

North Dakota Agricultural Bankers Conference

Ag Profitability in Uncertain Times

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Today's Outline



US Economy: High Inflation, Economic Weakness



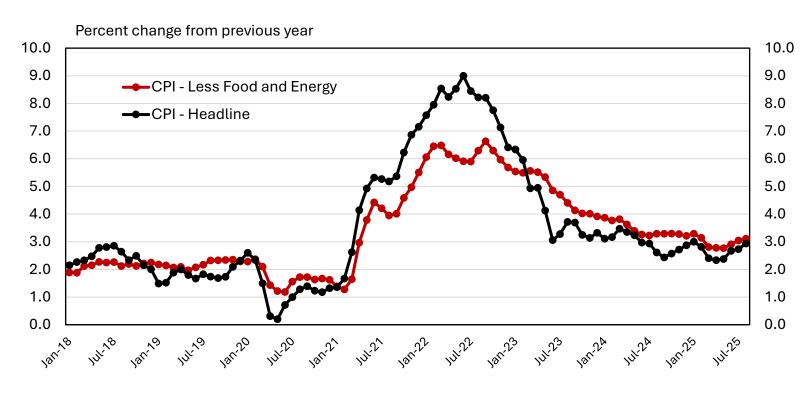
US Ag Economy: The Farm Boom is Over



Farm Finances: How Big of a Storm?

US Economy: Inflation stays stubbornly high.

US Consumer Price Inflation



- Inflation is rising ~ 3.0%

Inflation is broad-based

- Food +3.2% - Shelter +3.6%

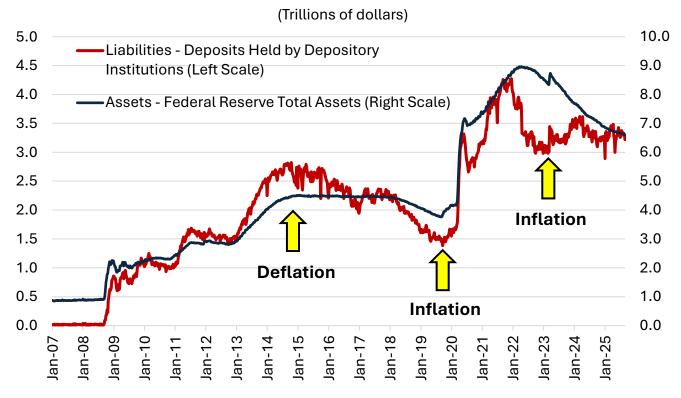
- Transportation +3.5%

Medical care + 4.2%

Source: Bureau of Labor Statistics

The Fed is working to slow inflation.

Federal Reserve Assets and Liabilities

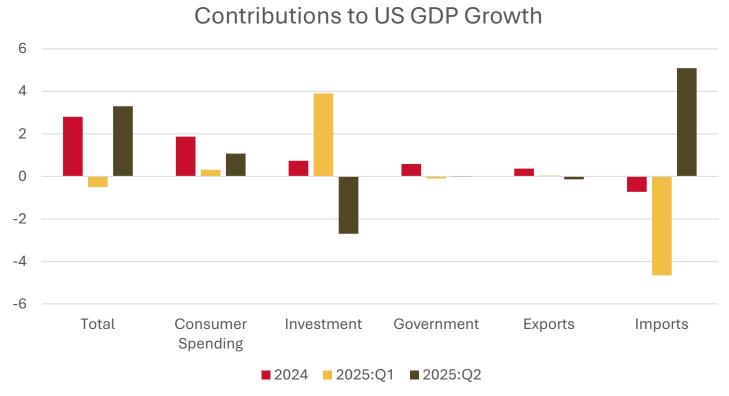


Quantitative Easing is now Quantitative Tightening

- Federal Reserves is pulling money out of the economy by shrinking its asset base
- Banks are keeping money on deposit and not lending (limiting chasing)
- What will lower interest rates do to the balance sheet?

Source: Federal Reserve Economic Data (FRED)

Tariffs have meddled with the economic data.



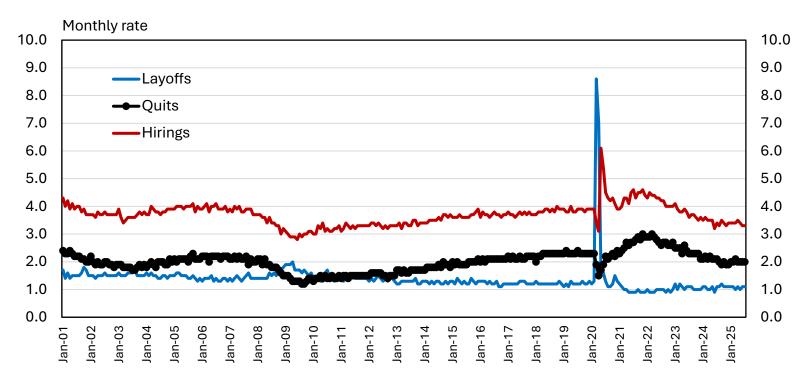
Tariffs impacts

- 2025:Q1 (Drag)
 Businesses increased investments with imports
- 2025:Q2 (Boost)
 Business cut spending on imports
- Going forward: Who Knows

Source: Bureau of Economic Analysis

US Economy: Labor market is stuck.

US Job Quits, Hirings and Layoffs

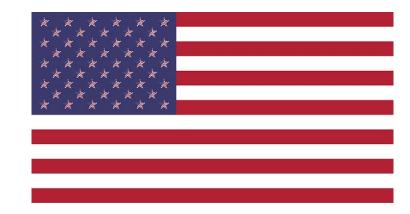


- Hiring rate has slowed
- Layoff rate remains low
- Quits have slowed
- Workers are hunkering down in their jobs.

Source: Bureau of Labor Statistics

Today's Global Economic Challenge





China's Economic Challenge: Get Wealthy Before Getting Old US Economic Challenge: Pay off Debt Before We Retire

Common Challenge: People and Productivity

US Economy: Shrinking US Debt

Projected FY25 Deficit ~ \$1.9 trillion

What is the national deficit?

A deficit occurs when the federal government's spending exceeds its revenues. The federal government has spent \$1.63 trillion more than it has collected in fiscal year (FY) 2025, resulting in a national deficit.



Fiscal year-to-date (since October 2024) total updated monthly using the Monthly Treasury Statement (MTS) dataset

Compared to the national deficit of \$1.52 trillion for the same period last year (Oct 2023 - Jul 2024), our national deficit has increased by \$112 billion.



Source: Department of US Treasury

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Current Accumulated Debt \$37.3 trillion

What is the national debt?

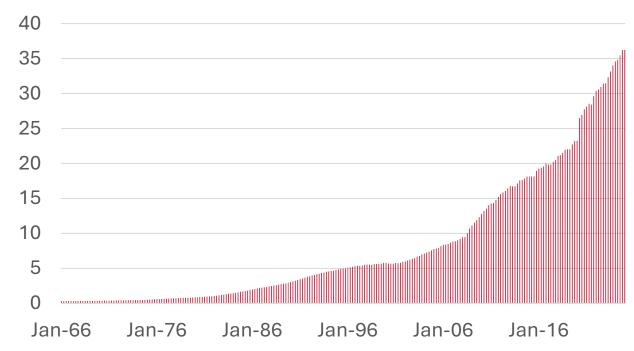
The national debt (\$37.31 T) is the total amount of outstanding borrowing by the U.S. Federal Government accumulated over the nation's history.



Updated daily from the <u>Debt to the Penny</u> dataset.

Shrinking US Debt: Many Unpopular Strategies





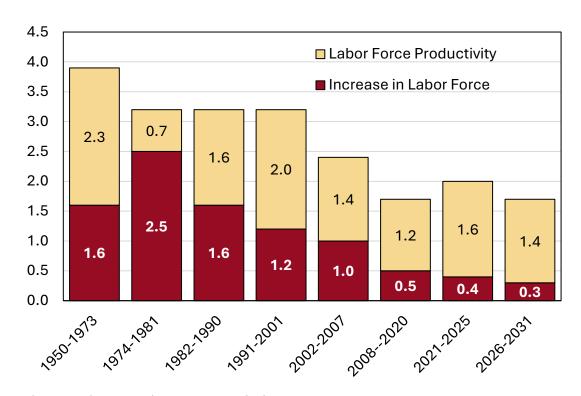
Source: Department of US Treasury

Strategies to Shrink Government Debt

- 1. Default on the Debt
- 2. Sell Assets (Government Land)
- 3. Stronger Economic Growth
- 4. Increase Taxes
- 5. Decrease Spending
- 6. Inflation (Monetize Debt)

The US has a Population and Productivity Challenge

U.S. Potential GDP Growth (Average Annual Percent Change)



Source: Congressional Budget Office

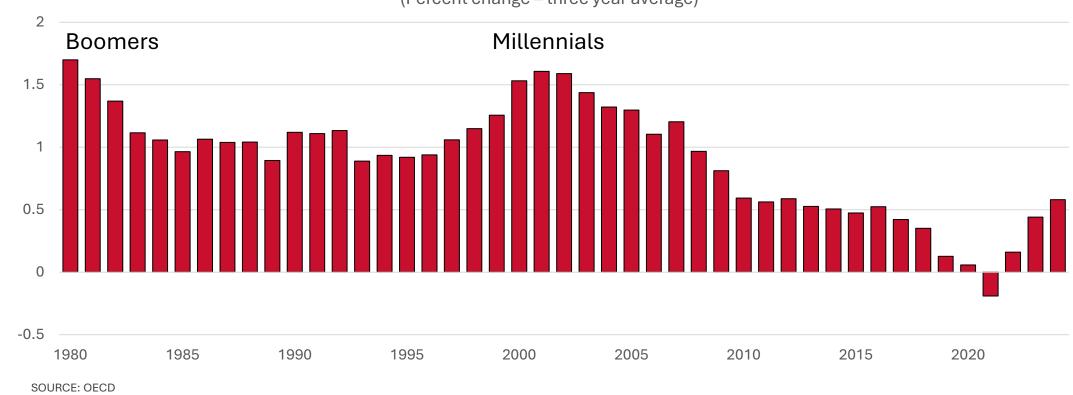
Economic Potential and Quality of Life

- How many people work?
- How productive they are at work?

Innovation:
Turning Science into Practice

A Competition for Talent has Emerged.

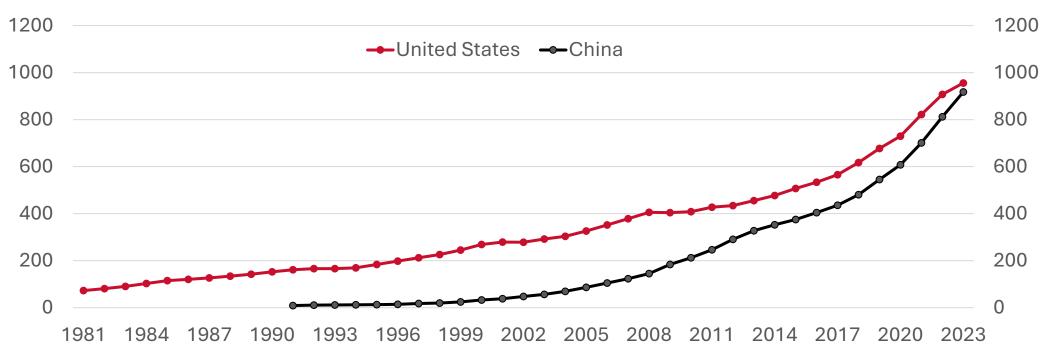
US Working Age Population Growth (15 to 64 years of Age)
(Percent change – three year average)





US R&D Productivity Advantage has Disappeared

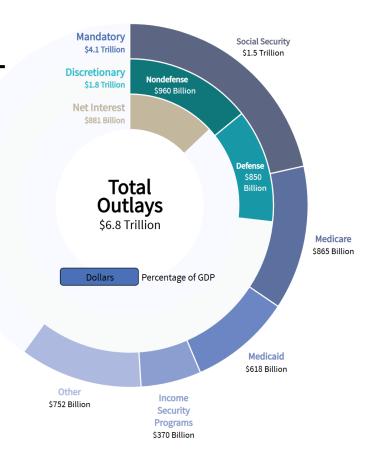
Gross Domestic Expenditures on R&D (Billion dollars)



Source: OECD

Federal budget cuts are politically difficult.

THE FEDERAL BUDGET IN FISCAL YEAR 2024



Source: Congressional Budget Office

Top 5 Expense Categories

- 1. Social Security
- 2. Interest Expenses
- 3. Medicare
- 4. Defense
- 5. Medicaid

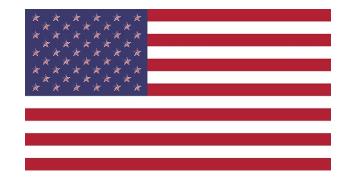
Today's Global Economic Challenge

Economies have two components

Production



Consumption



Strong Dollar Supports a Consumer-oriented Economy





- Strong dollar makes ...
 - Foreign goods cheap
 - US goods expensive

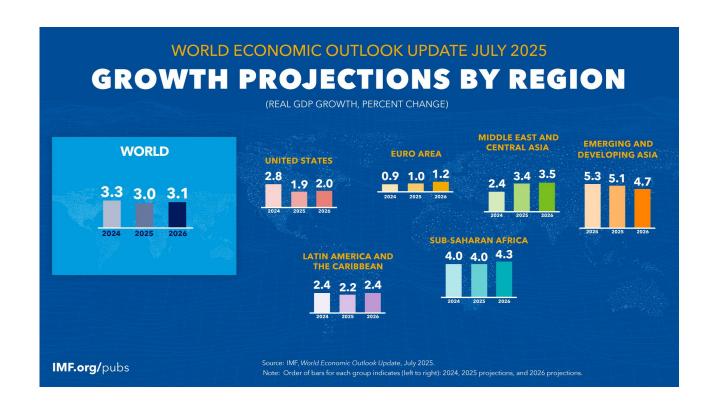
What is agriculture?

What is North Dakota's Economy?

- Production-oriented
- Consumption-oriented

Source: Federal Reserve Economic Data (FRED)

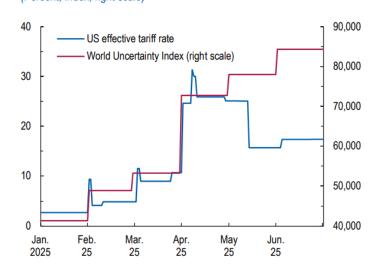
Will global economic growth stabilize in 2026?



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Global Uncertainty Index is High

Figure 1. Tariffs and Global Uncertainty (Percent; index, right scale)

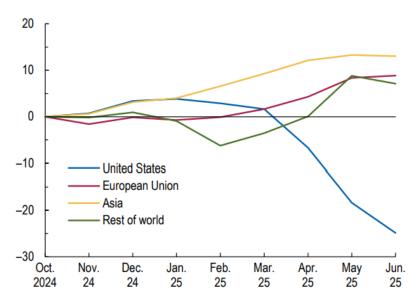


Sources: World Trade Organization; World Uncertainty Index (WUI) database; and IMF staff calculations.

Note: US effective tariff rates include the tariffs announced April 2, until April 9, when they were paused, and additional tariffs on China announced April 8 and afterward, until May 10, when they were paused. These effective tariff rates are based on a pre-2025 United States-Mexico-Canada Agreement compliance rate. The WUI database is constructed based on methodology in Ahir, H., N. Bloom, D. Furceri. 2022. "The World Uncertainty Index." NBER Working Paper 29763. The WUI is calculated by counting the frequency of the word "uncertain" in Economist Intelligence Unit country reports and normalizing by the total number of words. The index is then rescaled by multiplying by 1,000,000 and weighted using the 5-year moving average of nominal GDP in US dollar.

Where is the Chinese economy headed?

Figure 2. China's Cumulative Export Growth by Destination (Percent)



Sources: General Administration of Customs, China; Haver Analytics; and IMF staff calculations.

Note: Growth rates are calculated using three-month moving averages of seasonally adjusted goods exports, which are valued on free-on-board basis. Asia does not include Oceania.

Source: IMF Economic Outlook, July 2025

Headwinds to China's economy

- China's economic growth is expected to slow to 4.25 in 2025 down from 5.4% in 2024
- China's export growth to the US down 25%
- China's population is expected to fall 2.9% over the next decade. Previous estimate was a decline of 0.5%.
- Can China transition from a production/export economy to a consumption economy?

US Economy - Summary

- Slower long-term economic growth (approximately 2.0%)
 - Slower population growth.
 - Will US productivity rise?
- Higher levels of inflation (greater than 2.0%)
- Federal government debt challenges
- How will global competition and trade shift, especially with China?

Today's Outline

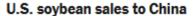


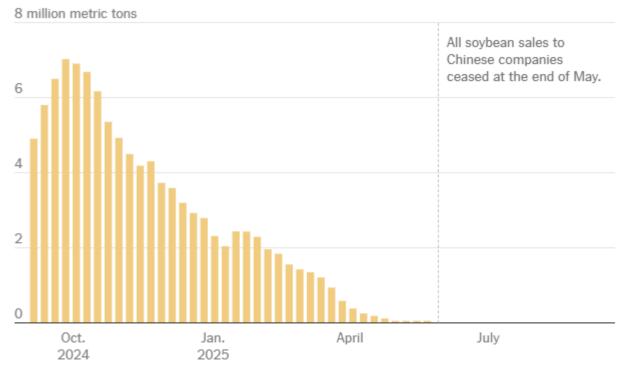
US Economy: High Inflation, Economic Weakness



US Ag Economy: The Farm Boom is Over

If this chart makes the NY Times, it is bad, really bad.





Source:

"China Bought \$12.6 Billion in U.S. Soybeans Last Year. Now, It's \$0."

Kevin Draper Sept. 25, 2025 New York Times

Source: United States Department of Agriculture - By Jacqueline Gu

Is US Agriculture the Residual Supplier?



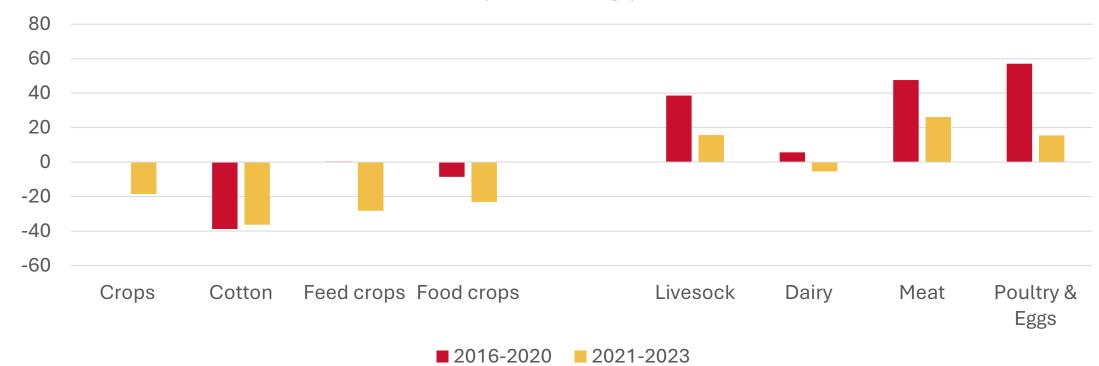
For North Dakota Information

Contact North Dakota State University Extension

https://www.ndsu.edu/agriculture/ag-hub/ag-topics/farm-management

Profits Depend on the Type of Ag Production

2025 US Ag Revenue Compared to 2016-2020 Avg and 2021-2023 Average (Percent change)

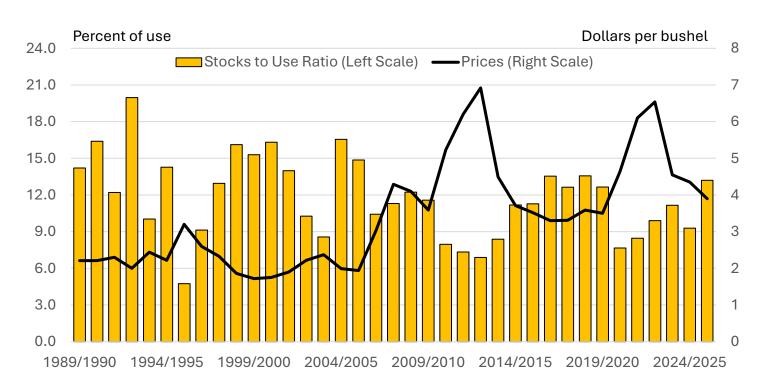


Source: USDA

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Big Supplies Lead to Lower Crop Prices

US Corn Prices and Stocks-to-Use Ratios

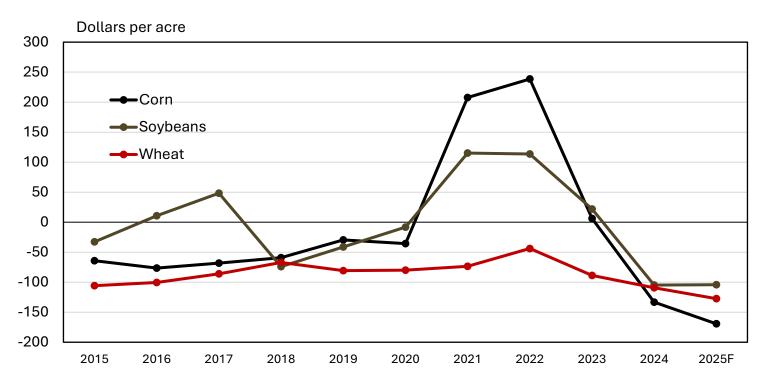


- Farmers responded to spring price incentive and planted more corn.
- Rain makes grain.
- Ending stock above 12% lead to \$3 corn?
- Ending stocks below 9% lead to \$6 corn?

Source: USDA, WASDE data

Crop profits have disappeared.

Estimated Net Returns to US Corn, Soybean and Wheat Production

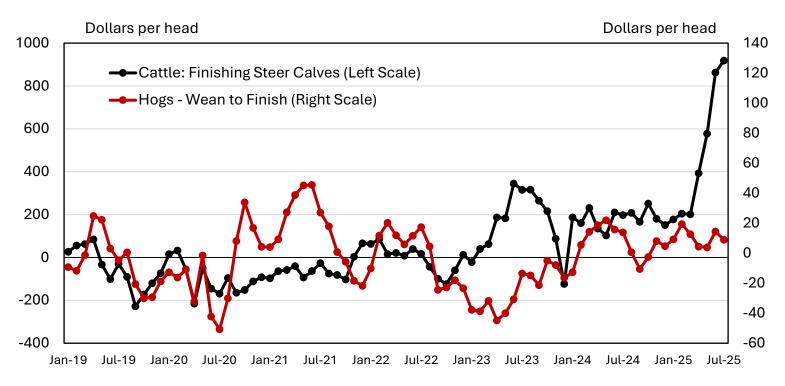


- The boom is over.
 - High input costs
 - Big supplies
 - Lower prices
- Who can turn a profit?
 - Farmers with no land costs?

Source: USDA Commodity Cost and Returns Data and WASDE estimates

Stronger livestock profits, especially cattle.

Estimated Livestock Returns to Iowa Producers

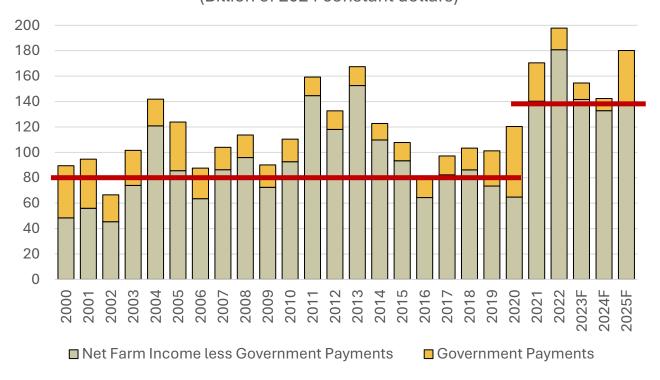


- Profitability in Livestock
 - Low feed costs
 - Tight supplies
 - Strong demand
- A bubble in cattle markets?
- When will consumer demand destruction start?

Source: Ag Decision Maker, Ag Decision Maker - Iowa State University (iastate.edu)

How can the farm boom be over with this data?





- Net farm incomes remain high.
- According to Purdue/CME Ag
 Barometer, only 27% of
 farmers expect worse financial
 performance this year.
- Is this a new plateau?

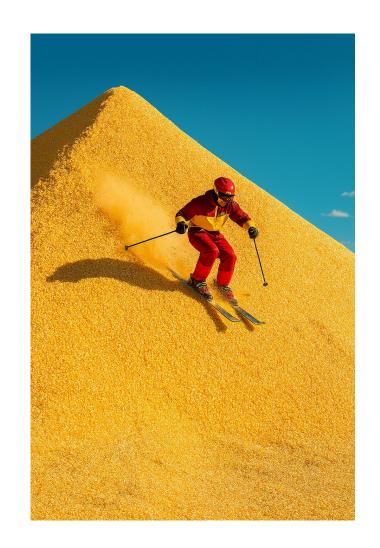
SOURCE: USDA



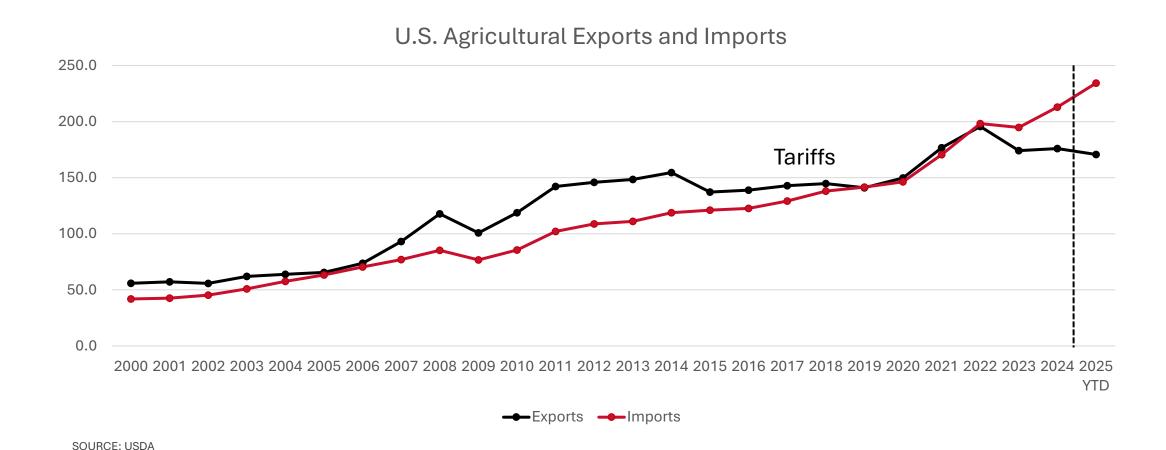
Stronger demand for agriculture is needed

Ski Mount Corn Pile

Opening Fall 2025



Intermediate Risk and Opportunities: Global Trade

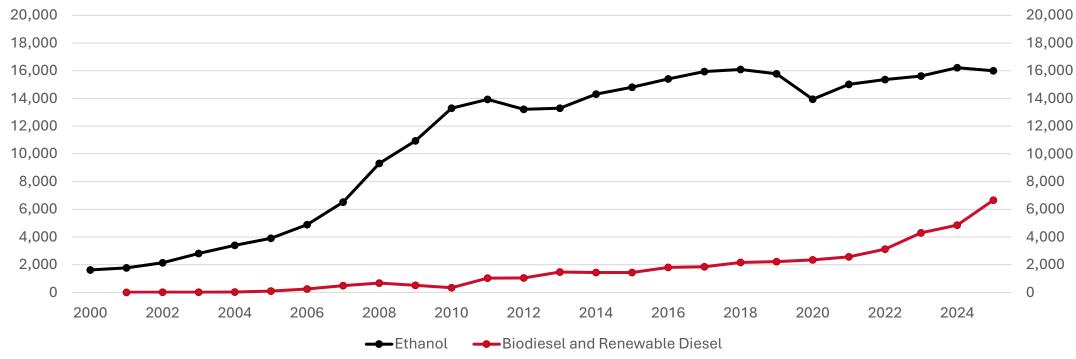


NOTE: YEAR TO DATE ESTIMATIONS ARE BASED ON THE CURRENT PACE OF AGRICULTURAL TRADE THROUGH APRIL 2025

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Intermediate Risk and Opportunities: Biofuels

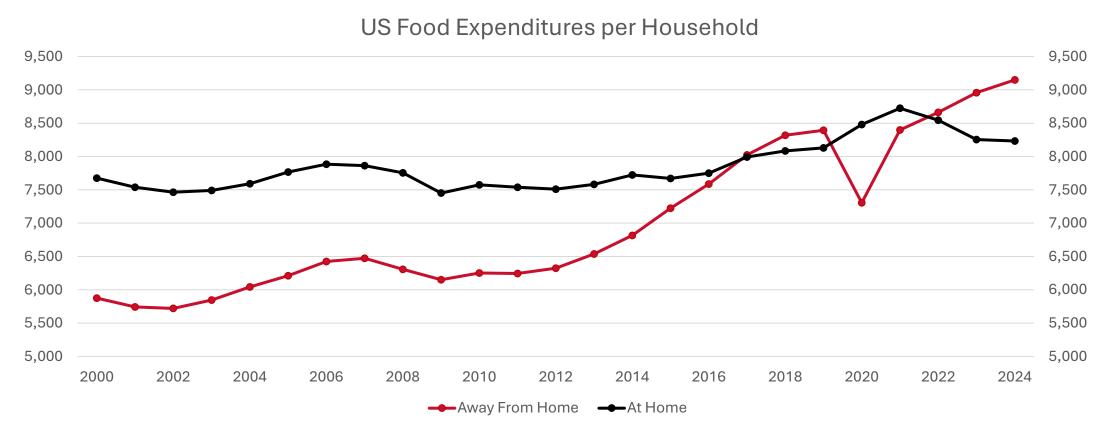




SOURCE: USDA

NOTE: 2025 PROJECTION DATA BASED ON PRODUCTION THROUGH MARCH 2025

Intermediate Risk and Opportunities: Food Purchases



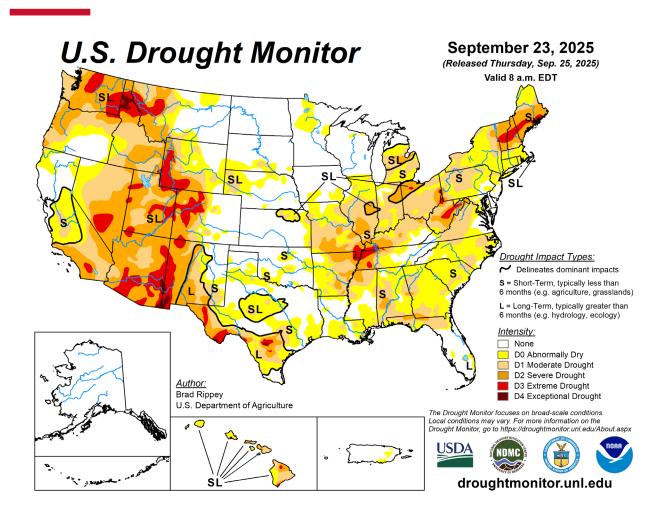
SOURCE: USDA

Intermediate Risks and Opportunities

What do they have in common?

Policy Driven: Trade, Energy, & MAHA

How will Water Policy Shape US Ag Production?



- Water drives ag production.
 - Persistent Drought
 - Flooding
- Genetics mitigates drought.
- Global groundwater reserves
 - United States
 - Brazil
 - Russia
- Farm vs Non-farm tensions.
 - Water Quality
 - Water Supplies

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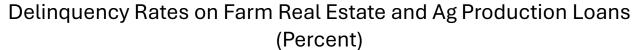


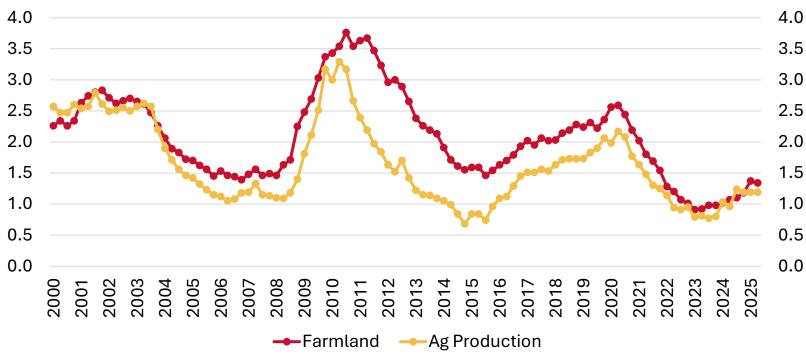
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Farm Finances: How Big of a Storm?

Farm Finances Deteriorating, But Historically Strong

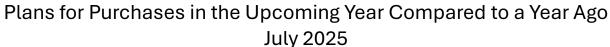


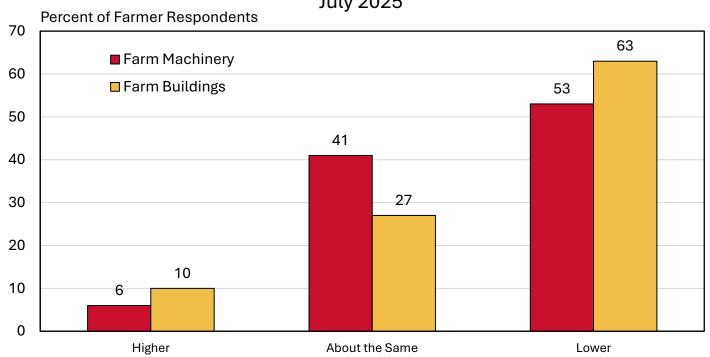


- Historically Strong Ratios
 - Debt-to-Asset
 - Working Capital
 - Delinquency Rates
- What is the burn rate on working capital?
- Who is impacted the most?

SOURCE: FEDERAL RESERVE BOARD OF GOVERNORS

Current Dynamics of US Agriculture: Capital Investment



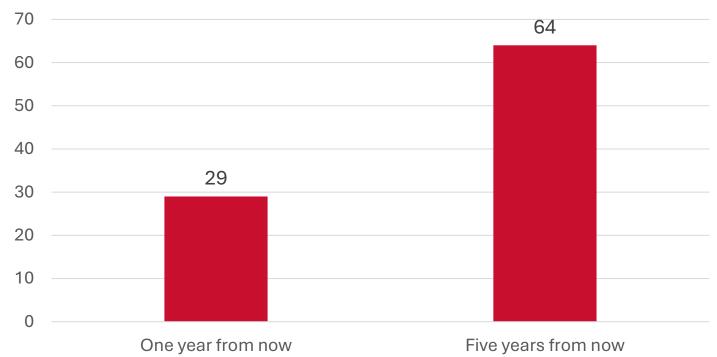


- Farm investment has slowed.
- #1 Driver: High Prices for Machinery and Construction
- Collapse in Tractor and Combine Sales is Leading to Layoffs
- How Long will this Last?

Source: Purdue/CME Ag Economy Barometer, https://ag.purdue.edu/commercialag/ageconomybarometer/

Farmland Values are Expected to Rise



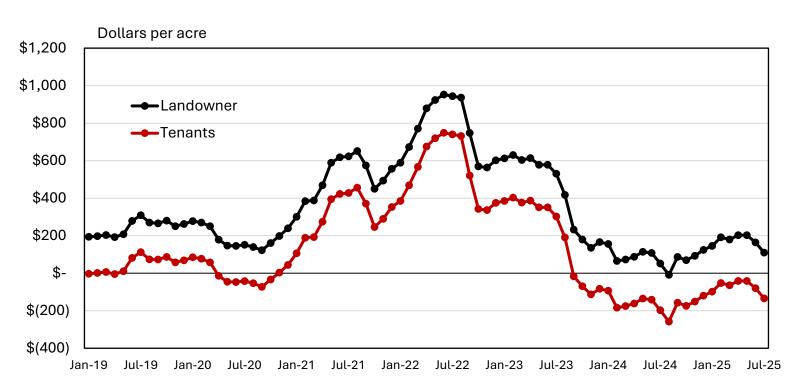


SOURCE:PURDUE/CME AGBAROMETER, JULY 2025 https://ag.purdue.edu/commercialag/ageconomybarometer/

- Farmland prices have softened, but depend on the location.
- Nonfarm demand is expected to drive prices higher.
- Can farmers resist buying land?

What about the young and beginning farmers?

Net Returns to Iowa Corn Production for Land Owners and Cash Renters



- The boom is over.
 - High input costs
 - Big supplies
 - Lower prices
- Young and Beginning Farmers
- Implications: Consolidation

Source: Ag Decision Maker, Ag Decision Maker - Iowa State University (iastate.edu)

Long-Term Strategic Questions and Implications

- Is Agriculture the Supplier of First Choice or the Residual Supplier?
- Will Globalization or Anti-Globalization Shape the U.S. Economy?
- Is the U.S. Federal Government Financially Broke?
- Do Americans Consider US Eating Habits and Food to be Healthy?
- Do Americans Believe U.S. Farmers Protect Land and Water?
- Do Americans View U.S. Farmers as Rich or Poor?
- What is the ROI of Ag Technology and AI?

Implications for Agriculture



Uncertain economic strength in US and agriculture



Challenges and Opportunities are policy-driven



Are US agriculture's strategic fundamentals shifting?