Trade, Tariffs, & the Ag Economy

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Ag Economic Summary

• Agricultural production and consumption has grown rapidly over the past several years.
  – But when production exceeds consumption, prices fall.

• Crop revenues peaked in 2012-13, while livestock revenues crested in 2014-15, leading to record farm incomes.

• Since then net farm income has been cut in half.
  – While the percentage loss is substantial, net farm income remains above levels from the early 2000’s.

• Farmers and ranchers have partially compensated for the loss in income by taking on higher debt loads.
  – Farm and ranch balance sheets are eroding and financial stress is building for some producers, but the financial issues are not as severe as during the 1980’s.

• If agricultural prices slowly improve (as projected), the squeeze on farm finances will improve as well. But for some producers, the squeeze may be too much.
Iowa’s Economy as an Example

- Manufacturing: 19%
- Government: 11%
- Real estate: 11%
- Finance and insurance: 10%
- Agriculture: 7%
- Health care: 7%
- Wholesale trade: 6%
- Retail trade: 6%
- Transportation and warehousing: 3%
- Professional services: 3%
- Information: 3%
- Utilities: 2%
- Other: 8%
- Arts and recreation: 1%
- Mining: 0%
Links to Manufacturing

- Manufacturing: 19%
- Government: 11%
- Real estate: 11%
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Farm Machinery
Links to Government

- Manufacturing: 19%
- Real estate: 11%
- Finance and insurance: 10%
- Agriculture: 7%
- Health care: 7%
- Wholesale trade: 6%
- Retail trade: 6%
- Construction: 4%
- Transportation and warehousing: 3%
- Professional services: 3%
- Information: 3%
- Utilities: 2%
- Arts and recreation: 1%
- Mining: 0%
- Other: 8%

Dept. of Ag.
Links to Real Estate

- Manufacturing: 19%
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Farm Leases
Links to the Rest of the Economy

- Manufacturing: 19%
- Government: 11%
- Real estate: 11%
- Finance and insurance: 10%
- Agriculture: 7%
- Health care: 7%
- Wholesale trade: 6%
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Why do U.S. farmers need export markets?

- That’s where the customers are
- That’s where the economic growth is
- That’s where the consumption growth is
- We produce surpluses
- We only eat high on the hog
- Exports are crucial to farm income
96% of the world’s population lives outside the US

- China: 19%
- India: 17%
- Other Asia: 26%
- Rest of the World: 34%
- U.S.: 4%

Source: CIA World Factbook
Population growth 2017 to 2050

Source: World Bank
Economic growth rates

Source: CIA World Factbook
Income growth will drive increased global demand

Households w/ Real PPP incomes greater than $20,000 (millions)

<table>
<thead>
<tr>
<th>Country</th>
<th>2016</th>
<th>Proj. gains by 2026</th>
</tr>
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<tbody>
<tr>
<td>China</td>
<td>151</td>
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<tr>
<td>India</td>
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<td>Indonesia</td>
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<td>Mexico</td>
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<td>Egypt</td>
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<td>Turkey</td>
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<td>South Korea</td>
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<td>Thailand</td>
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<td>Vietnam</td>
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<tr>
<td>Colombia</td>
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</tbody>
</table>

Data: Global Insight’s Global Consumer Markets data.
Share of U.S. Agriculture Exported in 2016

- >20% Cherries
- >30% Grapes
- 15% Apples
- >70% Cotton
- >70% Tree Nuts
- 50% Soybeans
- >50% Wheat
- >50% Sorghum
- >50% Rice
- 15% Corn
- 15% Dairy
- 15% Poultry
- 20% Pork
- 10% Beef

More than 20% of total U.S. agricultural production is exported annually.

Twitter: @USDAForeignAg  Website: www.fas.usda.gov
Source: USDA-FAS Global Agricultural Trade System (GATS)

United States Department of Agriculture
Foreign Agricultural Service

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Top ten US ag export markets, 2016

Source: US Census Bureau, Foreign Trade Statistics, FATUS export aggregations
Top 10 ag exporting states, 2016

Pork Export Shifts

Source: USDA-FAS

- South Korea: 46.2%
- Mexico: 5.4%
- Japan: 1.7%
- Canada: 6.2%
- Colombia: 53.5%
- Australia: 25.7%
- Philippines: 6.6%
- China: -63.6%
- Hong Kong: -32.2%
- Chile: -8.8%
- Other: -10.1%
- Total: 3.1%

1,000 Metric Tons
Sorghum Export Shifts

Source: USDA-FAS

China: 45.8%

Japan: -7.4%
Mexico: -77.6%
Colombia: 0.0%
South Africa: -89.0%
Taiwan: 345.5%
Vietnam: 0.0%
South Korea: -60.0%
Other: -49.8%
Total: 24.1%
Soybean Export Shifts

Source: USDA-FAS

- China: -19.7%
- EU: -17.0%
- Japan: -5.4%
- Mexico: 19.3%
- Indonesia: 6.4%
- Egypt: 189.4%
- Taiwan: 26.3%
- Thailand: 40.9%
- Pakistan: 47.9%
- Vietnam: 38.5%
- Other: 47.1%
- Total: -3.4%
Corn Export Shifts

Source: USDA-FAS

- Mexico: 5.4%
- Japan: -8.5%
- South Korea: -2.8%
- Colombia: -2.6%
- Peru: -2.6%
- Taiwan: -26.1%
- EU: 347.8%
- Vietnam: 285.4%
- Egypt: 175.6%
- Saudi Arabia: -50.1%
- Other: -0.2%
- Total: -1.6%

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Wheat Export Shifts

Source: USDA-FAS
Rice Export Shifts

- Mexico: -17.7%
- Japan: -7.4%
- Haiti: -9.0%
- Honduras: -1.1%
- Venezuela: -42.7%
- Canada: -7.3%
- Guatemala: 11.3%
- Iraq: 96,000 metric tons
- South Korea: -60.1%
- Other: -40.2%
- Total: -18.7%

Source: USDA-FAS
Cotton Export Shifts

Source: USDA-FAS

Vietnam 24.9%
China 22.1%
Turkey 8.3%
Indonesia 28.7%
Pakistan 63.0%
Mexico 0.0%
Bangladesh 69.3%
South Korea 4.6%
Thailand 33.1%
India -28.7%
Other 3.7%
Total 18.4%
Ethanol Exports

Source: EIA
Population vs. arable land

<table>
<thead>
<tr>
<th>Country</th>
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<th>Share of global arable land</th>
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<td>10%</td>
</tr>
<tr>
<td>US</td>
<td>4%</td>
<td>13%</td>
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Arable land
Inherent Land Quality Assessment
Want to provide feedback on my presentation?

https://www.surveymonkey.com/r/ChadHart
Thank you for your time!

Any questions?

My web site:  
http://www2.econ.iastate.edu/faculty/hart/

Iowa Farm Outlook:  
http://www2.econ.iastate.edu/ifo/

Ag Decision Maker:  
http://www.extension.iastate.edu/agdm/