

AGRICULTURAL FINANCE

# Agricultural 2022 Economic Outlook

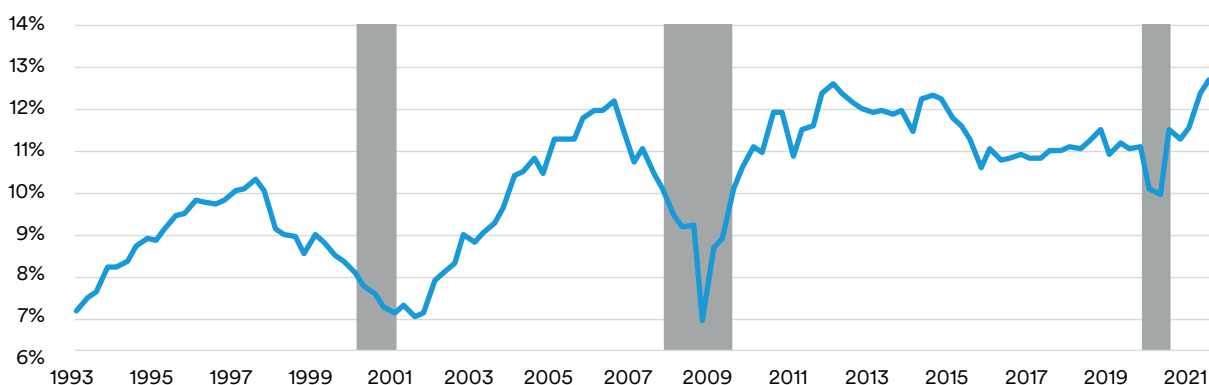
## Executive Summary

The agriculture sector of the U.S. economy appears poised for another strong year in 2022 amidst the backdrop of continued healthy overall economic growth. MetLife Investment Management (MIM) forecasts continued broad economic expansion, although there are lingering concerns regarding elevated inflation levels. Growth in spending on goods during the pandemic and sustained demand for food, fuel, and fiber have pushed agricultural commodity prices up and raised net farm incomes to levels not seen since 2013. Even if interest rates move from historic lows next year in response to elevated inflation, we believe the strong Ag economy is likely to persist, and farmland values should remain on an upward trajectory for the year.

## The Macroeconomy: GDP Growth, Inflation, and Interest Rates

MetLife Investment Management (MIM) expects the overall U.S. economy to expand at a 3.8% rate in 2022. While lower than the 5.5% annual growth MIM currently projects for 2021, it would remain stronger than the slower growth environment of the 2010s. Consumers increased purchases of goods relative to services during the pandemic, and we feel this is likely to persist into 2022. Rising economic profit margins are another reason for optimism regarding continued growth. Historically margins begin to decline as the economy heads into a recession. At least through the end of 2021, economy-wide margins had remained on an upward trajectory (Figure 1).

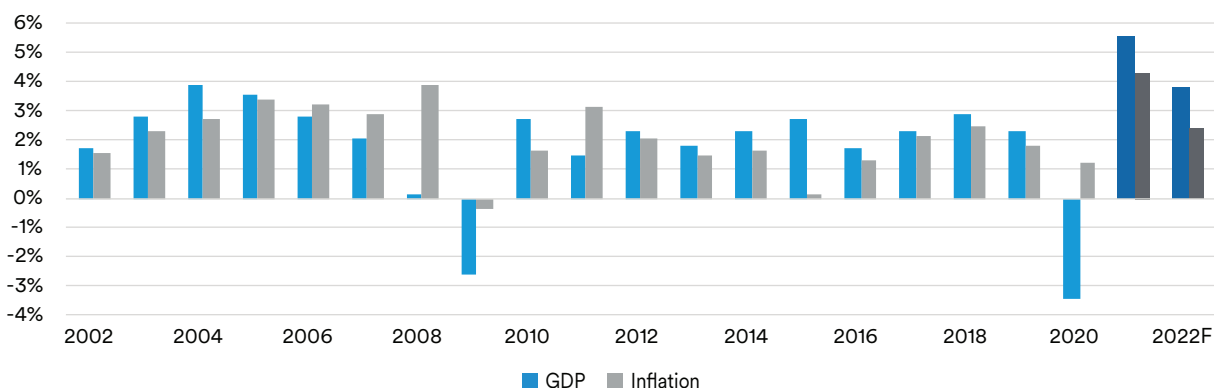
**Figure 1 | Economic Profit Margin (Quarterly, Corporate Profits / U.S. GDP)**



Sources: Bureau of Economic Analysis, HAVER Analytics, MIM

One concern of a rapidly growing economy is demand pull inflation. If too many dollars chase too few goods, inflation may start to erode purchasing power. The Federal Reserve Bank may use monetary policy to slow economic growth and lower inflation to its 2% average inflation target. As a result, we expect interest rates will move higher over the coming year, after bottoming out in 2020 and persisting at historically low levels through 2021 (Figure 2). The Federal Reserve is closely monitoring the durability of elevated inflation. Through the end of 2021 the Federal Reserve was anticipating that supply chain disruptions would be resolved, and inflation would be transitory. If inflation remains elevated, the Federal may move quickly to abate the increase.

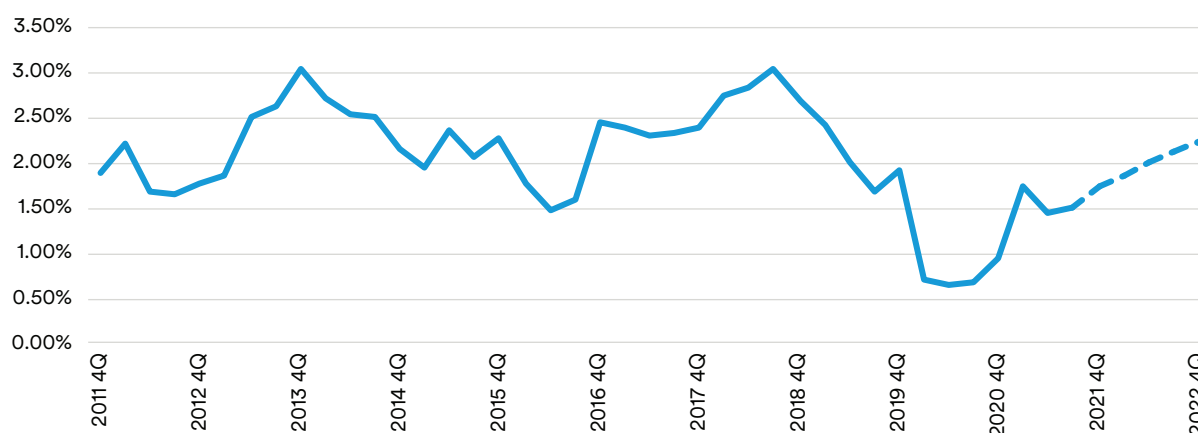
**Figure 2 | U.S. GDP & Inflation (YOY Change)**



Sources: HAVER Analytics, Bureau of Economic Analysis, MIM Forecast

Current market expectations project the Federal Reserve will raise short term interest rates 0.50% to 0.75% in 2022<sup>1</sup>. While the magnitude is relatively small compared to historical levels, it would represent a significant increase in short-term borrowing costs compared to levels today. Additional actions by the Federal Reserve could also fuel an increase in longer-term interest rates. Current MIM expectations are for the 10-year U.S. treasury rates to top 2.00% in 2022 (Figure 3). This outlook is contingent upon several factors including future COVID variants, the duration of elevated inflation, and global economic growth. Our projected increase reflects the strength of the U.S. economy and our expectations for future growth.

**Figure 3 | 10-year Treasury Rate (Quarterly)**



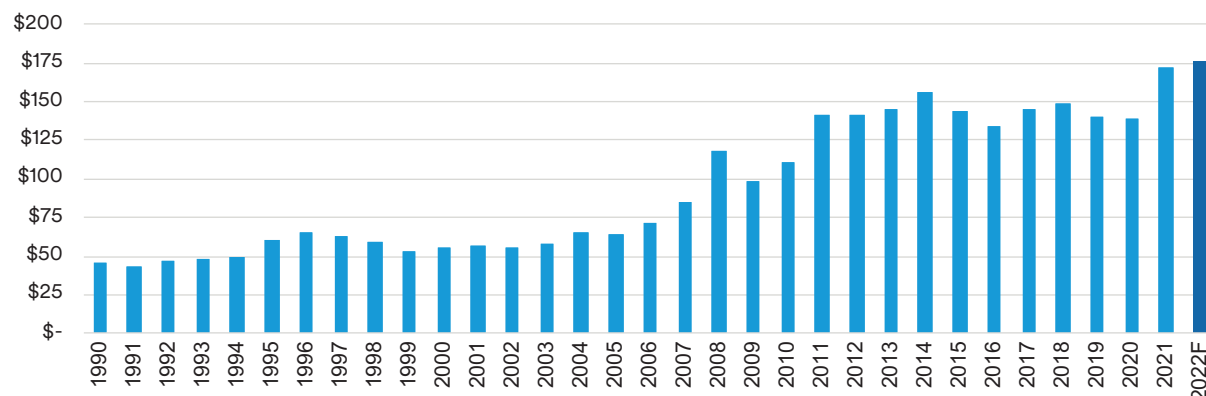
Source: Federal Reserve Board, HAVER, MIM Forecast

## Macroeconomic Considerations in the Agricultural Economy

Continued global economic growth in 2022 should bode well for the U.S. agricultural sector. Trade is a key demand source for the agricultural sector, as approximately 20% of U.S. production is exported annually<sup>2</sup>. The value continues to grow, and the USDA projects exports are projected to surpass \$175 billion this year (Figure 4). This would represent the second consecutive year of new record exports. The Phase One trade agreement between the U.S. and China has supported the growth in U.S. agricultural exports. However, U.S. agricultural exports are relatively diversified. Shipments of livestock products, tree nuts, and numerous other agricultural goods experienced record demand in 2021 from countries other than China. We expect improving global economic conditions will support further demand growth for U.S. agricultural products.





**Figure 4 | U.S. Agricultural Exports (Billions)**

Sources: USDA ERS, USDA FAS, U.S. Department of Commerce, MIM

The impact from the strong economic conditions is not limited solely to exports of U.S. agricultural products. Improved economic conditions have led to a rebound in domestic vehicular traffic which has, in turn, lifted ethanol demand. Ethanol production dropped sharply early in the pandemic but has since recovered and is currently higher than pre-pandemic levels<sup>3</sup>. This recovery has been a tailwind for corn producers as nearly 40% of U.S. corn production is used to produce ethanol<sup>4</sup>. As such, the rebound has provided significant support for corn prices.

Some experienced agricultural producers are becoming increasingly concerned about whether strong economic conditions will lead to elevated inflation and rising interest rates. Indeed, inflation has been relatively high in 2021 and monthly levels hit 6.8% in November, the highest in 39 years<sup>5</sup>. In response, the Federal Reserve intends to raise interest rates in 2022 to help reduce inflationary pressures<sup>6</sup>. However, it remains unclear what the marginal impact would be on agricultural borrowers. The average fixed interest rate on farm mortgages continued declining in 2021, even after the 10-year treasury rate began trending higher<sup>7</sup>. This partially reflects the competition among agricultural lenders to deploy financial capital in the form of loans. We expect capital to remain readily available in 2022. However, the decline in fixed interest rates on farm mortgages is unlikely to persist if benchmark interest rates move substantially higher.

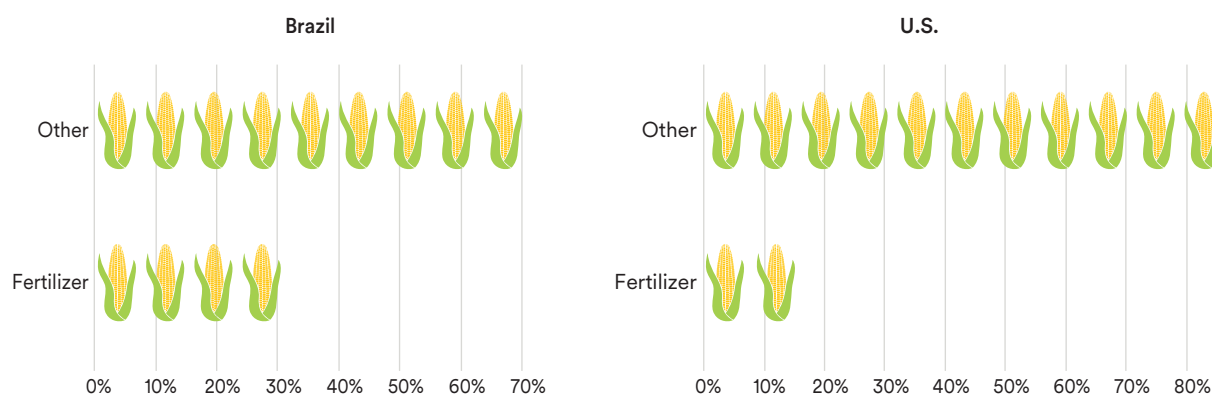
## Agricultural Economy and Net Farm Income

USDA projects farm incomes rose 23% year-over-year (yoy) in 2021, boosted by strong export demand and a rebound in the global economy<sup>8</sup>. Increases across nearly all agricultural commodity prices largely offset substantial declines in government payments to the sector for 2021<sup>9</sup>. Looking ahead to 2022, tight inventories of many agricultural crops could provide bullish support. The global economic recovery has shifted demand for protein sources, providing bullish support across meat and dairy commodities.

U.S. farmers are also increasingly concerned about the potential for rising input costs to further erode margins and net farm incomes in 2022. According to the Purdue Ag Economy Barometer, farmer sentiment dropped for the fourth consecutive month in November due mainly to concerns about rising input costs<sup>10</sup>. In addition to higher seed and chemical costs, fertilizer costs have soared<sup>11</sup>. The North American fertilizer price index increased 28% during the third quarter and is currently 172% higher relative to December 2020. Rising input costs are weighing on producer sentiment and have reduced producer appetite for significant capital investments into their operations<sup>12</sup>.

While rising input costs represent a headwind to U.S. producers, the costs are likely a greater financial strain on Latin American producers. In Brazil, the primary competitor to the U.S. in global corn and soybean markets, fertilizer constitutes approximately 30% of the total corn production cost<sup>13</sup>. In the U.S. the proportion is closer to 15% of total production costs, or approximately half as much<sup>14</sup>. Amplifying this difference over the past year has been a sharp depreciation of the Brazilian currency<sup>15</sup>. Approximately 85% of Brazilian fertilizer is imported, meaning the cost of fertilizer for Brazilian producers has surged even further relative to U.S. counterparts due to Brazil's weaker currency<sup>16</sup>. The combined effect is profit margins on corn grown in Brazil are more sensitive to movements in the price of fertilizer and have been significantly impacted in 2021.

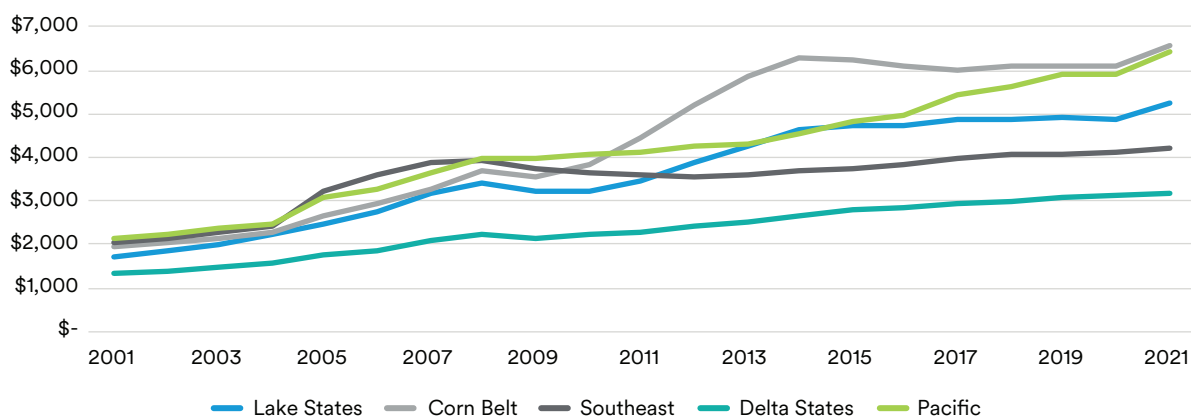
**Figure 5 | Corn Production Cost Comparison**



## Farmland Values

Looking ahead for farmland values, robust economic growth seems likely to outweigh the potential adverse effect of rising interest rates. As a result, we expect increases in farmland values are likely to persist into 2022. In 2021, favorable commodity prices, low interest rates, and strong demand from buyers all supported farmland values (Figure 6). The USDA reported in August that the average value of U.S. farmland increased 7% in 2021 compared 2020<sup>17</sup>. While this increase was the largest reported by the USDA in nearly a decade, the price increases were even more significant for some of the productive regions in the country. For example, farmland values in some Corn Belt states increased over 15% yoy<sup>18</sup>.

**Figure 6 | U.S. Farmland Values (\$/Acre)**



Sources: USDA, MIM

Despite increasing modestly over the past year, interest rates remain historically low and have provided significant support to farmland values. Many buyers have capitalized on low, long-term rates, reducing the impact of borrowing costs on cashflows. Although we expected interest rates to inch up in 2022, we anticipate that farmland values will also trend upward during the year. Robust demand for farmland has helped fuel the surge in values this past autumn even as the number of sales increased. Farmers continue to be the most numerous buyers, but attractive historical returns continue to attract non-farming investors as well.

## Conclusion

If farmland auctions are any indication of farmers' and investors' expectations of the future cash flows from agriculture production, the optimism for the agriculture sector of the economy is relatively high. As many agricultural counties across the country realize record high per acre prices for farmland, we find it hard to conclude anything other than widespread buoyancy. The durability of the optimism may hinge more on the durability of macroeconomic factors than sector fundamentals. Increasing interest rates to address persistent inflation could affect the agriculture economy just as much as rising input and equipment costs.

## Endnotes

- <sup>1</sup> CME Fed Watch Tool, CME Group, data accessed December 2021.
- <sup>2</sup> Percentage of U.S. Agricultural Products Exported, USDA Foreign Agricultural Service, May 2018.
- <sup>3</sup> Weekly Ethanol Plant Production, U.S. Energy Information Administration, December 15, 2021.
- <sup>4</sup> December World Agricultural Supply and Demand Estimates, USDA, December 2021.
- <sup>5</sup> Monthly CPI annualized, Bureau of Labor Statistics, December 2021.
- <sup>6</sup> FOMC Meeting Minutes, Board of Governors of the Federal Reserve System, December 15, 2021.
- <sup>7</sup> National Survey of Terms of Lending to Farmers Historical Data, Federal Reserve Bank of Kansas City, accessed December 2021.
- <sup>8</sup> Farm Sector Income and Finances, USDA Economic Research Service, December 1, 2021.
- <sup>9</sup> Farm Sector Income and Finances, USDA Economic Research Service, December 1, 2021.
- <sup>10</sup> Farmer Sentiment Weakens as Production Cost Concerns Mount, Purdue University Ag Economy Barometer, December 7, 2021.
- <sup>11</sup> North American Fertilizer Price Index, Green Markets, accessed December 2021.
- <sup>12</sup> Farmer Sentiment Weakens as Production Cost Concerns Mount, Purdue University Ag Economy Barometer, December 7, 2021.
- <sup>13</sup> Corn Production Costs, CONAB Agricultural Information Portal, accessed December 2021.
- <sup>14</sup> Corn Historical Costs and Returns, USDA Economic Research Service, accessed December 2021.
- <sup>15</sup> Brazil Foreign Exchange Rate, Federal Reserve Board, accessed December 2021.
- <sup>16</sup> Brazil Imports 85% Of Fertilizers Used In Agriculture, Williams Brazil, accessed December 2021.
- <sup>17</sup> Land Values 2021 Summary, USDA National Agricultural Statistics Service, August 2021.
- <sup>18</sup> 2021 ISU Land Value Survey Results, Iowa State University Center for Agricultural and Rural Development, December 14, 2021.

## Authors



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Michael Gunderson is Director, Head of Agricultural Research & Strategy. He provides leadership to market analysis of annual and permanent agricultural crops, forest and timberland products, and agribusinesses to help drive investment strategy for MetLife Investment Management. In this role, Mike shares market insights regarding agricultural credit conditions, commodity price forecasts, and industry dynamics to support MIM's agricultural portfolio. Mike earned his Ph.D. in Agricultural Economics from Purdue University, an M.S. in Agricultural Economics from Cornell University, and a B.S. in Agribusiness, Farm, and Financial Management from the University of Illinois.



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