full, depending on the amount of disposable income available and terms negotiated with the creditor. Unsecured nonpriority claims are completely dependent upon remaining disposable income, often are paid little or nothing in the process, and are eligible to be discharged at the close of the case. All bankruptcy plans must be confirmed within 45 days after the plan is filed with the court. Confirmation is done by the bankruptcy judge assigned to the case who determines if the plan is feasible and consistent with U.S. Bankruptcy Code. When situations change, modification of an approved plan may occur. Thus, it is important to continue to communicate with the trustee and to work with the courts, rather than stop making payments and risk the case being dismissed without discharge of debt.

Outcomes: Exiting the Court

Two main outcomes can occur for a bankruptcy case to leave the courts, as defined in the adjacent text box. First, the case can be discharged, where certain debts are forgiven and the debtor no longer has a liability for the discharged amount. For debts not dischargeable, payments that continue beyond the court time must still be made according to the bankruptcy plan. Second, a case can be dismissed. In this situation, a filer's debt has not been discharged, and the debtor no longer receives the protections associated with filing bankruptcy (e.g., the automatic stay).

A discharge is generally viewed as a positive, or most desirable, outcome from a bankruptcy case. In contrast, a dismissal is often thought of as a negative outcome. For example, a case may be dismissed because a debtor is not making debt payments associated with their bankruptcy plan. In this scenario, the debtor may need to liquidate and cease farming. However, a dismissal may actually be the most desirable outcome for specific situations. For example, a case may be dismissed at the request of the debtor if they have reached a new agreement with creditors that does not require continued court intervention. Regardless of whether a bankruptcy case is dismissed or discharged, farmers are going to need to think about what happens next if they choose to continue to farm, including items like potential tax liabilities and future borrowing abilities.

The Farm after Bankruptcy

Tax Implications of Filing for Bankruptcy

The tax implications of bankruptcy can vary by chapter (Internal Revenue Service, 2025). However, there is at least one implication that applies to all chapters: cancellation of debt (COD) becoming a taxable event. In most cases, when COD occurs because of insolvency, this forgiven debt does not have to be recognized as taxable income. However, when COD occurs outside a case of insolvency, it can affect future taxation. The recipient of this debt forgiveness must reduce certain tax attributes which can affect taxation outcomes in future years. These tax attributes are as follows:

1. net operating losses,
2. general business credit carryovers,

Key Outcomes

- *Discharge* – Outcome from a bankruptcy in which the debtor is no longer obliged to pay dischargeable debt. Dischargeable debt often includes non-priority unsecured claims. Debt that is not dischargeable includes those negotiated to extend beyond the bankruptcy proceedings (e.g., mortgage payments) or excepted categories of debt (e.g., fines payable to government entities or child support).
- *Dismissed* – Outcome from a bankruptcy in which the debtor is still responsible for all debt. Common reasons a case may be dismissed are for failure to file specific documents, failure to pay the filing fee, or failure to make plan payments.

3. minimum tax credits,
4. capital loss carryforwards,
5. basis of property,
6. passive activity loss and credit carryovers,
7. foreign tax credit carryovers.

The order listed above represents the general order stipulated by the Internal Revenue Code (26 U.S.C. § 108, 2024) that must be followed. However, there is an election available to choose a reduction in the basis of depreciable property first before following the general order. This can allow for preserving some tax attributes to help offset future tax liabilities. COD that exceeds available tax attributes is generally not taxable beyond the exhaustion of those attributes. However, if COD occurred prior to bankruptcy filing, it may become immediately taxable and no tax attribute reduction would apply.

Tax implications that primarily only apply to Chapter 12 bankruptcies include treating what normally would be taxing events that would fall under ordinary income rules as being taxed at capital gains rates instead. This is important as often farm bankruptcies involve the sale of assets such as land, livestock, machinery, or farm buildings. Outside of Chapter 12 bankruptcy, gains from selling depreciated farm equipment or other property may be taxed as ordinary income due to depreciation recapture rules. Ordinary income is generally taxed at higher rates than capital gains. However, special provisions in federal law allow many gains resulting from farm asset sales during bankruptcy restructuring to be treated as capital gains instead. Because capital gains are taxed at lower rates, this treatment can significantly reduce the overall tax burden associated with selling farm property.

Another important advantage applies specifically to family farmers filing under Chapter 12 bankruptcy. When farm assets are sold as part of a court-approved bankruptcy plan, the taxes that arise from those sales can sometimes be treated as general unsecured claims in the bankruptcy case. This means the tax liability may be reduced, discharged or become part of a bankruptcy plan along with other unsecured debts rather than requiring full repayment or receiving priority treatment. For farmers with large asset sales during restructuring, this provision can dramatically reduce total tax obligations and improve the chances of financial recovery.

Moving Forward after Bankruptcy

Recovering after a farm bankruptcy can be challenging, but it also provides an opportunity for farmers to rebuild their operations with a more stable financial structure. Bankruptcy is designed not only to resolve unsustainable debt but also to create a foundation for long-term financial recovery. Hopefully, with a good plan coming out of bankruptcy, an improved debt structure is realized and managing cashflow becomes easier. It is also the case that a farmer who files bankruptcy most likely has to operate under tight controls and with less resources during the bankruptcy period than may have been typical. This can provide financial discipline and increased efficiencies that hold over going forward.

Bankruptcy also affects credit and borrowing ability. A bankruptcy filing can remain on a credit report for seven to ten years, which may make it more difficult to obtain traditional loans immediately after the case is completed. Lenders may view the farmer as a higher-risk borrower, leading to higher interest rates or stricter loan terms. This may make it difficult for a farmer to secure an operating loan, potentially limiting the ability to meet cash flow needs for the next crop year. Over time, consistent financial management and timely payments can help rebuild credit and improve access to financing. Many farmers rely on agricultural lenders or government-supported lending programs during this credit rebuilding phase.

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Strategies

Short-Term Management Strategies to Weather the Storm

Jordan Shockley and Steven Klose

Introduction

The U.S. agricultural row crop sector is once again navigating a period of compressed and even negative margins. After several years of strong prices and incomes that encouraged expansion and investment, many producers are now facing lower commodity prices while cost structures remain elevated. Input prices, land rents, machinery costs, and labor expenses often adjust more slowly downward than output prices, creating a cost–price squeeze. In these periods, short-term management decisions can have long-lasting impacts on farm profitability, liquidity, and resilience.

One of the most difficult realities for agricultural producers is that they have little control over output prices and are largely price takers in global commodity markets. While marketing strategies can help manage price risk, they cannot fundamentally change the broader price environment. As a result, management must focus on controllable factors such as costs and efficiency, recognizing that trying to "outproduce" low prices often increases risk rather than improving profitability. While an unexpected, above-average yield may keep the farm from losing money, chasing that yield may simply exacerbate losses on the farm.

When margins are tight, cost management becomes the primary lever available to producers. However, cost cutting must be strategic rather than indiscriminate. Reducing costs that would have contributed more to revenue than the money saved will further reduce profitability. The objective is to identify costs that do not generate sufficient returns and adjust them without sacrificing long-term productivity. It sounds basic, but challenging financial environments call for a return to the fundamentals of farm management.

Back to Basics

A clear understanding of cost of production is the foundation of sound decision-making in any environment. Producers should know, with reasonable accuracy, what it costs to produce each crop or enterprise, including both variable costs (seed, fertilizer, chemicals, fuel, repairs) and fixed costs (machinery ownership, land, insurance, labor, and overhead). Enterprise budgeting is a valuable tool for organizing this information, allowing producers to evaluate which enterprises are profitable, compare across alternative enterprises, and determine break-even prices and yields needed to cover variable and total costs. Several Land Grant Universities across the South have enterprise budgets for most major row crops in the region, readily available through their local Cooperative Extension office. Published budgets are good for examples and benchmarks but are specific to the assumptions made that are not going to match every operation. Many of these published budgets are available in an Excel format that can be easily downloaded and edited to create an enterprise budget that does fit individual needs.

Break-even analysis is especially important in challenging periods. Enterprise budgets are used

to determine the price or yield required to cover variable costs and, separately, the price or yield needed to cover total costs. Identifying a break-even price is critical and should be incorporated into the operation's overall marketing plan. In some cases, an enterprise that covers variable costs but not total costs may still be justified in the short term. However, non-cash fixed costs (e.g., economic depreciation) should not be overlooked, as they reflect the true economic cost of production and are essential for evaluating long-term sustainability.

Enterprise budgeting often focuses on finding those break-even prices or yields. However, the management exercise of identifying costs and organizing cost structure by enterprise also creates a solid understanding of where you are investing your operating expenditures. With that clear understanding, management attention should shift to identifying high-cost inputs and evaluating their marginal contribution to revenue. Sound economic decision-making relies on marginal analysis, which compares the additional cost of an input to the additional revenue it generates. Inputs that fail to provide adequate marginal returns should be adjusted or eliminated, and this analysis should be revisited throughout the growing season as conditions evolve.

Listed below are specific areas to explore as we weather this downturn in the agricultural economy. Of course, there are no silver bullets. Many of the strategies below come with cautions or other considerations, and the answers will be different for different operations. Therefore, approach each with the foundation of knowing the cost structure, and evaluate in the context of the specific operation.

Strategies to Reduce Costs Without Sacrificing Productivity

Fertilizer Management

Fertilizer is often one of the largest variable costs in row crop production, making it a logical area for careful scrutiny. Soil testing should be the starting point for fertilizer decisions. What is not measured cannot be properly managed.

Strategy 1: In fields with high phosphorus and potassium levels, producers may be able to safely draw down soil fertility in the short run without sacrificing yields. This strategy should be implemented cautiously and with a long-term plan to avoid degrading soil productivity.

Strategy 2: Consider precision nutrient management strategies such as variable rate application, banded phosphorus, and split application of nitrogen. Matching fertilizer inputs with field variability and crop needs will improve efficiency and reduce costs. Timing and placement of crop nutrients matter, especially when fertilizer prices are high relative to crop prices. The caution here is in the expense of the technology. If you do not already own or have access to variable rate application technology, you must weigh the investment cost against the potential savings in input costs.

Strategy 3: Where available, animal manure can be a cost-effective complete nutrient source. However, nutrient content, application costs, and logistics must be evaluated to ensure economic benefit.

General Input Management

Strategy 1: Avoid shooting for the best yield. Investing in inputs to produce the highest yield possible will not be the most profitable strategy. Remember that maximizing profits is the goal. Weigh marginal fertilizer, herbicide, pesticide, and other variable expenditures against the incremental revenue expected to be generated. For example, make sure that the solution for a particular weed/pest is not more expensive than the loss in revenue expected from the original problem.

Strategy 2: Avoid unproven products and so-called "quick fixes," including some biological additives or consulting services that promise dramatic yield increases or financial stability without credible evidence. Capital should be reserved for inputs with well-established returns.

Machinery Management

Machinery represents a significant cost for many operations.

Strategy 1: Understanding the full cost of operating machinery, including depreciation, interest,

insurance, repairs, and fuel use, is essential. Assessing whether continued repairs or replacement is a better option is both a long-term cost effective question as well as an immediate cashflow feasibility question.

Strategy 2: Selling equipment and custom hiring can be a cost-effective strategy for certain field operations. Alternatively, doing custom work for others can help spread fixed costs over more acres and generate additional income.

Strategy 3: Carefully evaluate whether the machinery on the farm is appropriately sized for the operation. Cost savings can happen if oversized machinery is addressed by switching to the right sized equipment.

Strategy 4: Explore investing in technology that improves efficiency and reduces costs, such as precision agriculture, imagery, or automation. However, even profitable investments that improve efficiency must also fit into with the current year cashflow reality.

Strategy 5: Preventive maintenance is especially important during downturns (e.g., equipment calibration, irrigation assessments, etc.). Keeping equipment in good working order reduces downtime, avoids costly repairs, and extends machinery life.

Land Management

Land costs, whether owned or rented, are often among the largest expenses. Producers should critically evaluate each acre's contribution to profitability.

Strategy 1: Rental and share agreements should be routinely evaluated and if necessary renegotiated to reflect current market conditions. If exploring alternative leasing options, like flex leases, a decision aid can be found on the University of Kentucky website.

Strategy 2: Unproductive or consistently unprofitable acres should be reconsidered. This may include field edges, turn rows, drainage areas, or marginal land that increases costs without generating adequate returns. Also explore conservation programs, such as the Conservation Reserve Program, to enroll unprofitable land.

Strategy 3: In some cases, renting out owned land rather than operating it yourself may improve cash flow and reduce risk.

Strategy 4: Explore grazing (if infrastructure like fencing exists) or baling straw on row crop ground, particularly where these practices can generate revenue without significant additional costs.

Labor Management

Labor decisions are among the most challenging aspects of an economic downturn. Labor costs are often fixed in the short run, and reductions can have implications for morale, productivity, and long-term capacity. Clear communication, well-defined roles, and efficient management become even more important when resources are constrained.

Strategy 1: Producers should assess whether current staffing levels align with the scale and intensity of the operation. Is there the right mix of full-time and part-time workers? Some situations dictate retaining full-time employees even though it means having excess capacity. Look for ways to spread that cost to additional revenue generating activities.

Strategy 2: Perhaps most importantly, producers should evaluate their own time use. For example, during downturns, the operation may need its owner to act more as a manager than a laborer, focusing on planning, analysis, and decision-making rather than day-to-day tasks alone. In contrast, for the owner that primarily serves a managerial role, taking on some of the day-to-day tasks could help reduce labor costs. Honest self-assessment can reveal opportunities to improve efficiency and effectiveness.

Conclusion

Economic downturns test the resilience and discipline of farm operations. While producers cannot control market prices, they can control how they respond. Short-term management strategies focused on understanding costs, making informed marginal decisions, and allocating resources carefully can help operations weather the storm.

Remembering the basics of analyzing the cost of production, scrutinizing high-cost inputs, managing

machinery and land strategically, and focusing on effective labor and time management, helps producers reduce losses and protect long-term viability in good times and bad. These decisions are rarely easy, but they are essential. History shows that agriculture is cyclical, and those operations that survive downturns by developing good farm management strategies are often best positioned to thrive when conditions improve.

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Things to Consider When Looking at Alternative Row Crops

Francisco Abello, Henry Nelson, Jonathan Shepherd, and Tyler Mark

Alternative Crops

Recent years of low or negative returns due to low prices and high production costs, including with higher interest rates, have led many farmers to look for alternative row crops. Potential options aim to increase returns, improve cash flow, provide access to new markets, and help better manage financial risk. Alternative crops can also be beneficial from a production standpoint, supporting crop rotation, weed control, and soil management.

Higher-profit alternatives typically involve greater risks. Any new crop should be evaluated as a business strategy, weighing its advantages and disadvantages within the farm operation. Each alternative crop must be evaluated from production, market, financial, and legal perspectives.

In the past, we have seen several alternative crops succeed and others fail for various reasons. Crops such as hemp, canola, specialty grains, guar, some oilseeds, popcorn, and other niche food crops can potentially improve returns and mitigate financial risk. However, history has also shown that these alternative crops have not always been successful, with highly volatile markets and significant production challenges.

Market Size, Demand, and Price Contracts

Alternative crop markets differ from common commodities like corn, wheat, cotton, and soybeans. They tend to be smaller, have specific supply channels, fewer buyers, limited acreage, and lower liquidity, creating both opportunities and increased risks. Early adopters may earn high prices and returns, but these can decline if acreage outpaces demand. For example, popcorn accounts for about 1% of total corn acreage. If many farmers switched to popcorn, the market could quickly be saturated.

Before selecting an alternative row crop, consider:

- Market size: How easily can the market become saturated?
- Demand stability: Is demand stable or emerging? Is it a new product with growing demand?
- Number of buyers: Are there alternative buyers if your current buyer fails? Where else can you sell?
- Purchase contracts: Do contracts specify price, payment terms, product quality, and discounts for quality issues?
- Buyer solvency: Can buyers meet payment obligations? How long have they operated? Assessing solvency in alternative crop markets is often difficult.

Additionally, shifts in consumer preferences can dramatically impact demand for niche products. Trends in food, health, or environmental awareness can change quickly, leaving producers exposed to sudden drops in market demand. Because niche markets are often based on evolving consumer interests, they tend to be less stable than traditional commodity markets.

Price Contracting and Logistics

Because alternative crops tend to lack futures markets, producers must rely on contracts with buyers to set prices.

Contracts can reduce marketing risk by fixing prices or guaranteeing sales. However, producers should carefully review payment terms, delivery obligations, and the buyer's financial stability before committing acreage.

When choosing a new crop, consider transportation logistics. Even if production is viable, ensure adequate logistics during and after harvest, including facilities, transportation, and the buyer's receiving capacity to avoid bottlenecks. Major points to consider include:

- Transport distance;
- Transport cost;
- Receiving capacity;
- Storage requirements if the crop would need to be stored at your facility;
- Whether segregation, harvester cleaning before harvest, or special handling is required, as these increase costs or extend labor time.

Specialty markets frequently require unique processing, packaging, or distribution capabilities that may not be readily available in all regions, thereby limiting market access and increasing costs.

Careful research, monitoring of market trends, and attention to supply chain considerations are important steps for producers interested in pursuing niche opportunities. Building relationships with buyers and remaining flexible in business planning can help mitigate these risks and support long-term success. Understanding the supply chain is essential to meeting requirements and accurately assessing costs.

Production Risk

Despite promising profitability, one must confirm a crop's production feasibility. New crops carry uncertainty due to limited historical data and experience.

Assess the crop's adaptability to local climate, including temperature, frost risk, water needs, pests, diseases, soil conditions, and available machinery. Many new crops may lack approval for the agrochemicals we typically use for weed, disease, and pest control. Producers can get information about alternative crops and approved chemicals from state Extension services at Land Grant Universities. USDA soil and climate data are also useful. Producers should always check chemical labels. Chemical approvals differ by state, so it is important to verify local rules. Using multiple sources helps producers ensure the crop suits local conditions and is manageable with current resources.

Evaluate the benefits and risks of adding a new crop to your rotation. Alternative crops can improve pest management through herbicide rotation, by reducing soil compaction, and by optimizing machinery use if compatible with existing equipment.

Production Costs

Analyzing true production cost is essential when evaluating a new alternative crop. Enterprise budgets are practical tools for assessing whether an alternative crop is suitable for a farm operation. They help analyze the actual costs of a new crop to determine break-even prices and yields.

An enterprise budget estimates the costs and returns for a specific farm enterprise, typically per acre. It helps producers identify expected revenues, input costs, labor, machinery, operating capital needs, and break-even prices and yields.

When evaluating a new crop, use available Extension budgets or develop your own based on local assumptions and considering their unique marketing and production factors. This process can uncover hidden costs or management requirements. It also highlights ways to reduce expenses or improve efficiency. Existing equipment may be suitable for some crops with minor adjustments. However, other crops may need significant capital investment. Do not underestimate increased machinery maintenance costs.

Develop a business budget that estimates expected yield, input costs, machinery expenses,

labor needs, indirect and transportation costs, and break-even price. These budgets should include variable costs, such as herbicides and fertilizer. Add custom application costs as well. Fuel, lubrication, repairs, and labor are based on expected field operations, including land preparation, planting, and cultivation. Estimate interest on operating capital according to the share of this enterprise. Fixed costs include depreciation, taxes, insurance, and interest on machinery or buildings, especially for new long-term investments.

It is important to consider variability in yield and gross margin associated with a new alternative crop. While you likely understand the risks of familiar crops, you may have limited knowledge about this new option. Do not rely solely on average production figures. Instead, evaluate multiple scenarios to prepare for unexpected outcomes.

Risk Management

Risk management tools are vital for commercial agricultural producers, enabling them to safeguard their investments and maintain financial stability. When exploring alternative row crops beyond the traditional staples, it is important to recognize that the availability of crop insurance and other risk management tools may be limited. Coverage options often depend on the crop's prevalence in each region, market demand, and specific USDA or private insurance programs.

For some alternative row crops, standard policies such as multi-peril crop insurance may not be offered, or coverage may be available only in select counties or through pilot programs. Producers may need to consider supplemental insurance products, contract provisions, or even self-insurance strategies to manage risks such as weather variability, pest outbreaks, or market volatility. Before committing to an alternative crop, it is essential for farmers to evaluate not just agronomic suitability but also the insurance and risk management support available in their area. Local extension specialists or crop insurance agents can provide valuable guidance for navigating these decisions.

For more information on crop insurance and risk management tools, visit the USDA Risk Management Agency's resources page.

It should be noted that whole-farm revenue policies may be used in many cases where less common crops are grown. Local insurance agents with experience writing policies for the crop being considered should be consulted.

Cautionary Tale: The Case of Hemp

There has never been a new agricultural demand that could not be oversupplied. Sometimes production growth can outstrip processing capacity. At other times, small increases in production can result in a rapid drop in prices. Hemp is a great example of some of the pitfalls and opportunities that can befall new alternatives.

Volatility through regulatory change, evolving market dynamics, and consumer demand have shaped the hemp industry since its reintroduction in 2014. From 2014 to 2018, states had the opportunity to shape the development of the industry within their state.[1] Leading into the 2018 Farm Bill, hemp acreage was expanding, especially in the Cannabinoid sector. Hemp showed promise as a way to produce a profit, and as a result, a rapid expansion in production occurred across the country.

However, like many emerging markets, the boom was followed by a sharp correction.[2] Production increased much faster than processing capacity and consumer demand, leading to oversupply and falling prices. Many farmers who invested heavily in hemp production during the early years experienced financial losses.

Despite this correction, hemp production has not disappeared. Instead, the market has begun to stabilize as supply and demand have slowly adjusted. Some producers have re-entered the industry, although the scale of production is more sustainable this time. Hemp production continues to be

[1] https://www.ams.usda.gov/rules-regulations/hemp/HempLawsandRegulations
[2] https://www.aetrjournal.org/UserFiles/file/9%20Shepherd%20Full.pdf

dominated by floral hemp intended for cannabinoid (CBD) extraction. Demand for hemp grown for fiber or grain remains relatively limited in comparison but is growing slowly.

The story of hemp highlights many of the difficulties in starting a new enterprise. But, it also offers some hope as the market stabilizes and slow growth begins.

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Strategies for Surviving an Economic Downturn and the Role of Cooperatives

John Park

The Business Environment of Production Agriculture

When we speak of farming as being a challenging business, we might initially think of the production-related challenges, such as weather variability, severe weather events, water scarcity, pest and disease control, labor shortages, competing land uses, regulatory pressures, and price volatility. But there are other challenges that come to light as we look at the overall business environment surrounding agriculture.

For instance, competition in commodity markets makes agricultural producers price takers. They are unable to negotiate prices, which forces them to sell all their production at prevailing market prices. Some price risk can be mitigated as farmers lock in prices by buying and selling futures contracts or by delaying sales through participation in USDA marketing loans, but the inherent difficulty of commodity marketing remains. They are generally unable to protect against falling commodity prices because they are unable to prevent new competitors from entering their market or existing competitors from expansion. Even the pursuit of favorable prices is not certain. Since the use of land as a resource is not specific to any one commodity, competitors can easily switch to other commodities, resulting in expanded acreage, a positive supply shift, and lower prices. Not surprisingly, producers focus on production efficiency to achieve low per-unit costs in the hope of continued profitability.

However, there are other challenges in the business environment outside of producer competition. Agricultural producers rely on large conglomerate firms to provide their inputs. In 2023, Syngenta, Bayer CropScience, BASF, and Corteva had combined sales exceeding $42 billion and control an estimated 60% of the industry (Statista, 2024). These four companies provide excellent products and services, but they are very large, and their customers have little power of negotiating favorable prices. When their costs increase, it is easier for them to pass those increases through to customers to maintain their profitability.

A similar problem exists with the marketing of agricultural production. Individual agricultural producers are quite small in relation to the firms that assemble, store, process, distribute, and market their crops. According to the National Agricultural Statistics Service, 97,014 U.S. farms produced more than 1.7 billion bushels of wheat in 2022 (USDA NASS, 2024). This equates to an average of 17,596 bushels grown per farm. In other words, the average farm that grows wheat accounts for 0.001% of the national crop. Cargill, ADM, Bunge, and Louis Dreyfus control the majority of grain exports. An individual farm has no ability to negotiate commodity prices with a large, concentrated group of buyers.

If we examine the entire value chain, we realize that challenges extend beyond the farm itself. Services that support farm operations, such as financial services, insurance, telecommunications, healthcare, and electricity, are all essential for the growth and well-being of farms and their surrounding rural communities. Farm operations depend on access to financial service providers who comprehend the

seasonal fluctuations and inherent risks associated with agricultural and rural businesses. Rural communities, in turn, require reliable power and telecommunications infrastructure. However, commercial banks and utility companies may hesitate to provide support to rural agribusinesses and their communities due to the perceived risks involved.

Strategic Solutions

Thus, individual agricultural producers have limited means to overcome the marketing power of large buyers and sellers, and they have no control over who enters their industry. Further, they are price-takers in the marketplace, unable to differentiate their production from other competitors.

The overall solution for generating higher profits seems simple: farm profits will improve if producers are able to lower costs paid, increase prices received, or both. The problem is that these specific solutions are difficult for an individual producer to overcome. However, with the added advantage of cooperative business ownership, they become viable strategies. A cooperative is a business owned and controlled by its users, in this case, agricultural producers. Typically, cooperative members share profits based on their patronage. For instance, a member contributing 10% of the cooperative's revenue would receive 10% of the declared profits. Profits are usually shared partially as cash and partially as equity redeemable in a future year. This arrangement ensures that current members maintain ownership and control of a business they otherwise would only interact with as customers. In essence, they have vertically integrated within their supply chain. Now let's evaluate strategic solutions with the added advantage of cooperative ownership. A summary of this evaluation is found in Table 1:

Be the Lowest Cost Provider

When we say that a firm is a price setter, we mean that they face a situation where if they lower price, they can expect a higher volume of sales. In this case, being the lowest cost provider means the firm has greater ability to use price to increase sales. They can set prices lower than their rivals, presumably capturing more of the market. It's not a great long-term strategy since lowering price means lower profit margins. But lowering the firm's fixed and variable costs always means higher profits.

A farm operation is a price taker, meaning that they are unable to change their sales volume by lowering price. They can sell all their output (farm commodities) at the market price. Again, lowering fixed and variable costs means higher profits. However, for agricultural producers, the benefits of lowered costs are eventually lost to the stronger bargaining power of commodity buyers and input sellers.

Table 1: An Evaluation of Strategic Solutions for the Farm and Cooperative.

Potential Strategic Solution	Feasible at the Farm?	Feasible with a Cooperative?
1. Be the lowest cost provider.	Yes, but efficiency gains are eventually lost to other firms in the supply chain.	Yes, a farm supply cooperative might purchase inputs at better prices and share profits with members.
2. Find ways to add value to your output.	Yes, but may be very limited to specialty crops at small scale. Profitable scale of value adding processes may be cost prohibitive for a single producer.	Yes, collectively, members could own value adding processes and services, and essentially vertically integrate into other markets.
3. Control price.	Generally, not feasible for row crop agriculture without significant volume, time, and expertise.	Yes, marketing cooperatives sort, grade, store, market, and distribute the combined output of members at higher margins.

Membership in a cooperative can help agricultural producers reduce their costs by capturing profits within the supply chain. For instance, a rancher might join their local cooperative feed mill and purchase bagged feed at competitive prices. These purchases contribute to the feed mill's profitability, which is then shared with members at the end of the year. In essence, the profits received by the farmer have reduced the price they paid for bagged feed.

Find Ways to Add Value to Your Output

Most value-adding activities are simply too costly for an individual producer to invest in. Transforming corn into bagged feed or wheat into flour demands substantial investments in machinery, land, and labor. It necessitates considerable management expertise and a large volume to achieve profitability. Individually, farm operations lack the scale to undertake such activities. Consequently, attempting to add value-adding activities may lead to underutilized capital assets and a diversion from primary farm production.

A cooperative already has the organizational structure to concentrate on value-adding activities. A cooperative farm store likely possesses managerial experience, property, marketing expertise, distribution networks, and access to necessary capital assets, thereby allowing farms to focus solely on adapting their production to align with market conditions or opportunities and generating additional profits for its members.

Control Price

Agricultural producers have limited control over prices and often interact with large firms that wield significant market power. Consequently, Congress enacted the *Capper-Volstead Act* in 1922. This act permits agricultural producers to collectively process, prepare, handle, and market their products. (USDA RBCS, 1995) The act establishes legal frameworks for these collaborations, enabling producers to overcome industry challenges without facing antitrust repercussions. Cooperatives play a crucial role in agricultural industries by empowering small producers to influence prices through collective purchasing and bargaining. They also provide alternative access to essential market services, such as assembly, grading, storage, marketing, and distribution. Profits generated from these activities are subsequently shared with member-owners. Cooperatives are an integral component of agricultural industries, enhancing producers' control over profitability and resilience.

Benefits of Cooperation

Cooperative solutions for risk management are applicable to all aspects of farm operations, such as purchasing supplies, ginning cotton, marketing grain, storing commodities, manufacturing value-added goods, securing financial services, purchasing insurance, and utilizing utilities. Cooperative businesses offer comprehensive services in all these areas.

Agricultural cooperatives provide crucial strategic solutions for farm operations. They facilitate vertical integration, enabling producers to reduce costs, enhance production value, and control prices. By participating in a cooperative, farmers can boost their income by extracting profits from other parts of the supply chain. Additionally, agricultural cooperatives offer some other significant benefits as provided below.

First and foremost, agricultural cooperatives play a critical role in ensuring farmer access to essential services and markets. For instance, cotton production heavily depends on cotton ginning facilities. Consider a scenario where there's only one gin available, and it shuts down due to low crop yields. Similarly, a pecan grower faces challenges when their local shelling company opts to import cheaper nuts, leaving them unable to process their pecans. By forming agricultural cooperatives, farmers safeguard the industry's infrastructure, enabling them to remain profitable and enhancing their overall productivity and resilience.

Finally, agricultural cooperatives empower producers by giving them a platform to voice their concerns and promote their interests within their communities, industries, and state governments. These cooperatives represent the political, social, and economic interests of the farmers who own

them. Moreover, membership in a cooperative offers economic resilience, enabling farmers to weather economic downturns and beyond.

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Exit and Transition Strategies for Farm Businesses

Jonathan Shepherd and Kenny Burdine

Farming is more than just an occupation—it's a way of life, and this often changes how difficult decisions are viewed by farmers. Most farms are family farms that have been passed down from generation to generation and/or built slowly over time through a lot of work. For this reason, close connections often exist between farm operators, the land that is farmed, the livestock that are managed, and the infrastructure that exists. This is very common and adds to stress in situations where farm businesses are struggling. While farm operators typically don't want to cease operations, there are situations when this is the best option.

Farm operators should first understand that exiting farming should not be viewed as failure. Sometimes there is a negative connotation associated with selling a farm or transitioning to non-farm employment, but this is unfair. New businesses form—and existing businesses close—on a regular basis. In fact, if an entrepreneur starts a small business, develops that business over time, and sells it to another entrepreneur or another existing business, that is often seen as success. There is no reason why farm businesses should not be considered similarly. If a farm is struggling, they should evaluate all their options, including exit from the industry. In some cases, this option is never considered or is seen only as a last resort. This can lead to short-run decisions that have major negative implications in the long-run and result in things only getting worse.

Take Stock of Your Current Financial Situation

If a farm operator feels they are in a dire financial situation, it is probably best to seek some advice from a third party. It can sometimes be hard to see the gravity of a difficult situation from the inside, so outside perspective can be helpful. Outside perspective can come in many forms such as lenders, accountants, lawyers, Extension professionals, mentors, and friends. The best advice is most likely to come from someone who understands the farm business but is not directly involved. It also needs to be someone who will be honest, direct, and is not afraid to have difficult conversations.

A good first step is to make an accurate assessment of the current financial situation, which starts with updating financial statements for the farm. At a minimum, the operation needs an updated accrual income statement (or accrual adjusted income statement) and balance sheet as both provide important perspective on the scope of the issue. The income statement provides an understanding of farm profitability over a period of time – typically one year. One can examine the income statement to determine how income compared to expenses in the most recent year and how close the farm was to being profitable. Some tweaks to the previous year's income statement can be made to project profitability for the upcoming year. These projections need to be based on actual data, or as close to actual data as possible. For example, using crop insurance actual production history, actual calving history, and current input prices. This avoids falling into the trap of projections based off optimistic results that may or may not be possible. If the operation can cover all their variable expenses, and some of their fixed expenses, it may make sense to continue operations while further assessing the situation. If the operator feels they cannot cover their variable costs in the upcoming year, it likely

does not make sense to produce as that will only make things worse.

While an income statement is important, an updated balance sheet may be even more important when an operation is considering exiting. Unlike an income statement that covers a particular period, a balance sheet is created at a specific point in time and can be evaluated precisely at the point when an exit is being considered. A balance sheet is a systematic listing of all assets (what is owned) and liabilities (what is owed), and equity is the difference between the two: total assets minus total liabilities. If farm assets exceed liabilities, the farm is considered solvent. A solvent operation has the potential to sell all their assets, pay all their liabilities, and walk away with some amount of money. If liabilities exceed assets, the farm is insolvent and the situation is more dire.

In addition to assessing the solvency of an operation, balance sheets also provide perspective on liquidity. Liquidity refers to the operation's ability to meet current obligations. Assets and liabilities on a balance sheet are typically categorized by how soon liabilities are due and how quickly assets can be converted to cash. For example, a feed bill that is due in two weeks is a current liability because it must be paid very soon. The value of a hay baler on that same balance sheet may greatly exceed that feed bill, but the baler would have to be sold in order to be used for payment on that feed bill. Current assets like cash are typically needed to cover current liabilities. Having current assets eliminates the need to sell assets (or take out additional debt) to cover current liabilities.

By taking stock of the farm's current financial situation, the operator will have a clearer picture of the situation, what resources they have to work with, and how soon decisions need to be made. In some situations, farms have significant owner equity due to the values of land, equipment, and other assets. They may be dealing with profitability issues that are negatively impacting their equity positions, but they do have equity to work with. In other situations, farms may be dealing with profitability and solvency issues, in which case they are likely forced to act sooner. Further, there are likely to be tax implications for any of these decisions that must be considered as part of the exit strategy. The rest of this chapter will provide considerations for farm operators as they consider what exit strategy is best for them.

What Should be Considered in An Exit Strategy?

Planning an exit from a business, especially an agricultural operation, requires more than deciding when to stop working, although that too is a difficult decision. Ideally, the business owner needs to maintain control over the exit process to ensure it aligns with long term financial security, is robust in strategic tax planning, and meets family or successor goals. It is advisable to take stock of your current situation and your retirement plans and ask yourself, "how much equity am I going to burn through until this agriculture cycle is complete?" If you are close to your retirement age goal, you could negatively impact your equity by continuing production for a couple more years while waiting for things to improve. This could leave you in a position where you are forced to continue to operate beyond your retirement goal in an effort to recoup what was lost in the low profitability times.

One of the most significant components of any exit strategy is understanding the tax consequences of asset sales and retirement income. Back of the envelope mathematical approaches to calculating potential tax liabilities associated with business asset liquidation rarely approximate the real liability potential. Equipment, real estate, breeding livestock, inventory, and other assets each carry different tax treatments. Capital gains taxes, depreciation recapture, and the potential for ordinary income characterization of those sales in their entirety (or in part) can dramatically affect the tax liability realized. For example, when depreciated equipment is sold, depreciation recapture rules come into play, resulting in all or a portion of that sale being taxed as ordinary income rather than at capital gains rates. In fact, for depreciable asset sales, only if the asset is sold above the cost basis will any of it be considered under the typically more favored capital gains rate. Real estate may qualify for long-term

capital gains treatment, but the depreciable assets attached to it (i.e. buildings, fences, and some improvements) will likely be subject to depreciation recapture as well. Selling multiple assets in one tax year can push income into higher tax brackets, significantly increasing the overall tax burden.

Given these complexities, successful exit planning must involve tax professionals and financial advisors. Strategies such as spreading asset sales over multiple years and using installment sales can reduce tax exposure. These decisions should also not be made in a vacuum. Other sources of income such as required minimum distributions (RMDs) from retirement accounts, Social Security income (and when to start drawing), as well as state specific tax considerations should be integrated into the plan. Failing to understand tax implications can turn what appears to be a strong liquidation position into a disappointing net outcome. Effective planning ensures that owners keep as much of their accumulated wealth as possible while strategically managing taxes under current tax laws.

Understanding Financial Needs After Exit

Another key component of retirement is understanding post-retirement cost of living. It is not uncommon for people to underestimate their living expenses in both their working phase and retirement phase. Taking time to fully understand cash needs to maintain the current standard of living is of paramount importance to ensure that adequate funding will be available in retirement. Key areas to consider include healthcare costs, insurance expenses, travel, housing costs, and property taxes, along with all the other family living costs that will be needed. Forecasts need to be adjusted for inflationary pressures over the expected post-retirement period. Another cautionary point is that personal expenses can sometimes be hidden (unintentionally or not) within business expenses. So, we encourage you to take time to develop a detailed budget to understand the true living costs so you are not overspending or living unnecessarily frugally because of income uncertainty. Professional financial assistance may sometimes be required to adequately project these essential costs.

What Exit Strategies are Available?

There are of course multiple options for how to exit. For example, gradually downsizing the footprint of the operation over time can ease the overall financial burden and provide time for personal assessment. This process might involve selling excess or underutilized equipment, reducing herd size or acreage, paying down debt, and/or transitioning away from labor-intensive or high stress enterprises. Gradual reduction allows income to be spread over several years, potentially reducing tax liabilities in aggregate and allowing for better cashflow planning to meet those obligations. It also provides time to evaluate how exiting impacts you on a personal level. Some may discover that partial retirement suits them well, allowing continued involvement while lessening the physical and managerial demands of a full operation. But this is not always the case. For individuals who have spent decades building a business, personal identity and purpose are closely tied to the business that has been created, including the daily operational requirements. A phased approach allows time to adjust, mentor successors if desired, and shift focus on other pursuits whether they are recreational or income producing. Others find that they need more and find working for another farmer in the community provides them with an outlet that they need.

Instead of fully exiting farming, some farmers who own land choose to retain that land and lease it out. This can be done via cash rent or crop-share agreements. This approach allows for preservation of ownership of an appreciating asset, creates predictable low-risk income, and preserves options for generational succession. However, this approach is not without headaches. Before transitioning from the role of a farm manager to landlord, one must understand lease structures, liability, market risk protection, and market rents to ensure the arrangement supports retirement needs. Lease agreements should clearly define responsibilities, payment terms, and liability coverage. Additionally, landlords

must understand how rental income affects taxes (passive income vs. material participation) and retirement cash flow. Renting land can serve as either a long-term retirement strategy or a transitional phase before eventual sale or transfer. It also offers flexibility and often provides emotional comfort to owners who are not ready to completely sever ties with their operation or land.

Yet another exiting strategy for the current ownership is to transition to the next generation. However, this seldom can be executed successfully if done quickly. Managing expectations to acknowledge that this is a time intensive process will help mitigate frustrations at the outset. Both the transitioning generation and successor generation need to have open and honest conversations about the income and cashflow needs of both parties and develop a strategy that will meet the goals of both. It is important to consider cashflow and understand debt servicing, debt transition, asset transition, management transition, and ownership transition. Having a very structured ownership and management role agreement is crucial to ensure a successful transition. Putting time and effort into getting things right in the beginning is essential to ensure that relationships are preserved and conflict is avoided to the extent possible. While there seemingly is a lot of literature available that deals with the concept of succession and transition, it is advisable to reach out to someone who is certified in these areas to help develop a plan that has the best chances of success.

One of the final options is to exit all at once by selling assets as quickly as possible or utilizing a whole farm auction. There are situations that are so dire that this is the only option. Each of the strategies we have discussed carries its own financial, emotional, and risk-based implications, and this one certainty is no exception. An all-at-once exit can provide simplicity, relieve mental strain associated with analyzing best approaches, and provide closure. Assets are liquidated, taxes are paid, and the remaining proceeds can then be invested for retirement income needs and legacy desires. This approach will likely create a large one-time tax burden and eliminate potentially diversified income streams. It can also create emotional stress, particularly for owners deeply connected to their businesses. In contrast, a gradual exit spreads taxable income across multiple years and allows for smoother cash flow management. It provides time to mentor successors and adjust personally to reduced involvement. However, it also prolongs exposure to operational risks and market volatility. As we noted at the outset, as uncomfortable as it may be, this could still be preferable to continuing to erode equity and should not be perceived as failure.

While many farm operators don't like to think about exit from farming, the reality is that every operation will eventually need an exit or transition plan. There is no universally correct choice, and the operator needs to decide what works best for them and fits with their goals. The best strategy depends on health, financial position, family goals, market conditions, and personal readiness. Many owners find that a hybrid approach, combining gradual reduction with defined milestones, offers a balance. An effective exit strategy will depend on individual circumstances. Whatever the decision, it is important to work with a team of professionals that can help guide and inform you through the planning process.

Local and Value-Added Food and Food Product Markets

Tim Woods and Crystol Thomas

Introduction – Location, Brands, and Credence Attributes

Much of agriculture focuses on bulk commodity markets – producing and selling products that are not differentiated and are typically traded in large volumes. Commodities are typically inputs into another production process and, as such, producers are essentially price takers, allowing for premiums in quality or storage.

A significant part of agriculture, however, involves selling into markets where consumers place a high premium on values associated with the product. Consumers increasingly ask questions about their food purchases like 'who produced this food?', how was it produced'? or 'where was this produced?'. This has led to an increased recognition of credence attributes in agricultural supply chains – attributes about a product that the consumer values and would be willing to pay more for, but, without some supporting certification or evidence that the credence attributes are present, the opportunity to capture a premium over products without these attributes is lost. Consumers of ag products are increasingly segmented around their preferences, creating opportunities for marketing programs and supply chain relationships to meet emerging attribute demand.

Branding the location of production is another credence attribute. While relating directly to the 'where was it produced' question, it tends to bundle several related values together in the mind of many consumers. These values may include interest in local economic development, preserving the heritage of certain agricultural production practices or communities, perceptions around environmental impacts, perceptions around freshness and product quality, and other factors. Growth in food consumer interest in local food sourcing has experienced a long and steady growth in the United States (Woods and Collart, 2025) reflecting consumer interest in those credence attributes connected with their food choice (see Figure 1). Mounting evidence points to an expansion in both consumer interest and actual purchasing frequency of food products identified as local, with notable growth in grocery and restaurant channels (see, for example, in Kentucky, Woods *et al.*, 2026).

Branding for credence attributes such as location of production offers value through identification of local products that has been recognized by many state departments of agriculture. Most state departments of agriculture have established branding statewide programs for fresh and value-added food and fiber products, such as Kentucky Proud, Pick Tennessee, Virginia's Finest, and Go Texan. These branding programs are used in direct to consumer and intermediate markets (grocery, foodservice, wholesale, etc.) to help end users better identify locally produced products. The success of local branding programs varies by state but generally is valued by 'locovore' buyers as they look to source products grown nearby (Woods and Thilmony, 2018; Varziri *et al.*, 2025).

Farm estate branding, or identifying the specific farm that is producing a product, is another very effective way to signal to the consumer the "where" of its origin. Many marketing efforts utilize a farm brand and the state's brand together. The goal for any branding program is to build brand equity – a value of trust consumers will place in a product sourced from a known produc-

er that leads to long-term loyalty as measured by repeat purchases.

Credence attributes that inform the buyer about the production practices they prefer have historically centered around organic, humane treatment of animals, and other eco-labels. Growth of organic into mainstream food distribution began with smaller local farms, grew into state or regional certifications, and eventually served as the foundation of the USDA certification process meant to harmonize how approved farm production practices related to the product consumers were seeking to purchase. Since its inception in 2002, USDA certified organic food products have generally garnered a price premium over conventionally grown products (Skorbiansky, 2025). Free range eggs, certified humane, and many other sustainability labels, while not connected to place of production, utilize the same branding and certification strategy required to capture the value associated with credence attributes to signal legitimacy to the production practices preferred by their customers.

Market Channels for Local Products

Direct marketing provides producers with an opportunity to interact directly with customers and, through relationship building, create long-standing market relationships around these values that can translate into substantial lifetime consumer value. Access to direct market opportunities can vary depending on the products and geographic location. Direct market channels provide a platform for customer engagement early in market development of new products, product forms, and product lines offered for sale. While inherently management and people intensive, these channels provide new revenue streams as market relationships and product development are explored at a relatively low cost and significantly less risk.

The segment of consumers typically willing to purchase local products over a long period tends to be limited by factors such as income, age, work status, household size, etc., and may be concentrated in urban areas where consumers have access and exposure to a wider range of food choices (Varziri, *et al.*, 2025; Rossi and Woods, 2023).

Direct marketing strategy options have expanded since the COVID-19 pandemic ended. Growth in e-commerce, social media marketing, and other tools that supplement the direct-to-consumer sale make market entry and customer engagement much easier (see expanded discussion on post-COVID direct marketing and e-commerce in Thilmany, *et al.*, 2021).

Agritourism has also expanded since COVID, with many farms with their own on-farm retail market supporting their own and other local farm

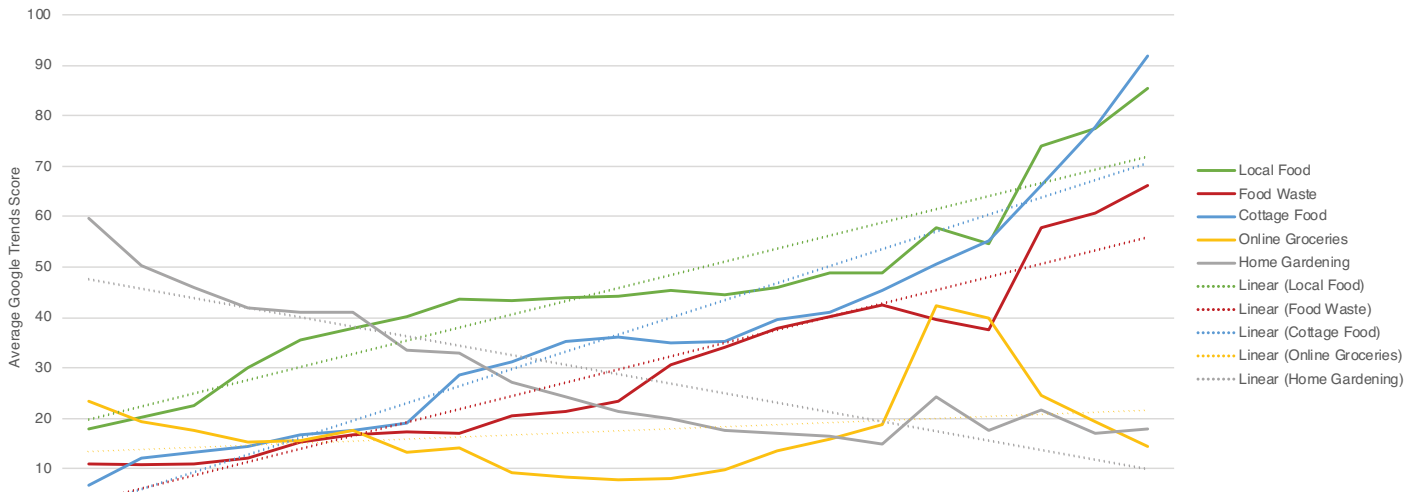

Figure 1: Google Search Interest in Selected Food Terms in the United States, 2004-2024.
Source: Google Trends and calculations by A.J. Collart.

products in addition to the tourism experience. [1] This translates to an alternative type of on-farm business that is event and experience oriented and firmly anchored in the "local" value space for visitors.[2]

Farmers who grow beyond direct marketing at on-farm stores or farmers' markets will often add restaurant and grocery store delivery—or offer a farm-to-school partnership—if these market locations are easy to service and purchase larger volumes. Intermediate markets, working with buyer partners that represent the farm products directly to the end consumer, are important for farm business growth around local marketing. Recent studies note that at least $3-4 in local food purchasing takes place through intermediate markets for each $1 of direct-to-consumer local food sales (Low *et al.*,2015; Woods *et al.*, 2026).

Many consumers who place a high value on local sourcing have limited opportunities to purchase through farm markets or other on-farm retail. Intermediate marketing partners may facilitate access to the producer's products (Figure 2). As producers grow in volume and supply capability, they can work with commercial distributors that are aggregating other local products and regularly interacting with larger customer numbers and expanded geographic areas. Working with intermediate buying partners requires careful signaling of the local character of the farm product, since intermediaries are sourcing similar products.

Consumer Segments in the Local Food Market

The market for consumers that prefer locally sourced products is complex and highly segmented. This is characteristic of markets where differentiated products are more prevalent. A segmentation model, drawing on a characterization by the Hartman Group for organic consumers, points to

[1] The Kentucky Farm Bureau Certified Market program for agritourism operations expanded from 83 markets enrolled in 2019 to 165 markets in 2025, https://www.kyfb.com/federation/programs/certified-farm-markets/.

[2] National agritourism networks like the North American Farm and Direct Marketing Association (NAFDMA) provide business resource exchange on numerous topics unique to this industry, including best practices around insurance, event planning, social media engagement, etc. It has become an international network. https://www.nafdma.com/

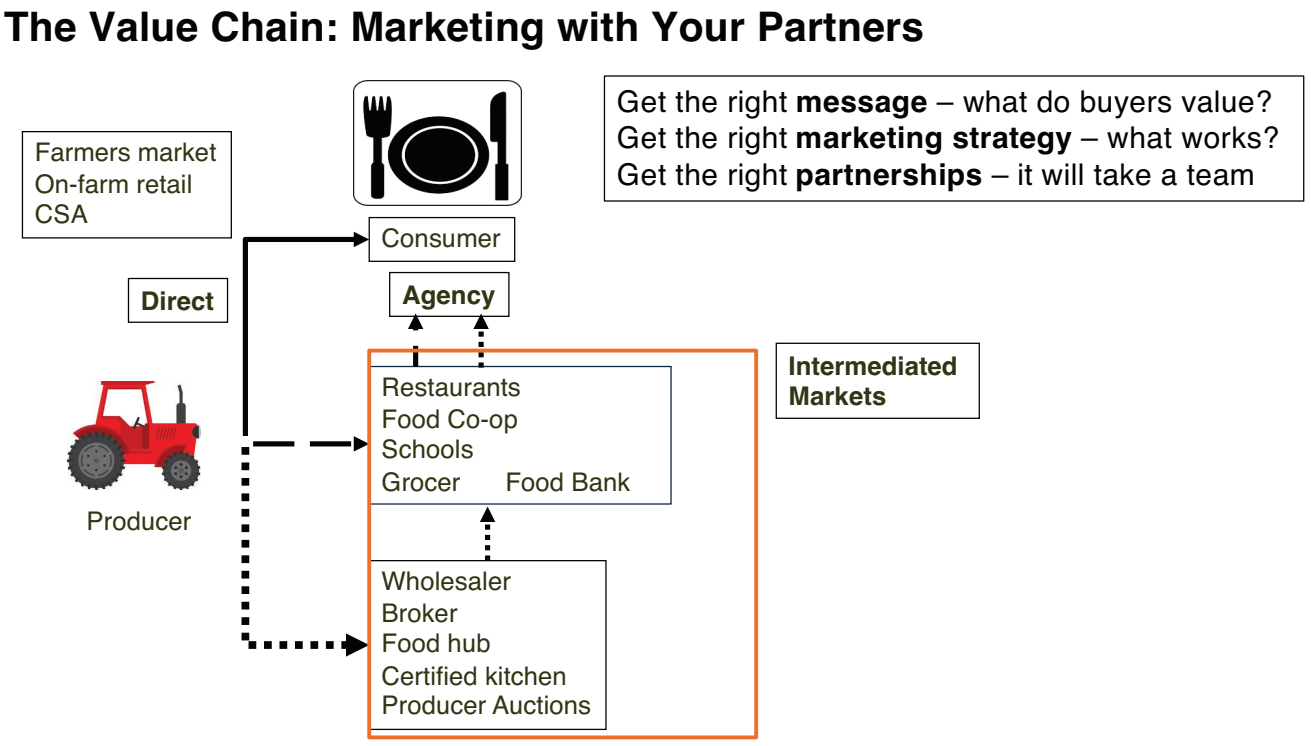

Figure 2: Farm-to-Consumer Pathways marketing Local Food Products.

consumers with varying preference along a 'core,' 'mid-level,' and 'periphery' category.[3]

Consumers in a 'core' part of a segment embrace the credence attributes and tend to be less sensitive to price changes of those products that reflect the values they seek. In the case of local sourcing preferences, there is a strong value to having a direct relationship with the farmer, hence the draw to traditional direct-to-consumer markets where relationships can be cultivated and values related to these products authentically delivered (Figure 3).

Market strategies that place a dependence on the attribute of locally sourced should include a study of the target market to determine market segment size, competition, and extent of preferences. Market relationships in this space typically take time to develop and may involve longer-term partnerships with buyer partners. Many food retailers target these consumers, and certain restaurant concepts, health and wellness grocers, food consumer co-ops, and institutional markets connected to schools and healthcare foodservice.

Improved Food Access Market Opportunities

Local farm products can fit into another consumer segment where there are limits on healthy food access. Food-insecure markets may not be a primary channel for farms, but there can be a strong missional value connection with marketing as a local food product and making a connection to a community need. Numerous Federal and state programs have emerged that aim to strengthen the connection between local farm products and consumers with limited income or (fresh) food access. Despite the southern region's economic reliance on the agricultural industry, food insecurity is more prevalent in these states than in other parts of the United States. Feeding America's Map the Meal Gap data show that about 70% of food-insecure people in the United States are located in south-

[3] This characterization was initially used for organic consumers in 2000 in a study done in association with the Organic Trade Association. It was expanded to other applications for segmented markets, including Community-Supported Agriculture (CSA), by Woods and Tropp in 2016.

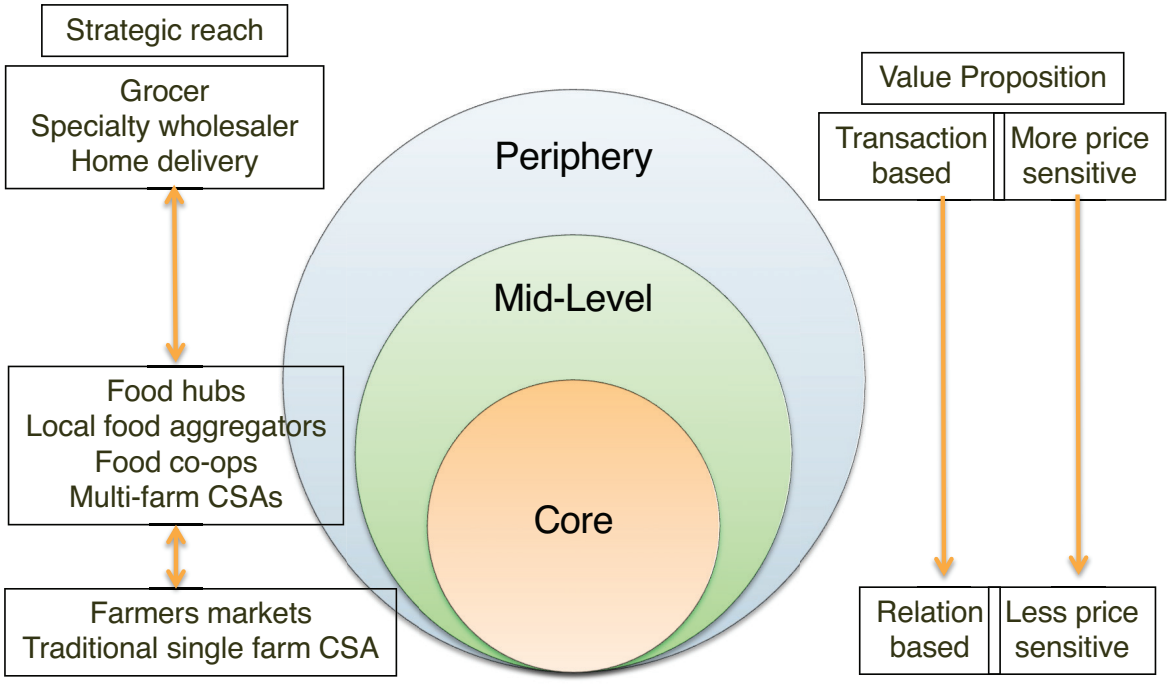

Figure 3: Core, Mid-level, and Periphery Market Segments for Local Food Consumers.
Source: Woods and Tropp, "CSAs and the Battle for the Local Food Dollar," JFDR, 2016.

ern states (Figure 4). Mississippi and Arkansas are the most food-insecure states, with 19.4% and 19.3% of their populations, respectively, not having enough to eat or not knowing where their next meal will come from. Moreover, a Feeding America report notes that 9 out of 10 counties with the highest food insecurity rates are rural, partly due to greater distances from grocery stores and food pantries and lack of reliable or public transportation options. Research has shown that limited access to healthy and nutritious food leads to health concerns, which reduce productivity and income (Landaeta-Díaz *et al.*, 2024; Levy and Perez-Velazco, 2026).

With smaller population and lower wages, there are fewer incentives to open food stores in rural towns, which contributes to residents not having access to fresh and healthy foods. Farmers and ranchers can play a role in mitigating this food insecurity across the southern region. However, since most U.S. producers operate small family farms (86%), they are likely to face challenges in meeting community food needs due to imperfect and asymmetric information about how to gain access to local markets. Relatively small-scale production, lack of direct contact with final consumers, and limited knowledge of procurement and adequate storage infrastructure further hinders their ability to supply nearby areas. Efforts to aggregate and coordinate with nearby growers and markets are needed for them to meet local demand and to help address the food insecurity problem.

There are opportunities for producers to work with cooperatives and other food entities. Small-scale farmers can collaborate with several local food alternatives and potentially access local markets through various means, such as food hubs or direct sales to schools, churches, and restaurants. Food hubs play a key role as aggregators in this process, though some rural towns may lack connections or networks with these entities. Connecting to a food aggregation program involves identifying local food hubs, cooperatives, or, for assistance, state-level initiatives or USDA-supported regional hubs. Producers can join these groups by contacting them directly. A list of resources can be found on the USDA website. State-specific entities can be contacted through the respective state departments of agriculture.

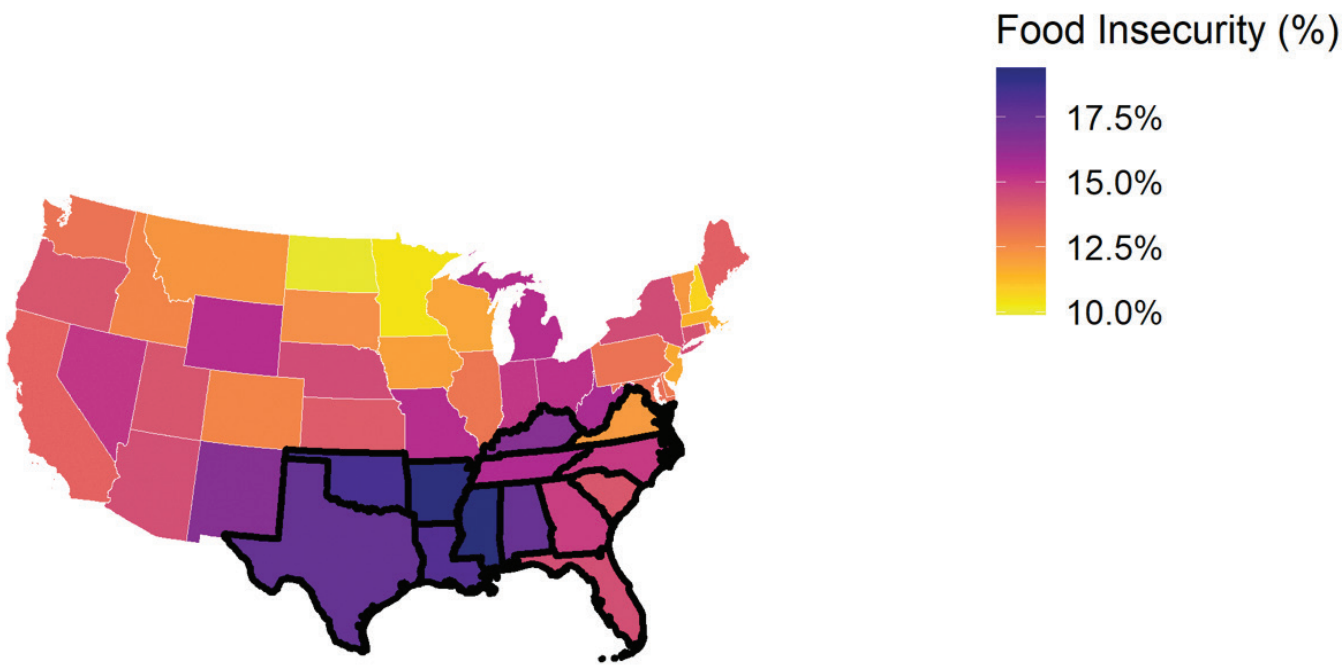

Figure 4: Food Insecurity by State Heap Map, 2003.
Source: Feeding America, Map the Meal Gap.

Pursuing Value-Added Market Opportunities

The notion of 'value-added' implies that some sort of market value is being added to a commodity product with the intent to better position it for a higher price based on that value added. Value adding can take place through branding (credence attributes or otherwise) or through some manner of product transformation. It represents capturing a larger share for a farmer out of a value-adding process along a market channel. Part of the strategy for the farmer involves choosing a value to add and adopting a business model that addresses the needs for product transformation and marketing support.

Product innovation through a process transformation of a raw commodity can be complicated by value-added market and quality expectations and existing market players. For example, a farmer or cooperative who makes a pasta product now faces added business issues around recipe development, product quality and safety, and infrastructure and management needs quite different from those of production. Many states have developed programs to help producers develop value added products and partnerships with food scientists, engineers, and packaging specialists available through many Land Grant University programs.[4] These may also need to be pursued through private engagement.

Federal programs like the Value-Added Producer Grant (VAPG) Program are designed to support these initiatives. Many states offer VAPG and related grant development facilitation programs through various agencies.[5] Programs like this are useful in the early stages of product and business concept development and require the producer to invest time and resources into business planning.

Farmers who pursue value-added market offerings need to pay attention to management, risk, contracts, and other legal considerations. Cooperatives, LLCs, partnerships and other kinds of entities have been utilized to organize value-adding initiatives across groups of producers. Again, there are many great legal and cooperative development agency entities around the country that have helped producers navigate this space.

The Value-Add to Farm Business Investment in Local Markets During Economic Downturns

While producers may add value-added enterprises to their businesses to help mitigate risks associated with commodity production, risk management during tough economic times requires a different approach when marketing food products differentiated by location, added value, and smaller markets. Unlike with commodity products, there are limited insurance options available to these producers. Products and enterprises in these markets are difficult to place into larger pools of shared risk. Loan subsidy programs and futures markets are risk management tools available to commodities, but niche, high-value, differentiated products require learning new management and marketing skills by the farm owners, managers, and partners.

Direct marketing strategies build on long-term relationships that may buffer price sensitivity. These products are competing based on a "benefit"[6] advantage – adding credence attributes, location, or brands that communicate values offered above the lower-priced commodity options. Farms invested in value-added strategies can insulate themselves from commodity price volatility and

[4] The Food and Ag Products Center (FAPC) at Oklahoma State University is one resource for value-added product development that has been in place for many years. Numerous technical expertise, training, and business development resources are available here and at other schools. https://food.okstate.edu/. The FAPC is large with lots of resources and experience. Similar centers are available in other states but vary in scale and scope of services.

[5] The Kentucky Center for Ag and Rural Development has provided extensive grant development assistance for Kentucky-based initiatives. The Center for Profitable Ag has provided similar services in Tennessee. Other university and Extension NGOs offer similar assistance in other states.

[6] A 'benefit' leaning advantage can be developed to seek differentiation and a competitive position in a market, which contrasts with a 'search' leaning advantage that emphasizes something closer to a commodity with efficiency and low-cost supplier emphasis – typically pursued on large scale. See Besenko *et al.*, 2017.

macroeconomic shocks such as the pandemic and global conflicts which unexpectedly drive up production costs. Successful risk management through direct to the consumer marketing activities involves added management efforts, targeted marketing partnerships, brand development and support, and awareness of competition.

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Managing Land During Economic Downturns

Mykel Taylor

During hard economic times in agriculture, we often struggle to come up with strategies that will help us in the short term but not harm us in the long run. Land management, including ownership and/or renting, is an example of a farm business decision that can have implications for the profitability of the farm now and in the future.

Land values have continued to rise nationally and in many local markets due to agricultural and non-agricultural investment (Figure 1). While land values are affected by profitability in the agricultural sector, they don't adjust as quickly as farm profitability does to changes in commodity prices and input costs. This longer adjustment period is due to long-run reasons for buying and holding land and the expectations of buyers and sellers that future returns from farming and non-agricultural uses will continue to grow. However, increasing land values at the same time that farmers face an economic downturn means that they will have a hard time being able to afford purchasing farmland. If they cannot buy land, renting is another option that farmers may turn to.

Just like farmland prices, rental rates for leased farmland do not change quickly when the profitability of farming goes down. This is because many farmers sign multi-year leases (3 to 5 years) with a fixed cash rent value. This means adjustments to the rental value have to come through negotiations with the landowner. Many landowners are reluctant to lower rents and may drop a tenant rather than take a lower rate.

Farmers typically have both owned and leased land in their operation. While selling land is an option for generating capital to keep a farming operation going, it is often a non-starter for producers, leaving them to decide on the profitability of the land they lease. Some farmers may find themselves

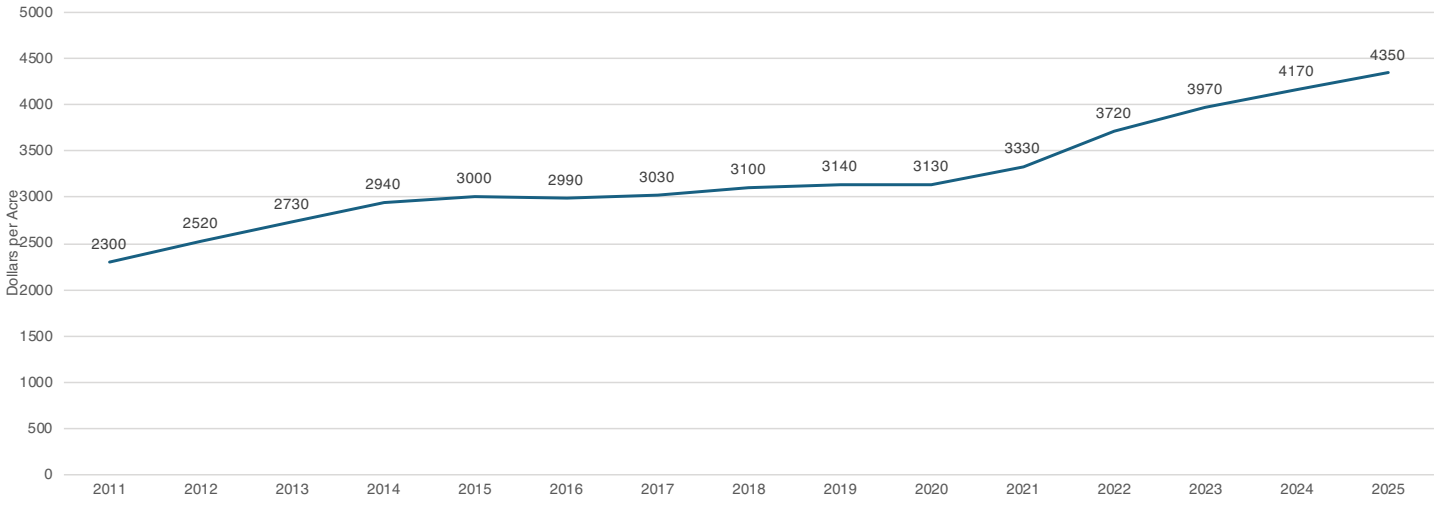

Figure 1: Average U.S. Farm Real Estate Value (2011-2025).
Source: USDA/NASS.

in a situation where they are paying more for a leased parcel of land than they expect to profit from farming it. This is a bad situation and the decision to let go of a leased parcel is multi-dimensional and varies by farmer and parcel. So how can you approach this decision and what do you need for information to make the best possible decision for your operation?

Keep Leased Land or Let It Go?

What is the time horizon for your decision? In the short run, you need to be able to cover your variable (cash) costs so you can keep going for another year. This includes fertilizer, chemicals, seed, fuel, and labor expenses. In the long-run, you will need to cover all your costs (variable plus fixed), where the fixed costs include depreciation on machinery, property taxes, utilities, and returns to labor and land. If commodity prices don't recover, we can expect low profitability situations for farmers for several more years, begging the question of how long is the short run for you?

What kind of information do you need to make the decision to continue leasing unprofitable land or let it go? Start with data on your farm's costs and returns that are up to date and go back several years. Ideally, you would have an accrual-based balance sheet that is updated monthly and you would have a strong idea of your fixed and variable costs. It is also important to make a list of the pros and cons of a specific parcel. For example, what is the location of the parcel relative to your home operation or what are the non-financial implications of keeping or losing the parcel (i.e., leasing from family).

The decision to keep a parcel will come down to the costs of keeping it versus the costs of letting it go. The costs if you keep the parcel include the loss of dollars from farming it, such as not covering cash costs from putting a crop in the ground and harvesting it. You may also end up subsidizing this parcel by not getting a return to your owned land or your management time. These are costs that we sometimes bear in the short term but need to think about when making farm management decisions regarding land.

Letting go of a piece of land may cost you in terms of the amount of machinery you run relative to your land base. When you lose leased land, your costs per acre will increase, making it necessary to think about your machinery costs in terms of idling it if owned outright, using it for custom work in addition to your own land to offset loan payments, or even selling machinery. This last option has tax implications that need to be considered carefully. For small parcels of leased land, the change in machinery costs may not be considerable, but it is something to think about if you are going to potentially give up a large portion of your land base.

The other cost associated with letting leased land go is that you are not likely to get that parcel back in the future or find another parcel that is a better fit in a short period of time. Finding the right piece of land for your operation can sometimes be a once-in-a-generation event, and that makes us reluctant to let go of leased land, even when we are losing money on it.

Navigating Negotiations with Landowners

If you decide your rental payment is too high relative to your expected profitability, you will likely need to talk to your landowner about renegotiating your contract to help you get through the current situation. This conversation is always easier if you have good communication with your landowner, and it is likely to go better if you are transparent about both the general agricultural economy and your situation in particular. Sharing a projected budget for the upcoming year with expected yields, market prices, and costs of inputs can help a landowner understand the economic challenges you are facing. Putting this budget into historical context through comparisons to market prices and input costs from previous years will also help the landowner understand your current situation. Sharing information on farm finances with a landowner is not very common, but when done well, it can form the basis of trust in the relationship and guide where to go with regard to setting a rental rate that is equitable for both parties.

The final decision to let go of a leased parcel can be the result of several scenarios: inability to cover

variable costs in the short run, unsuccessful rental rate renegotiation with a landowner, or your lender telling you that letting go of that parcel is your best option. In many cases, it is better to be thinking and deciding ahead of time what your options are and how you can manage your land portfolio rather than waiting until external voices force your hand.

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Evaluating Alternative Non-Agricultural Land Uses During Tough Economic Times

Paul Goeringer, Tiffany Lashmet, Holiday Scott, Madeline Jones, and Olivia Scuderi

Introduction

Alternative land uses can potentially generate long-term revenue streams for a farming or ranching operation. Oftentimes, developers look to agricultural lands for potential sites due to their flat topography and access to existing electrical infrastructure. Particularly during economic downturns, revenue from alternative land uses such as solar leases, wind leases, data centers, or cell towers can help an operation survive. Oftentimes, developers look to agricultural lands for potential sites due to their flat topography and access to existing electrical infrastructure. Despite the potential increase in income from these types of uses, there can be downsides for both the landowner entering into the agreement, neighboring landowners in the area, and tenants who rely on that land to sustain their agricultural operations. This section will explore key considerations for agricultural landowners when presented with an alternative land-use contract. Though there are a variety of potential alternative land uses, we will focus specifically on solar development and data centers.

Considerations Applicable to All Land Uses

While each alternative land use has its own specific issues and considerations, there are several important items to consider regardless of the type of land use.

Always Seek Professional Advice

One of the first steps when presented with a contract for any alternative land use should be finding an attorney to help negotiate an agreement that will best protect the landowner. These agreements are often long and contain extensive and sometimes complex legal terminology. Landowners should remember that nearly all alternative land-use agreements are drafted by attorneys representing the developer. These attorneys have a professional obligation to create an agreement that benefits their client, the developer, and not the landowner. By hiring an attorney to represent the landowner's interest, the landowner will be in a better position to understand the terms and to negotiate better clauses that will protect the landowner over the life of the agreement. A landowner should consider asking the developer presenting the agreement to cover all, or at least part, of the landowner's legal fees in the negotiation process. While this may not always be acceptable, many companies are willing to agree to cover at least a portion of these costs.

When searching for an attorney, understand that landowners will need a lawyer licensed in their state. Finding an attorney who has worked on this type of agreement in the past can be extremely helpful and can save on time and fees in the long run. To find an attorney, landowners can look to organizations such as the American Agricultural Law Association or their State Bar Association to see whether they have an agricultural law section.

Additionally, word of mouth is often the best way to find a good attorney in your area, so talking with neighbors or other landowners who have negotiated similar agreements may be useful. Additionally, landowners may want to work together to negotiate with a company to further reduce costs and split fees. At the same time, this will give the attorney greater numbers when negotiating with the company

In addition to an attorney, landowners should also seek consultation from a tax professional. Depending on how the deal is structured, there may be tax implications to consider and a plan to develop prior to the agreement being signed.

If the land is subject to an existing mortgage or is serving as collateral on an operating note or other loan, taking time to discuss the potential agreement with a lender is highly advisable. There could certainly be language in the alternative land use agreement that could impact the lender's rights, such as a subrogation clause, of which a lender would want to be aware. On the other hand, there could be clauses in the lease that might affect the ability to enter into certain alternative land-use agreements.

All alternative land use agreements, including both solar leases and data center contracts, are often lengthy documents that reflect the complexity of the relationship between the developer and the landowner. Ensuring a landowner is protected by engaging professionals in the negotiation process is critically important.

In All Cases, Research the Developer

When a developer (representing a solar or data center) approaches you, the first step should be to learn as much as possible about the company and its previous dealings. Ask the developer about other projects they have completed and request information about landowners which whom they have previously worked. Communicating directly with other landowners can provide valuable insight into the developer's reliability, communication style, and overall business practices.

Landowners should also verify that the developer is properly registered to conduct business in their state. This information is typically available through the office of the Secretary of State. At the same time, take the time to conduct independent online research about the company, which can provide helpful information. Do not stop at the first page of Internet search results; dig deep into the results to determine if there are issues of which you should be aware. When gathering information, always be aware of the reliability and relevance of sources.

When dealing with a solar developer, the solar industry also maintains a professional association known as the Solar Energy Industry Association (SEIA). Members of this association must comply with the SEIA Solar Business Code. Landowners may want to ask developers whether they are members of SEIA and review the Code to better understand industry standards.

Consider Existing Programs and Future Plans

Landowners should also consider how alternative use agreements may affect their existing activities and their long-term plans for the property. While some leases, such as wind energy, may allow the landowner to continue agricultural activities on the property, other uses may strictly prohibit such activities.

Regarding existing uses, landowners should consider any existing uses, income, and contractual agreements in place on the land. For example, landowners participating in government programs, such as land enrolled in the Conservation Reserve Program, should determine whether these alternative uses could conflict with those program requirements. Some programs involve multi-year commitments for how the land must be maintained. Leasing to a solar developer or a data center developer on such land could require repayment of prior payments or penalties. Landowners should contact the appropriate agencies before signing any agreement and consider negotiating provisions that compensate them for any lost program payments and any required program repayments. Similarly, landowners with any existing leases on the property such as grazing or farming leases should consider how the alternative use might impact those leases, what termination rights exist, and what penalties might flow from that decision.

Another consideration that is easily overlooked is that because these alternative leases can last decades, they may impact estate planning and succession decisions. Future owners of the land may inherit the property subject to the lease. For this reason, landowners should consider involving family members or successors in discussions about these alternative use leases before making a final decision.

Remediation and Decommissioning

A landowner should carefully review the language regarding what happens at the end of the lease, namely, what decommissioning and remediation efforts will be required by the developer. Decommissioning is the removal of the equipment and associated infrastructure from the property. Remediation is restoring the property to an agreed-upon future use, in many cases returning it to agricultural use.

In many cases, landowners may want to require a bond or a letter of credit to cover future decommissioning and site remediation costs. At the same time, landowners may want to include language that allows the bond or letter of credit to be reevaluated over the life of the lease to ensure the financial commitments are met. For example, a lease could specify that every 5 years, the developer must provide the landowner with new estimated decommissioning and remediation costs for the site and the amount by which the bond or letter of credit would increase based on those projections.

In addition to the financial considerations, contractual agreements should also address the activities required to return the land to the condition prior to the project. This might include removal of concrete and other structures, reseeding of grass, and decompaction of soil, to name a few. Some states may have statutory requirements for these terms, of which landowners should be aware. Skilled attorneys will understand how to negotiate decommissioning and remediation clauses that benefit the landowner. A skilled attorney will also understand existing state law provisions that may benefit landowners in ensuring the land is remediated to allow agricultural uses in the future.

Implications/Considerations for Tenants

While it is a landowner's right to consider the best use of their land, the landowner's decisions also impact any tenants on the land. Converting land from agricultural production may negatively impact the tenant who relied on that land to make their operation economically viable. While those implications may not change a landowner's mind, it is worth keeping in mind that the landowner's decisions can have a significant impact on tenants. This can be particularly acute during economic downturns when producers are already struggling to break even.

Solar Leasing Considerations

A solar development lease can provide steady revenue streams for an operation; however, they can significantly impact the landowner's use of the property and last for decades. Entering into a solar lease is not a decision that should be taken lightly, and landowners should understand the contracts before signing. In addition to the issues above, including seeking professional advice, researching the company, and carefully reviewing the agreement, there are some solar-specific considerations landowners should keep in mind.

Recognizing the Different Phases of Solar Agreements

One of the most important things for landowners to understand is that a solar agreement may function as several agreements combined into a single document. These agreements often include: (1) an option; (2) a development and permitting term or option to lease; and (3) a lease or operating term. Each phase has different implications for how the land can be used and how the landowner is compensated.

Phase One: Option or Investigation Period

Many solar agreements begin with an option period in which the landowner grants the developer the exclusive right to study the land and determine whether it is suitable for solar development. During this period, the developer may conduct surveys, in-

stall sensors to evaluate solar capacity, and perform environmental and wildlife studies. This phase can vary significantly in length, sometimes lasting only one or two years, and in other cases extending up to ten years. During this period, rent is generally paid in either a per-acre rental rate or a flat rental rate.

During this time, landowners are usually allowed to continue normal agricultural operations, such as crop production or livestock grazing. However, the option is typically exclusive, meaning the landowner cannot negotiate with other solar developers or energy companies during this period.

Phase Two: Development and Permitting

If the developer decides to proceed, the project typically moves into a development phase during which the developer seeks the permits necessary to construct the solar facility. This phase usually lasts between 2 and 5 years. During this period, rental rates are commonly either a flat fee or a per-acre rental rate.

Even at this stage, the developer may not be legally obligated to build the project. Depending on the terms of the lease, agricultural production may continue on the property until construction begins. However, landowners should ensure that agreements address potential damage to crops or forage when development activities begin. If the property is leased to a tenant for agricultural activities such as farming or grazing, the lease should specify the portion of any damage payments to be allocated to the tenant.

Phase Three: Construction and Operation

The final phase of the agreement involves the construction and operation of the solar facility. This is typically the phase when existing agricultural production on the property will be required by contract to cease. This stage typically includes construction, operation, potential renewal periods, and eventually decommissioning when the project ends. Depending on lease extensions, this period could run for 35 to 40 years.

During this phase, solar panels and related infrastructure are installed on the property, and the landowner begins receiving the agreed upon lease payments. Typically, these lease payments are a per-acre rental rate based on the area covered by solar panels and potentially rates for additional structures on the property, such as roads, batteries, or substations.

How Solar Projects May Affect Land Use

Solar energy projects can significantly affect the landowner's right to use the land. Unlike wind energy projects, which often allow agricultural activities to continue around turbines, solar projects usually restrict agricultural use within the immediate area of the equipment.

Although solar projects may occupy a smaller geographic footprint than wind projects, they tend to use a greater percentage of the land within that footprint. Additionally, most solar agreements prohibit agricultural activity inside the fenced project area. Landowners should consider how solar development might affect fencing, irrigation systems, drainage patterns, and field layouts. These issues must be discussed during negotiations to determine whether adjustments can be made or whether compensation should be provided for disruptions. For landowners interested in potential agrivoltaic uses, such as grazing sheep or goats under the solar panels, these considerations should be negotiated in the lease agreement as well.

Solar projects may also affect recreational uses of land, such as hunting leases. In some agreements, hunting may be prohibited during construction for safety reasons. In other cases, indemnification clauses may make the landowner responsible for damages caused by hunters or other individuals on the property. Landowners should carefully review these provisions and consider requiring hunters to sign agreements stating that they are responsible for any damage they cause to solar equipment.

Other Potential Concerns

Aesthetic concerns are another issue sometimes raised by neighbors. Solar projects typically produce little noise because they have few moving parts. However, visual impacts may still be a concern. Courts have historically been reluctant to award damages based solely on aesthetic concerns,

but developers and landowners should still consider potential community reactions and the steps that might be taken to mitigate them.

Another question often raised is whether solar panels create glare or light reflection. In most cases, photovoltaic panels are designed to absorb light rather than reflect it, which minimizes this issue. However, developers may produce glare maps showing where reflections could occur, and landowners may wish to review those maps before signing.

Tax Considerations

Many agricultural landowners receive special use valuation on their property taxes when qualifying agricultural uses are conducted on the property, resulting in a significantly reduced tax bill. The ability to maintain this special use valuation may be impacted when solar production begins on the land. This may differ by state (or even by county, depending on the state law) but can have significant impacts on the profit to a landowner from entering into a solar lease. Taking time to consider the potential property tax implications and negotiating the payment of additional tax burdens by the developer should be discussed.

Data Centers

The rapid expansion of digital infrastructure has increased demand for large tracts of land suitable for data center development. Rural land, including farmland, is often attractive to developers because of lower land costs and access to large parcels. Selling or leasing land for a data center can provide significant income for landowners. Like solar leases, these data center agreements are complex and may affect how the land can be used for many years. Landowners considering a data center agreement should carefully review any proposed agreement with an attorney and understand the long-term implications before signing.

Structure of the agreement

One of the first questions landowners should ask about a data center agreement is how it will be structured: as a sale or as a lease. Currently, developers are taking both approaches. Depending on the type of agreement a landowner is considering, the long-term impacts and terms can vary widely.

If a landowner is considering a sales contract, many of the typical alternative land use considerations are not applicable, as the landowner will no longer own the property. Key considerations for a land sale may include the potential capital gains tax liability and the impact of the data center on any surrounding property owned by the landowner, including impacts on land value and uses.

Data center leases are often long-term agreements that define how rent will be calculated, when payments will be made, and how long the developer may occupy the property. Many leases include an initial term followed by optional extensions that allow the tenant to continue leasing the property if certain conditions are met. For example, in one recent lease, the initial term was 10 years, followed by the option to extend the lease for two additional 10-year terms. As discussed above, taking time to consider the limitations a lease agreement will place on the property is critical.

Payments

For agreements involving the sale of the land, there is typically a one-time purchase price agreed upon and paid at closing. For lease agreements, rental payments are frequently calculated on a per-acre basis and paid in installments over time. Agreements may also include scheduled rent increases during extension periods. Because these lease agreements can last for decades when extension options are exercised, landowners should carefully evaluate whether the payment structure reflects the land's long-term value. As mentioned earlier, in one lease reviewed, the initial term was 10 years, and for each 10-year extension exercised by the developer, the rental rate would increase by 20 percent.

Restoration and Decommissioning

Data centers involve significant infrastructure, including buildings, cooling systems, electrical equipment, and supporting utilities. Because of the scale of these improvements, lease agreements often include provisions requiring developers to remove facilities and restore the land upon project completion.

Some agreements require the developer to establish a restoration or decommissioning fund to ensure that adequate resources are available to remove structures and return the property to an agreed condition. These funds are typically accumulated over time and may be used by the landowner if the developer fails to complete restoration work. As mentioned earlier, the landowner would want to work with an attorney to negotiate this language to ensure that it covers all cleanup and restoration costs.

Conclusion

Entering into an alternative land use agreement such as solar lease or data center agreement can offer long-term revenue streams to a landowner. Verbal commitments made by the developer that are not articulated in the written contract may not be enforceable. As this article has tried to outline, these written agreements require careful understanding and legal review to make sure the contract is the right choice for the operation and that the landowner's interests are protected.

Tax Considerations and Recovery Strategies for Forest Landowners after a Natural Disaster

Yanshu Li

Introduction

Timber producers in the U.S. South have faced persistently depressed softwood sawtimber prices since the 2008-2009 economic crisis. Despite a brief rally in early 2022, housing starts have remained weak, keeping sawtimber stumpage prices under sustained pressure. Nominal pine sawtimber prices are roughly half of what they were in 2000. When adjusted for inflation, real prices have fallen to nearly one-quarter of their level 25 years ago. Compounding the problem, an increased number of pulp and paper mill closures across major timber-producing regions have pulled significant pulpwood demand out of the market. Together, these forces have squeezed profit margins and tested the resilience of forest landowners through years of prolonged hardship.

The last thing timber producers in the region needed amid a prolonged market downturn was a natural disaster. Yet for thousands of landowners, that is precisely the reality they now face. Recent catastrophic events have compounded an already difficult timber market environment. Hurricane Helene swept through Florida, Georgia, the Carolinas, and Tennessee; wildfires burned thousands of acres of forestland in Louisiana; and Hurricane Beryl carved a destructive path through East Texas.

Natural disasters can cause significant economic losses for forest landowners. Although these disturbances are part of the natural cycle of forest ecosystems, they often destroy timber that takes decades to grow, leaving landowners at a loss about how to move forward.

Not all natural disasters are treated the same for federal income tax purposes. Timber losses caused by **sudden, unexpected, and unusual** events such as fire, storms, floods, hurricanes, volcanic eruptions, landslides, or earthquakes may qualify as casualty losses. The IRS emphasizes the suddenness of the loss rather than the event itself. Timber losses caused by gradual deterioration such as prolonged drought, widespread disease, or epidemic insect infestations generally do not qualify as casualty losses. However, these losses may qualify as noncasualty losses for landowners who hold timber as an investment or in a trade or business.[1] This article focuses on timber casualty losses.

Although full recovery after a disaster may take time, several immediate actions can help landowners recoup a portion of their losses. These include claiming a timber casualty loss on federal income tax returns, conducting salvage timber sales, and carrying out reforestation or stand restoration. This article explains the federal income tax rules that apply to these activities and discusses strategies

[1] See Li (2024) for tax treatment of noncasualty timber losses.

that forest landowners may consider after natural disasters.

Determining the Tax Classification of your Forest Holding

The classification of your forest holding has important tax implications and affects how income, expenses, and losses are reported. Generally, forest holdings fall into one of three broad categories (Greene *et al.* 2013):

- **Personal-use or hobby:** You own the property primarily for personal enjoyment, not for profit.
- **Investment:** You have a profit motive (e.g., through timber income or land appreciation), but your forest management activities do not rise to the level of a business.
- **Trade or business:** You manage the forest with a profit motive and conduct forestry activities in a business-like manner. Depending on the extent of your involvement, your activities may be classified as passive or material participation. Material participants generally receive the most favorable tax treatment.

Identifying the Single Identifiable Property (SIP)

After classifying your forest holding, you need to identify the Single Identifiable Property (SIP) damaged or destroyed by the casualty. The SIP is the record-keeping unit (timber depletion block) used to track your timber basis for depletion purposes. Timber casualty losses are calculated with reference to the entire SIP, rather than the individual trees damaged.

SIPs can be defined as an operational or logging unit, or defined based on geographic or political boundaries. For example, it may include all timber tracts delivering to a particular sawmill, all pine stands managed within a county or state, or a timber tract reforested in a given year. Regardless of how the block is defined, it is important to maintain consistency in the SIPs established and recorded. The IRS does not allow landowners to change block boundaries after a casualty event simply to include additional timber and artificially inflate the casualty loss deduction.[2]

Determining your deductible timber casualty loss

Once you have identified the SIP, the deductible timber casualty loss is **the lesser** of:

- The adjusted basis of the SIP before the casualty, or
- The decrease in the fair market value (FMV) of the SIP due to the casualty.

This amount is then reduced by any compensation received from insurance or other sources. Income from salvage timber sales is not considered compensation. Salvage timber sales and casualty loss deduction are treated as two separate events. Be aware that if your adjusted timber basis is low or zero, your deductible timber casualty loss will also be limited, regardless of how substantial the actual timber damage is.

Follow these steps to determine your deductible timber casualty losses:

Step 1) Determine the Adjusted Timber Basis of the SIP

Locate your tax and management records to determine the adjusted timber basis for each SIP damaged or destroyed. The timber basis generally represents your investment in the timber for tax purposes and should not include the basis of the land or other assets.

Timber basis starts with the original timber basis and is adjusted over time (increasing with capital investments and decreasing when the timber is sold or lost due to casualty or other events). The adjusted basis is the timber basis after these adjustments.

The original timber basis is determined based on how you acquired the property:

- **Purchased property:** The portion of the total acquisition costs allocated to the timber

[2] See IRS Notice 2006-47, 2006-20 I.R.B. 892 for more information about depletion blocks and SIP rules.

(e.g., purchase price, legal and regulatory fees, timber cruise fee, surveying, and other qualified expenses related to the purchase). Costs are allocated proportionally among the land, timber, and other assets based on their respective shares in the total FMV of the whole property at the time of purchase.

- **Inherited property:** The FMV of the timber on the decedent's date of death (or the alternate valuation date, if elected). This usually results in a higher basis for the beneficiary, often referred to as a stepped-up basis.
- **Gifted property:** Typically, the donor's basis plus any gift tax paid. Since the basis is transferred to the recipient, it is normally called a carryover basis.
- **Newly established timber stands:** Direct costs of forestation or reforestation, whether planting or natural generation. The basis normally is recovered through the reforestation expensing and/or amortization rule.

If you have not established a timber basis, it can be reconstructed retroactively (IRS, 2011). A professional forester can help you estimate the timber volume and value at the time of acquisition using current timber stock, timber growth rate, and historical timber stumpage prices. Before doing so, consider whether the potential tax savings justify the service cost of establishing a basis.

Step 2) Estimate the Decrease in FMV of the SIP

You generally need a competent appraisal to estimate the decrease in the FMV of the timber block caused by the disaster.[3] The appraisal should include sufficient information and analysis to support the estimated values. Only actual physical losses caused by the disaster are deductible. A decrease in timber value due to the general market decline in the disaster area does not count as a timber casualty loss.

A registered consulting forester typically provides competent timber appraisal. If you choose not to obtain a formal appraisal, you should keep sufficient evidence and documentation to support how you determined the FMV of the SIP immediately before and after the disaster in case of an IRS review.

Step 3) Determine the Deductible Timber Casualty Loss

Compare the amounts from Step 1) and Step 2).

- **For timber held in a trade or business or as an investment:** The allowable timber casualty loss deduction is the lesser of the adjusted timber basis or the decrease in FMV.
- **For timber held for personal use:** Additional limits apply. Beginning in 2026, personal casualty losses are deductible only if attributable to a federally- or state-declared disaster. The deductible amount above is further reduced by $100 per casualty event and 10 percent of your adjusted gross income (AGI). The $100 reduction applies once per casualty event, regardless of how many properties are involved in the event.

How to Report a Timber Casualty Loss

For timber held in a trade or business: Report the casualty loss in Section B (Business and Income-producing Property) of Form 4684. Then, enter the loss in Form 4797 as "Net gain or (loss) from Form 4684." If it results in a loss after netting with other Section 1231 gains and losses, report it on Schedule 1 of Form 1040 as "Other gains or (losses)."

For timber held as an investment: Report the casualty loss in Section B (Business and Income-producing Property) of Form 4684, Casualties and Thefts. Then, enter the loss in Schedule A of Form 1040 as "Other Itemized Deductions."

For timber held for personal use: Report the casualty loss in Section A (Personal Use Property) of Form 4684. Then, enter the loss in Schedule A as "Casualty and Theft Losses."

[3] See IRS Timber Casualty Loss Audit Techniques Guide (2011) for more details.

Timing of the Deduction

In general, casualty losses are deducted in the year they occur. However, if the damaged timber is in a federally designated disaster area eligible for individual or/and public assistance, landowners may elect to claim the loss on the preceding year's tax return. This election allows affected landowners to recoup losses sooner, generate immediate cash for recovery, and potentially get greater tax savings if their ordinary income tax rate was higher in the preceding year.

Postponing Taxes on Income from Salvage Timber Sales

Timber casualty loss deductions and subsequent salvage timber sale are treated as separate events. You can claim your timber casualty loss deduction before salvaging the timber, and you do not need to reduce the loss by the salvage income. This is beneficial because casualty losses offset ordinary income while timber salvage income generally is treated as long-term capital gains (taxed at lower tax rates if the timber was held for over a year).[4]

A salvage timber sale is treated as an involuntary conversion under federal income tax rules. Even if the salvaged timber is sold at a steep discount, a taxable gain may still occur if the sale proceeds exceed the timber's adjusted basis and selling expenses.

If you have a gain, you can either pay the capital gains tax on the profit or postpone the taxes by purchasing qualifying replacement property:

- **Qualifying replacement property:** Must be similar or related in service or use to the damaged timber (e.g., timber, timberland, reforestation costs, and stocks of a corporation that owns timber or/and timberland if you gain 80% control). You can defer the tax in full if the cost of your replacement property is higher than the sale proceeds (not just the profit). The basis of your replacement property is reduced by the deferred gain, deferring the tax until the replacement property is later sold. The replacement property does not have to be in the disaster area (Li *et al.* 2024)
- **Special rule for federal disaster areas:** If the damaged timber is held in a trade or business or as an investment and is in a federally declared disaster area, any tangible replacement property for productive use in a trade or business qualifies as replacement property.[5]

To defer the gain, attach a statement to your tax return detailing the date and details of the casualty, how you calculated the gain, and your intent to replace the property within the allowed period (generally ends two years after the close of the first tax year in which any part of the gain is realized).

Take Advantage of Reforestation Tax Incentives

Forest landowners may deduct up to $10,000 of qualifying reforestation expenditures per year for each qualified timber property (QTP) in the year the costs are incurred. Any remaining amount can be amortized over 84 months. There is no limit on the amortization deduction for reforestation expenditures.

Reforestation costs are direct expenses for reforestation through planting or natural regeneration. They may include costs for site preparation, seeds or seedlings, labor, tools, depreciation on equipment used in planting, and replanting. The value of your personal labor cannot be included. If you sell the property at a gain within 10 years, a recapture provision applies. See IRS instructions for Form T (Timber), Forest Activities Schedule for details.

Expenses Related to Determining Casualty Losses

The cost of appraisals used to determine the decrease in FMV of the timber property due to the

[4] See IRS Publication 544, Sales and other dispositions of assets, for exceptions to this rule, such as property acquired by gift, inheritance, or like-kind exchange.
[5] IRC Section 1033(h).

disaster is not part of the timber casualty loss. However, these expenses can be deductible costs for determining your tax liability.

Recordkeeping and Documentation

Maintaining thorough documentation is essential to substantiate your casualty loss deductions and related expenses. Good practices include keeping:

- Photos of the property before and after the casualty (with dates).
- News articles about the disaster and its impacts in your area.
- Proof of ownership (e.g., warranty deed, recorded plat, and/or county tax map with parcel number).
- Forest management records and timber accounting records.
- Past income tax returns showing timber-related deductions or basis.
- Court or legal documents for inherited property.
- Proof of any efforts to salvage the affected timber (if any).

Recovery Strategies after Natural Disasters

For family forest landowners, recovery starts with the relationships you build before a disaster strikes. Being connected to a professional network helps you receive timely information about technical and financial assistance. They may include a local consulting forester, state forestry district forester in your area, forest landowner association, and local Natural Resources Conservation Service agent. Landowners with smaller tracts often face challenges when trying to get help with timber salvage or land restoration. To overcome this, coordinate with other landowners in your area to make the salvage or replanting projects more attractive to contractors. Seek help from professional foresters for recommendations on timber salvage and stand recovery. If you decide to reforest, act immediately. Seedling supplies often run low and planting crews get booked very quickly. Plan reforestation properly to take advantage of the reforestation expensing rule.

Conclusion

Natural disasters are an inherent risk associated with forest investment. By understanding the federal tax rules, you can turn a devastating timber loss into a structured recovery. Timber losses due to casualty are deductible. Your timber casualty losses are calculated with reference to the entire timber block, not just the individual trees damaged. The deductible losses are limited to the adjusted basis of the affected timber block. Claiming timber casualty losses and conducting salvage timber sales are separate events. If your salvage timber sale results in a taxable gain, you can defer the taxes by reinvesting the proceeds into qualifying replacement property.

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Resiliency

Recognizing and Responding to Signs of Financial Stress: Practical Tools for Farmers, Families, and Communities

Erica Barnes Fields

Farming requires balancing business management with environmental stewardship, family legacy, and community responsibility. Because farms are often both a workplace and a home, financial stress can extend beyond the financial statements, influencing decision-making, family relationships, physical health, and emotional well-being.

Today's agricultural economy—shaped by volatile markets, tariffs, rising input costs, and increasing interest rates—has placed additional pressure on many farms. As a result, some producers are restructuring debt, delaying equipment purchases, or seeking additional income to remain viable.

Recognizing financial stress early allows farmers, families, and agricultural communities to respond before challenges escalate into crisis. This publication highlights common warning signs and offers practical tools to help producers navigate difficult times.

Understanding the Nature of Farm Stress

Agriculture is widely recognized as one of the most stressful occupations in the United States due to financial risk, environmental uncertainty, and the close connection between farm business and family life. Producers must regularly make high-stakes decisions under conditions largely outside of their control.

Several characteristics contribute to stress in agriculture:

- geographic isolation in rural communities
- long and unpredictable work hours
- weather and climate disruptions
- commodity price volatility
- rising interest rates and debt exposure tied to land and equipment
- health-care costs and limited rural access
- exposure to agricultural chemicals and environmental hazards
- blurred boundaries between work and family life
- generational expectations tied to land ownership (Braun, 2019).

While these structural pressures exist year-round, financial stress in agriculture often intensifies during specific points in the production cycle.

Seasonal Patterns of Farm Financial Stress

Farm financial stress often follows seasonal patterns tied to the agricultural production cycle. Stress typically increases when producers must make major financial commitments or evaluate the financial outcomes of the season.

Planting through Harvest: Production Season

During planting and production seasons, farmers make major financial commitments before knowing how the year will unfold. Operating loans must be secured, inputs purchased, and equipment prepared while weather and markets remain uncertain.

Common financial stressors include:

- securing operating loans
- equipment maintenance and fuel costs
- purchasing seed, fertilizer, and crop protection inputs
- weather and planting window uncertainty
- fluctuating commodity prices.

These decisions involve substantial financial risk and can create intense pressure for both producers and their families.

Winter: Post-Harvest Financial Review and Planning

The months following harvest can be one of the most emotionally challenging periods of the year. As winter approaches, cash inflows often slow while producers evaluate the season's financial results and plan for the next. Reduced field activity combined with ongoing expenses can make this period especially stressful for many farm families.

Post-harvest financial stress may include:

- evaluating financial performance
- tax preparation and financial recordkeeping
- marketing stored crops
- loan renewals and lender meetings
- restructuring or refinancing debt
- equipment payments and capital obligations
- crop insurance decisions for the upcoming season
- planning next season's crop decisions.

As field work slows, social interaction often decreases (Agriculture for Life, 2025). This combination of financial reflection and seasonal isolation can increase fatigue, irritability, and difficulty concentrating.

Recognizing Signs of Financial Stress

Financial stress rarely appears suddenly. Instead, it develops gradually through changes in behavior, communication, and farm management practices.

Verbal Cues may include:

- "God's not listening to me."
- "I let everyone down – my family and my family's legacy."
- "I'm not making any more plans."
- "I can't afford to feed my cows."

Statements such as "They'd be better off without me," "I'm a burden," or "I don't want to live" may signal a serious mental health crisis. These warning signs should never be ignored. If you hear statements like these, take them seriously and contact the resources listed under "You're Not Alone: 24/7 Farm Stress Resources." If someone is in immediate danger, call 911 or go to the nearest emergency room or call the National Suicide and Crisis Line, 988.

Behavioral indicators may include:

- withdrawing from relationships or community activities
- giving away or selling equipment, tools, land, or livestock without a plan
- displaying uncharacteristic irritability, tearfulness or anger
- increasing alcohol or substance use to "take the edge off"
- frequently canceling or missing meetings or appointments.
- neglecting everyday responsibilities.

Operational indicators may include:

- missing critical timing windows that affect profitability
- avoiding recordkeeping, bills or lender communications

- increasing reliance on credit, delaying bill payments, or bouncing checks
- downsizing suddenly without a clear succession plan
- neglecting the farmstead – allowing property, yards, sheds, equipment, or fencing to deteriorate
- leaving animals underfed, fields unmanaged, or weeds overgrown despite the capacity to maintain them
- continuing to operate unsafe or poorly maintained equipment
- making short-term survival decisions instead of long-term management choices.

Emotional and Physical indicators may include:

- experiencing persistent feelings of hopelessness, emptiness, or sadness
- losing interest in previously enjoyed activities
- showing visible panic or dread when discussing finances
- feeling excessive fatigue or a consistent loss of energy
- noticing significant changes in appetite or weight
- struggling with sleep – trouble falling asleep, waking too early, or sleeping excessively
- feeling emotionally "shut down" or detached from others
- experiencing unexplained aches, headaches, or ongoing physical tension.

When several of these signs appear together, they may signal deeper financial and emotional strain. Symptoms that persist for two weeks or begin interfering with daily responsibilities should be taken seriously and may require professional support (American Psychiatric Association, 2022).

Stress Tools for Farmers

Farmers often work long hours with limited opportunities to step away from responsibilities. Simple practices that can be used during daily routines—while driving equipment, feeding livestock, or taking a short break—can help interrupt the body's stress response and restore focus. Farmers cannot eliminate uncertainty in agriculture, but they can adopt practices that support resilience and clear thinking.

Release the Weight of Guilt

Markets, weather, policy changes, and global economic forces often shape outcomes beyond any individual producer's control. Yet many farmers carry a deep sense of responsibility when seasons are difficult. When financial outcomes become tied to personal identity, setbacks can feel like personal failure rather than business realities. Guilt does not solve the problem—it simply adds weight. Releasing that weight allows farmers to acknowledge what happened, learn from the experience, and move forward with clarity.

Steps to Release the Weight of Guilt

- Acknowledge what happened. State the facts without blaming yourself.
- Separate the event from your identity. You are not the weather, the market, or the debt.
- Feel the feelings. Let emotions move through you instead of burying them.
- Find the lesson. Ask what you would do differently next time.
- Speak to yourself with kindness. Use the same tone you would use with a neighbor you care about.
- Make amends or adjust behavior. Apologize or take one small corrective step if needed.
- Release it. Pray it out, breathe it out, or write it out.

Releasing the weight of guilt is not a one-time event. It is a practice that lightens the emotional load farmers often carry.

Make Sleep a Priority

Adequate sleep supports clear thinking, emotional regulation, and sound decision-making.

Chronic fatigue can intensify stress and make financial challenges feel more overwhelming. Prioritizing rest helps farmers maintain focus and resilience during demanding seasons (National Institute of Mental Health, 2025).

Set Healthy Boundaries

Farmers are known for their strong work ethic and willingness to help others. However, constant work without rest can increase stress and decision fatigue. Setting healthy boundaries protects both personal well-being and farm productivity.

Boundaries may include:

- saying no to additional commitments during busy seasons
- protecting time for rest and family
- creating personal financial policies
- limiting activities that drain energy without adding value.

The "Wait Before You Answer" Rule

Farmers often feel pressure to respond immediately to requests. However, answering too quickly can create unnecessary stress. Waiting gives the body time to determine whether the request is truly a yes or a no.

Step 1: Pause First

Before responding, pause. This pause allows the body to settle.

- take five slow breaths
- count slowly to ten
- allow a few seconds of silence.

Step 2: Check the Body

Ask yourself one question:
"Does this tighten me up or calm me down?"

- tight chest, fast heart, clenched jaw ➪ likely no
- calm, steady, clear ➪ likely yes

Step 3: Use a Holding Phrase

If you need time to decide, use a simple response such as:

- "Let me think on that."
- "I'll get back to you."
- "I need to check a few things first."

These statements are boundary tools, not excuses.

Step 4: Answer Later

Once you have time to think clearly:

- say "yes" if the request still fits
- say "no" if it does not.

This works because stress pushes people to answer too quickly. Waiting protects your health, your time, and your farm.

Disconnect from Unnecessary Stress

Information can be helpful, but constant exposure to stressful information can increase anxiety.

Farmers may benefit from limiting exposure to:

- constant market updates
- negative news cycles
- social media discussions that increase worry.

Protecting mental space allows for clearer, calmer decision-making.

Nourish Your Body

Physical health plays an important role in managing stress. Farmers often prioritize maintaining equipment but forget that their bodies are their most important piece of equipment.

Supporting the body may include:

- staying hydrated
- eating nourishing meals
- getting rest when possible
- maintaining regular sleep patterns.

Stretch and Move Regularly

Farming is physically demanding and often repetitive. Small movements throughout the day can improve circulation and reduce muscle tension. Even simple movements such as shoulder rolls while sitting in a tractor seat can relieve physical stress.

Take Walks Outdoors

Walking outdoors without a specific task allows the mind to reset. Walking for yourself, even briefly, can prevent stress from building throughout the day.

A short walk can:

- reduce stress hormones
- improve mood
- help clear mental clutter.

Journal Your Thoughts and Feelings

Writing thoughts down helps organize emotions and reduce mental clutter. Journaling can help farmers process difficult decisions, clarify financial concerns and release frustration or worry. Even a few minutes of writing can provide clarity and emotional relief (Beck, 2021).

Reduce Mental Overload

Financial pressure often creates mental clutter. Writing tasks down, focusing on one decision at a time, and breaking complex problems into smaller steps can reduce feelings of being overwhelmed.

Maintain Routine

Routine provides stability during uncertain periods. Maintaining consistent sleep schedules, eating regular meals, and scheduling daily tasks can help regulate mood and energy levels.

Talk About Financial Stress

Farmers often feel pressure to handle challenges independently. However, sharing concerns with trusted individuals can reduce isolation and clarify potential solutions. Consider speaking with a spouse or family member, a lender or financial advisor, an Extension professional or a trusted neighbor or pastor. Talking about financial stress is not complaining—it is responsible farm management. Visit AgFTAP.org for financial resources and mentorship support.

4-7-8 Breathing Technique

Stress affects both the mind and the body. One simple way to calm the nervous system is controlled breathing. The 4-7-8 breathing technique helps slow heart rate and activate the body's relaxation response.

Inhale slowly through your nose for 4 seconds, hold your breath for 7 seconds, then exhale gently through your mouth for 8 seconds. Repeat this cycle four times (Weil, 2024).

Support Tools for Families and Communities

Farmers rarely face challenges entirely alone. Rural communities often function as informal support networks where neighbors, family members, and agricultural professionals interact regularly. Those who work closely with farmers—such as family, Extension agents, lenders, veterinarians, crop consultants, and pastors—may notice signs of stress before farmers openly discuss their concerns.

Farmers are often surrounded by people who care about them but may not know how to help. Simple conversations and expressions of support can reduce isolation and encourage farmers to seek assistance when needed.

What Can Community Members Do?

Start a conversation.

If you notice changes in behavior or signs of stress, check in with the farmer. A simple statement such as "I've been thinking about you—how are things going?" can open the door for conversation.

Listen without judgment.

Farmers often feel pressure to appear strong and self-reliant. Listening without criticism or immediately offering solutions helps create a safe space for discussion.

Encourage professional support.

If financial or emotional stress appears significant, encourage the farmer to speak with a trusted

Table 1: Warning Signs and Tools to Try.

Category	Warning Signs	What It May Indicate	Tools to Try
Emotional Signs	Irritability, anger, sadness, loss of motivation, guilt, feelings of hopelessness	Emotional strain caused by financial pressure or uncertainty	**Release the Weight of Guilt:** 1) Acknowledge what happened. 2) Separate the event from your identity—you are not the weather, the market, or the debt. 3) Reflect on lessons learned. 4) Speak to yourself with the same respect you would offer a neighbor.
Behavioral Changes	Withdrawal from family or community, avoiding conversations about the farm, working excessively or neglecting responsibilities	Difficulty coping with stress or feeling overwhelmed	**Reconnect intentionally:** share a meal with family, talk with a trusted friend or neighbor, or attend a community or church gathering.
Financial Indicators	Difficulty paying bills, restructuring loans, selling assets unexpectedly, delaying purchase of inputs	Increasing financial strain or declining profitability	**Review the numbers:** organize financial records and schedule a meeting with a lender, Extension professional, or farm management advisor to explore options.
Decision-Making Patterns	Indecision, impulsive financial decisions, avoiding financial records or lender meetings	Stress interfering with clear financial judgment	**Use the "Wait Before You Answer" rule:** pause, take a few breaths, and give yourself time before making major decisions.
Physical Symptoms	Fatigue, sleep problems, headaches, muscle tension, appetite changes	Chronic stress affecting physical health	**Care for your body:** drink water, eat nourishing meals, stretch during long workdays, and rest when possible.
Farm Management Changes	Declining maintenance, missed planting or harvest windows, reduced attention to livestock or crops	Stress affecting daily farm operations	**Break tasks into smaller steps:** focus on priorities and ask family or neighbors for help when needed.
Communication Patterns	Increased conflict with family members, lenders, or partners; reluctance to seek help	Stress affecting relationships and support systems	**Pause before responding:** use holding phrases such as "Let me think on that," and return to the conversation when you are calm.
Serious Risk Indicators	Talking about feeling trapped, being a burden, or thoughts of death or suicide	Stress may be reaching crisis level	**Seek help immediately:** contact a trusted person, healthcare provider, counselor, or a crisis support service such as 988 or 911.

professional such as an Extension educator, lender, financial advisor, counselor, or healthcare provider. The American Farm Bureau Federation also provides free, confidential support for farm families through its Farm State of Mind program, which connects farm families with peer support and professional counseling services.

Help reduce isolation.

Invite farmers to community gatherings, church events, or informal visits. Regular social interaction can reduce feelings of isolation, especially during winter months.

Offer practical assistance.

During particularly stressful periods, small acts of support—helping with chores, delivering a meal, or assisting with farm tasks—can provide meaningful relief.

Take an educational training course.

Take Mental Health First Aid or the Question, Persuade, and Refer (QPR) Training. These courses train community members to recognize people who may be suffering and to know how to reach out and respond.

Watch for Warning Signs

Family and community members should take signs of severe stress seriously. Warning signs may include:

- statements about feeling trapped or hopeless
- withdrawal from family or community activities
- sudden changes in behavior or mood
- talk of death or suicide.

If a farmer expresses thoughts of self-harm or suicide, immediate help should be sought from a healthcare provider, counselor, crisis support service, or 911.

Farmers perform extraordinary work that sustains communities and feeds the nation. Yet, the financial pressures facing agriculture today can place significant strain on farmers, families, and rural communities. Recognizing the signs of financial stress early is an important step in protecting both the well-being of farmers and the long-term sustainability of farm operations. Practical strategies—such as maintaining healthy routines, setting boundaries, seeking support, and using simple stress-management tools—can help farmers navigate difficult periods with greater clarity and resilience.

Farmers do not have to face these challenges alone. Families, neighbors, agricultural professionals, lenders, and community leaders all play an important role in recognizing stress and offering support. When communities support farmers, they strengthen not only individual operations but the rural communities and food systems that depend on them (Fields and Rainey, 2025). Several national and agricultural organizations provide confidential support and crisis resources for farmers and their families.

You're Not Alone: 24/7 Farm Stress Resources

- Farm Bureau Farm State of Mind: https://togetherall.com/en-us/
- Substance Abuse and Mental Health Services Administration (SAMHSA) Disaster Distress Helpline – Call or text 1-800-985-5990
- 988 Suicide and Crisis Lifeline – Call or text 988
- Agricultural Finance, Tax and Asset Protection (AgFTAP) Educational Program: https://agftap.org/

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Building Long-term Resiliency: Preparing Your Operation for the Next Downturn

Jonathan Shepherd and Kenny Burdine

Farming is risky by nature, and history holds many examples of time periods that created significant financial stress for a large share of operations. Sometimes this is the result of prolonged low crop and/or livestock prices, which largely describes the current challenges in the crop sector. Other times, production issues can also lead to financial stress when weather challenges or pest and disease pressures impact production levels or increase production costs. While there is no way to anticipate major swings in the agricultural economy, there are things that farming operations can do to reduce their vulnerability over time. These strategies include having a solid risk management plan, managing debt and leverage appropriately, strategically utilizing tax planning and management, and steadily building equity in their operation over time. Farms that build long-term resiliency are in a much better position to weather challenging times and are often able to grow during financially stressful times, as they can acquire assets from operations that are struggling.

Develop and Implement a Risk Management Plan

Building long-term resiliency in a farming operation starts with a solid risk management plan. While farms will always be vulnerable to production, market, and financial risks, strategies should be in place to limit their exposure to these risks. Risk management plans are proactive plans that identify risks that exist, assess their potential to impact the operation, and implement strategies to mitigate those risks. A risk management plan is also a living document that should be revisited regularly as operators learn more about the risks they face, when additional risk management tools become available, and as their financial situation evolves.

Farm operations should begin by protecting their assets as much as possible from major risks such as natural disasters, hazards, liability, etc. This typically starts with a farm insurance policy that covers farm assets and includes liability protection. Equipment, buildings, facilities, and other infrastructure represent a large share of the asset base on a farm. These types of assets are crucial to farm operations, but are also vulnerable to wind, hail, fire, flood, and other hazards. Having insurance coverage that replaces these assets as efficiently as possible restores the asset base of the farm and limits the amount of time the farm is forced to operate without them. Farm operators should have open conversations with insurance providers about insurance needs and the types of coverage they desire. During inflationary periods—s such as recent years—, it is also important to review coverage levels to ensure that they are sufficient to replace this infrastructure in the current market.

Liability is another element of common farm policies that should be considered and discussed with an insurance provider. Farms should implement practices that limit the risk of being sued. But since there is no way to eliminate liability risk, liability coverage is likely a necessity. Farms should carry an appropriate amount of liability coverage and be open with their insurers about how they operate. For example, a farm that regularly has visitors (retail

stores, agritourism, hosting groups, etc.) should be transparent and consider the additional risks that come with operating in that manner.

Choosing a business structure other than a sole proprietorship, such as a corporation or a limited liability company (LLC), may be an additional risk-mitigation tool worth considering. Since these are legally distinct entities, one should consult a legal professional before deciding to change business entity structures. The accounting rules associated with these business types, and the steps to maintain the liability protection, should also be fully understood. After careful evaluation, choosing to be something other than a sole proprietorship, coupled with adequate insurance coverage levels, can be a key foundation for risk management.

Secondly, farms should utilize risk management tools that exist to protect them from swings in commodity prices and farm revenues. Fortunately, there are an increasing number of tools that fall in this category. Some of these tools take the form of government programs administered by the USDA's Farm Service Agency (FSA). These include programs such as Agricultural Risk Coverage (ARC), Price Loss Coverage (PLC), Dairy Margin Coverage (DMC), Livestock Indemnity Program (LIP), Livestock Forage Disaster Program (LFP), Dairy Indemnity Payment Program (DIPP), Non-insurance Disaster Assistance Program (NAP), and numerous other disaster programs. Producers need to fully understand these programs and be prepared to apply for assistance when they qualify.

Beyond FSA programs, federal crop insurance programs are continually evolving. For row crop producers, crop insurance is an extremely important risk management tool as it can provide substantial protection from revenue declines. At the same time, insurance-based risk management tools for livestock and forage producers continue to expand. These include programs such as Livestock Risk Protection (LRP) Insurance, Livestock Gross Margin (LGM), and Pasture, Rangeland and Forage (PRF) insurance. Several programs exist that are crop-specific, and a Whole Farm Revenue Protection policy is now available that may be worth exploringRMA also now offers whole farm options, including Whole Farm Revenue Protection (WFRP) and Crop and Livestock Income Protection (CLIP) which is designed to provide umbrella coverage across crop and livestock enterprises on a farm. The focus of this article is not to explain any of these in detail (as that was provided in Chapter 14), but simply to make the point that utilizing these tools can provide some protection from financial stress for a farm operation.

Finally, sound financial management can also buffer farm operations from financial shocks. Several financial and tax management strategies will be discussed in later sections of this article, but working capital, in particular, has a role as part of a risk management plan. Having a source of liquid funds (e.g., cash) that can be used to buffer revenues during economic downturns can make a farm operation less vulnerable and limit the need for increased borrowing. By relying on working capital, rather than operating lines of credit, interest costs are saved. This has become increasingly valuable in recent years as interest rates have risen (see Figure 1).

Manage Financial Position for Long-Term Success

Liquidity

The Farm operators must effectively manage a farm's liquidity and solvency. Liquidity refers to the ability of a business to meet upcoming financial obligations and is the area where operations are currently feeling the most financial stress. Typically, liquidity is evaluated by assessing current assets and current liabilities. Market livestock, stored grain, and cash on hand are all commonly held current assets, meaning they can be sold and converted to cash relatively quickly. Conversely, accounts payable (e.g., feed bills and accounts at the co-op), operating loans, and credit card balances are common current liabilities as they are due relatively soon. The liquidity measure that is commonly used to determine a business's liquidity position is the current ratio, which is calculated as follows:

Current Ratio= Current Assets/Current Liabilities

A current ratio of 1 or more indicates that there are sufficient current assets to meet the current

liability obligations. A current ratio that is less than 1 suggests there are not enough current assets to meet those obligations. So, it is in a business's best interests to ensure that its current ratio remains least at 1. In many cases, grain in storage and marketable livestock represent a significant share of current assets. If those items are not forward contracted or hedged in some manner, there is a risk that the current ratio could deteriorate with changing market conditions. For this reason, many financial institutions prefer to see a current ratio of 1.5 or better, as it provides some cushion for these types of market fluctuations.

While knowing the mechanics of the current ratio is important, so is understanding options to address an underperforming current ratio. If the current ratio is not sufficiently high, the business operator may need to slow down or stop expansion for a while. They should also review their budgets to ensure that they are complete, accurate, and grounded in realistic assumptions based on past performance and objective market expectations. If areas can be identified where operating costs can be reduced, this will improve the liquidity of the operation by lowering current liabilities.

In other cases, assets may need to be liquidated to generate additional cash. The operator should be especially careful about liquidating income-producing assets such as productive cows or equipment that is essential to the operation. When income-producing assets are sold, it can hinder income generation potential in the next production cycle. If there are underutilized assets (e.g., a tractor that is not essential), then selling those assets may make sense. It is also advisable to discuss these decisions with your tax professional to understand any tax implications.

Finally, refinancing current operating debt can improve the current ratio, as some of those liabilities could be pushed into the future. One's ability to do this will depend on their solvency position (discussed next) but should also include a thorough review to understand why those liabilities could not be satisfied through normal business activities. Once the management implications that led to having a liquidity issue are understood, those mistakes are less likely to be repeated.

Solvency

Solvency refers to the relationship between all business liabilities and assets. A business is solvent when total assets exceed total liabilities and insolvent when total liabilities exceed total assets. The debt-to-asset ratio is used to examine solvency,

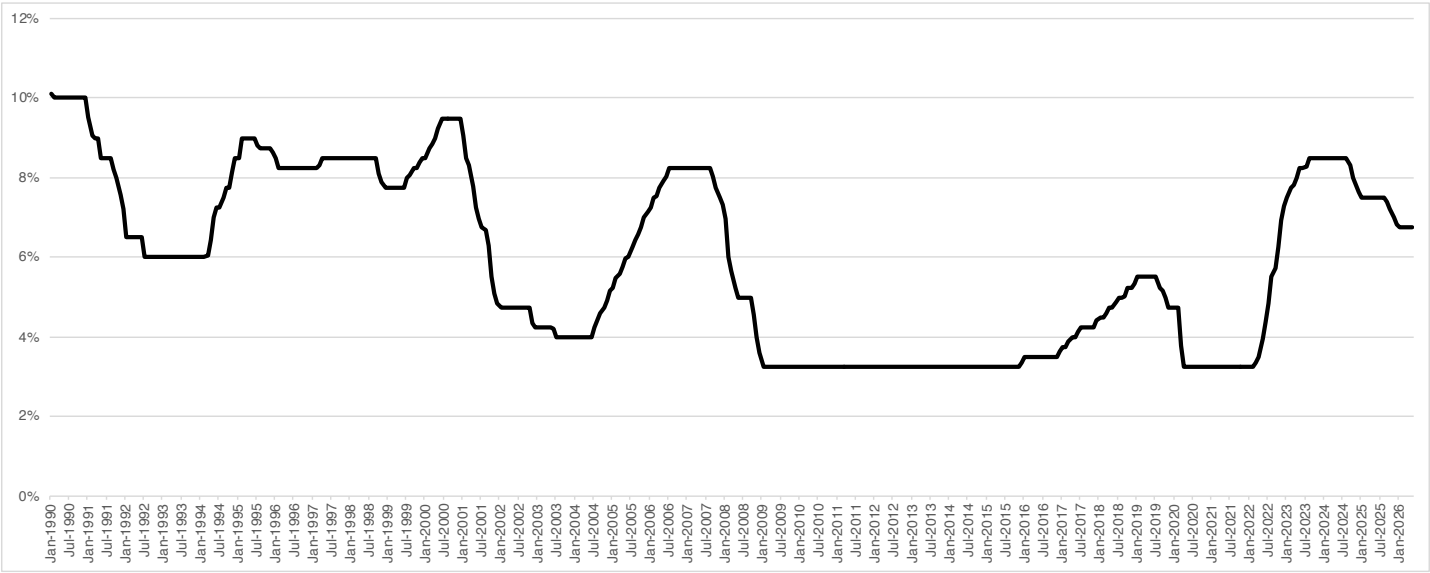

Figure 1: US Bank Prime Loan Rate (1990 to present).
Source: Federal Reserve System via FRED.

similar to how the current ratio examines liquidity, and is calculated as follows:

Debt-to-Asset Ratio= Total Liabilities/Total Assets

The debt-to-asset ratio measures how leveraged the business is. It is typically recommended that an agricultural business maintain a debt-to-asset ratio of less than 60%, and preferably 30% or less.

Strategies to fix a solvency issue are more limited than fixing a liquidity issue and are typically achieved over a longer period of time. These options include reducing debt, selling assets, or otherwise improving the overall profitability of the business. Similar cautions are warranted as in the liquidity section regarding the consequences of selling vital income-producing assets and the need to understand the cash flow impacts from a tax perspective.

Since many farmers are currently dealing with liquidity issues, it should be noted that prolonged liquidity issues can lead to solvency issues. This is common when unpaid operating expenses are refinanced over a longer horizon to improve short-term liquidity. This effectively moves them from a current liability into a long-term liability. While this may be necessary to get back on the correct financial course, one must remember that this can only be done so much before solvency issues arise. Finally, one must have long-term cash flow sufficient to support these actions. Refinancing changes the nature of the debt and the timeline for which it must be paid, but that debt remains on the balance sheet and must eventually be retired.

Implement Tax Strategies that Consider Short-term and Long-term Impacts

While seemingly paradoxical, a farm can face tax liability in a year when overall profitability is poor. This often results from using cash-basis accounting, which is very common in farming. Under this method, income is recognized in the year it is received, not necessarily the year in which the commodity was produced. For example, grain harvested in one year may not be sold until the following year. If market conditions encourage delaying sales into the following year, that income shifts to the next tax year, even though the production costs were incurred in the previous year. Weak cashflows and/or higher interest rates can sometimes prevent farmers from taking advantage of prepaid expenses that could help mitigate the potential of two years of income in a single year. As a result, a farm may show relatively low taxable income one year (because sales were deferred and cash accounting was used) and then unusually high taxable income the next year (because multiple crops or livestock sales are recognized at once or cashflow concerns prevented prepaying expenses). This "bunching" of income can push the operation into a higher-than-usual tax bracket that year.

To address this volatility, Congress created Farm Income Averaging, a tax management tool available only to farmers and fishermen. This provision allows a farm to take some, or all, of the current year's farm income and spread it evenly over the previous three tax years for tax calculation purposes. It does not amend prior returns or change what income was actually reported. Rather, it recalculates the current year's tax as if part of that income had been earned earlier. This strategy can be especially beneficial when the current year's income is significantly higher than the previous three years, prior years had unrealized income in lower tax brackets, and when the farm experienced income deferral followed by a rebound year.

By effectively "filling up" lower brackets from prior years, the farm may reduce the marginal tax rate applied to current income. While it does not reduce income itself, it can meaningfully reduce the overall tax liability in a high-income year by pushing some of the current tax year's income into previous years with lower marginal tax rates. Because eligibility rules and calculations can be complex, it is important to discuss this option with a qualified tax preparer when completing your return.

Another commonly used tax planning strategy in agriculture involves accelerated depreciation meth-

ods, most notably Section 179 Expensing and Bonus Depreciation, under the Internal Revenue Code. Section 179 allows farms to immediately expense (rather than depreciate over multiple years) qualifying capital purchases such as machinery, equipment, breeding livestock, certain farm improvements, and certain other items, up to annual limits. Bonus Depreciation similarly allows for immediate expensing of a percentage (100% of qualifying purchases) of eligible new or used property. These tools can significantly reduce, or eliminate, taxable income and improve cash flow as a result.

However, just because accelerated depreciation is available does not automatically mean it is the best choice. Accelerating depreciation today means fewer deductions available in future years. If income remains strong, the farm may face higher tax bills later with fewer write-offs to offset future income. An especially critical issue arises when the asset is financed. Depreciation is deducted upfront, but loan payments are spread over several years. In future years, the farm will still be making principal payments, and principal is not tax deductible. This can create a situation where cash outflows remain high while tax deductions are minimal. Knowing tax law for the state in which you operate in is also crucial, as some states do not fully conform to federal depreciation rules. The federal benefit may be large, but state tax savings could be limited or nonexistent. Making a purchase solely to avoid paying taxes is seldom a good long-term strategy.

Effective farm tax management is about smoothing income tax liability over time, not eliminating taxes in a single year. Income averaging and accelerated depreciation are powerful tools, but they work best when coupled with long-term financial planning, cash flow projections, and debt structure. Given the complexity and the interaction between federal and state rules, producers should proactively discuss these strategies with their tax preparer before year-end rather than as tax returns are finalized. Proper planning can turn what feels like a paradox—, taxes in a low-profit environment—, into a manageable and strategic decision. Further, strategic planning that incorporates both financial and tax management will prevent quick decisions to purchase capital assets for tax savings that could ultimately strangle cash flow in future years. In other words, it may be better to pay some in taxes this year to avoid creating a future liability that will eat up available cash for years to come.

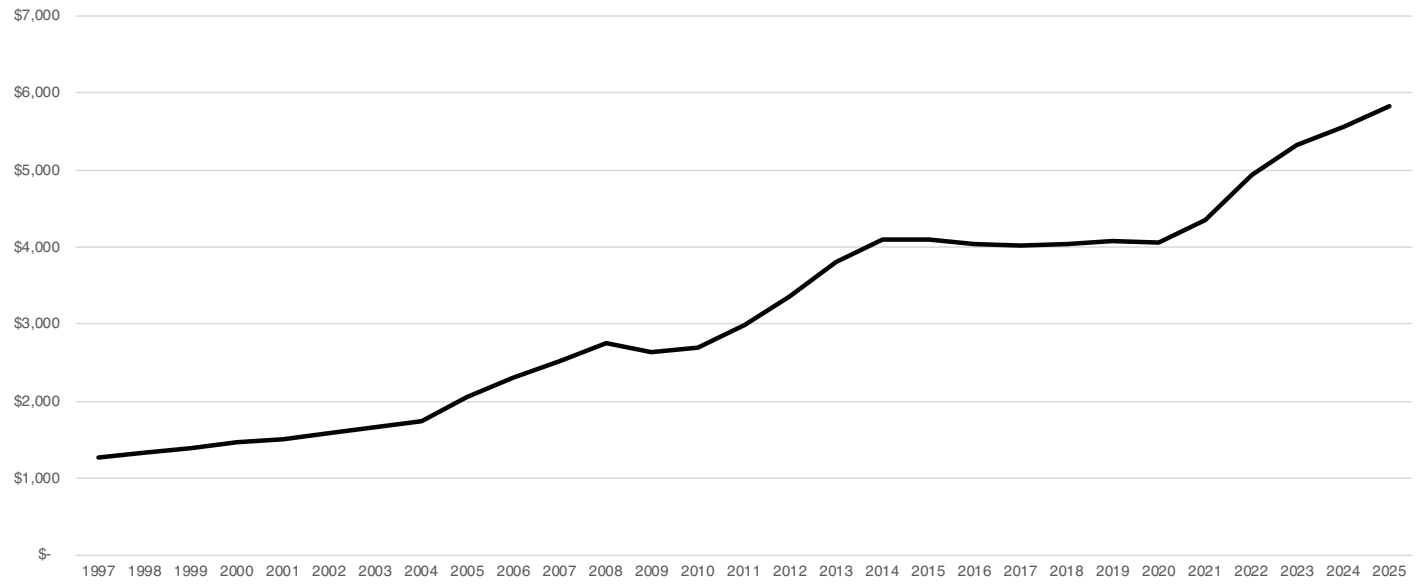

Figure 2: US Cropland Value per Acre (1997 to 2025).
Source: USDA-NASS.

Build Equity Over Time

While the goal of every operation is to profit from operations each year, a significant share of historical returns to farming comes in the form of asset appreciation. While this can apply to many types of assets, it applies most significantly to land. While there have been periods that were exceptions, land values have historically appreciated over time (see Figure 2). Even in years when farm profits have been unattractive, farmland has tended to hold its value. While high land values represent a significant challenge for new and beginning farmers as they get started, it is often the most significant asset on the balance sheet of a farming operation.

Most farms operate on some combination of owned land and rented / leased land. Due to the cost of land, newer operations tend to operate on a larger proportion of rented ground. But, farmers should recognize that by increasing the amount of land they own over time, they see more benefit from land appreciation. As debts are paid down and land appreciates, their equity position grows.

While the long-run benefit of owning more land is the increase in net worth, owning more assets also provides some benefit during challenging times. Land is an asset that lenders are very comfortable using as collateral on loans because it can't be moved and tends to hold its value. Owning more land increases the ability of the operation to secure borrowed capital during challenging times. While not ideal, land (and other assets) can be sold during difficult times to generate cash flow or pay down debts. It is a good practice for farm operations to increase land holdings over time to capture long-run equity benefits, but also to provide some additional options during challenging times.

While there is no way to completely insulate a farm from economic hardship, there are strategies that can be implemented over time to limit a farm's financial vulnerability. This typically starts with managing known risk through insurance and farm programs, choosing an appropriate business structure, and working towards having some level of cash reserves for challenging times. Secondly, farm operations should strive to improve their liquidity and solvency positions over time, to put them in the best long-term financial positions possible. Third, operators should be careful wary of short-sighted tax avoidance decisions and use tax management tools to manage tax liability over the long run. FAnd finally, operations should be opportunistic about growing their asset base over time, which will allow them to benefit from asset appreciation and provide more options during times of financial stress.

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