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Resilience of the American Agriculture Sector

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Abstract : This study aims to understand the impact of the pandemic on the overall economic well-being of the agricultural sector of the United States. The two key metrics used to examine the economic well-being are the bankruptcy rate of the U.S. farm operations and the operating profit margin. One of the primary reasons for farm operations (in the U.S.) to file for bankruptcy is continuous negative profit or a significant decrease in profit. The pandemic caused significant supply and demand shocks in the domestic market. Furthermore, the ongoing trade disruptions, especially with China, also impacted the prices of agricultural commodities. The significantly reduced demand for ethanol and closure of meat processing plants affected both livestock and crop producers. This study uses data from courts to examine the bankruptcy rate over time of U.S. farm operations. Preliminary results suggest there wasn't an increase in farm operations filing for bankruptcy in 2020. This was most likely because of record high Government payments to producers in 2020. The Federal Government made direct payments of more than $45 billion in 2020. One commonly used economic metric to measure farm profitability is the operating profit margin (OPM). Operating profit margin measures profitability as a share of the total value of production and government payments. The Economic Research Service of the United States Department of Agriculture defines a farm operation to be in a) a high-risk zone if the OPM is less than 10 percent and b) a low-risk zone if the OPM is higher than 25 percent. For this study, OPM was calculated for small, medium, and large-scale farm operations using the data from the Agriculture Resource Management Survey (OPM). Results show that except for small family farms, the share of farms in high-risk zone decreased in 2020 compared to the most recent non-pandemic year, 2019. This was most likely due to higher commodity prices at the end of 2020 and record-high government payments. Further investigation suggests a lower share of smaller farm operations receiving lower average government payments resulting in a large share (over 70 percent) being in the critical zone. This study should be of interest to multiple stakeholders, including policymakers across the globe, as it shows the resilience of the U.S. agricultural system as well as (some) impact of government payments.

Keywords : U.S. farm sector, COVID-19, operating profit margin, farm bankruptcy, ag finance, government payments to the farm sector
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