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Trade and the Ag Economy

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Some Perspective

“As we know, there are **known knowns**; these are things we know we know. We also know there are **known unknowns**; that is to say we know there are some things we do not know. But there are also **unknown unknowns**- the ones we don’t know we don’t know.”

- Donald Rumsfeld
Where are we in the cycle?
Real Net Farm Income (2018 USD), 1929-2018
Demand

U.S. Soybean Exports

- Bushels Exported
- Share of Production (%)

Bushels (Millions)

% of Production

- 1964/1965
- 1967/1968
- 1971/1972
- 1976/1977
- 1979/1980
- 1982/1983
- 1985/1986
- 1988/1989
- 1991/1992
- 1994/1995
- 2000/2001
- 2003/2004
- 2006/2007
- 2009/2010
- 2012/2013
- 2015/2016
- 2018/2019
Demand

China: Soybeans

- Production
- Domestic Consumption
- Share of Global Imports

1,000 Metric Tonnes

Share of Global Imports

China’s Acreage Gap

China: Acres Harvested & Acreage Equivalent of Domestic Consumption

Consumption: 413 million
Harvested Acres: 289 million
Gap: -124 million
(43% of harvested acres)
Supply Response: Global acres

- Up 249 million since 2000 (12%)
- South Am.: 78m
- Sub S Africa: 62m
- FSU: 42m
- E Asia: 20m
- Largest ever decline was in 87/88
Recent Yields Have Been Really Good

Use some caution when budgeting!
Corn vs Soybean: Be Careful

Michigan
Corn: +4% (7bpa)
SB: +6% (3bpa)
Farm Financial Conditions
Working Capital: Warning Signal

Working Capital to Gross Revenue Ratio, U.S. Farm Sector 2009-2018
Debt Service: Warning Signal

Debt Service Ratio, U.S. Farm Sector 1990-2018
Debt Service + Operating Exp.

Debt Service Ratio, U.S. Farm Sector 1990-2018

Operating Expense Ratio, U.S. Farm Sector 1990-2018
Farm Debt

About 65% of all farms have no debt

Farms with >$1 million in sales = 50% of all farm debt
Farm Loan Delinquency Higher, Historically Low
What Costs Will Adjust to Alleviate Margin Pressure?

Percent of Total Expenses, HQ IN Farmland, Average 1991-2015

- Land, 35%
- Machinery, 16%
- Fam Lab, 9%
- Fertilizer, Seed, and Pesticides, 26%
- Oth Var, 14%

Source: Derived from Purdue Crop Budgets, ID-166, Corn-Soybean Rotation
Machinery Costs and Investment

• Machinery investment varies drastically

• This is one of the fixed costs that needs to adjust

Farmland Valuation: A Review

- Asset Value
- Income
- Capitalization Rate

\[
\frac{\text{Rental Rate}}{\text{Farmland Values}} = \text{Cap Rate}
\]

\[
\frac{\$210}{\$7,000} = 3\%
\]

\[
\frac{\text{Rental Rate}}{\text{Cap Rate}} = \text{Farmland Values}
\]
Income cannot support rents at these levels
Farmland Capitalization Rates and Interest Rates on 10 Year US Treasury Bonds, 1967-2017

Sources: Data were compiled from various Land Values and Cash Rent Summary reports published by the National Agricultural Statistics Service.
Very dependent upon low cap rates

\[
\text{FarmlandValues} = \frac{(\text{RentalRate})}{(\text{Cap Rate})}
\]

Land Values Under Alternative Capitalization Rates (Multiples) and Income Levels

- **3% (33)**
- **4% (25)**
- **5% (20)**

2018 Value Avg Quality IN Farmland $7,072

2018 Cash Rental Rate Avg Quality IN Farmland, $210 per Acre
Trade
Where do US Ag Exports Go?

- Three largest export markets in 2015
- Combined: 44% of total U.S. ag exports
- 1990 = 19%
1) 6% Decrease in 2 years (2.6 million acres)
2) 11% Decrease in ‘18/’19 Expectations from June to July (5.2 million acres)

The Worst is Past? Just Getting Started?
China & Soybeans Consumption, Imports, & Ending Stocks:
China & Soybeans: The Starting Point Matters

1) Ending Stocks: -18%
2) Stock to Use:
   ->22% ('17/'18)
   ->15% ('18/'19)
China & Beef: The New Soybean?
The Hard (or Easy) Part about a Trade War Resolution

• What does a better deal need to include??
  • National Security Needs?
  • Reduce the Trade Deficit?
    • More Exports??
    • Fewer Imports??
  • Reform China’s Monetary Policy
  • Intellectual Property?
The Hard (or Easy) Part about a Trade War Resolution

“If you don’t know where you’re going, you might not get there.” – Yogi Berra

“If you don’t know where you are going, any road will get you there.” – Lewis Carroll
What about Trade Aid??

• Direct payments through the Market Facilitation Program

• Big checks: soybeans and cotton

• 2\textsuperscript{nd} 50\% of production payment in limbo...

\begin{center}
\begin{tabular}{|c|c|c|}
\hline
\textbf{Commodity} & \textbf{Initial Payment Rate} & \textbf{Est. Initial Payment**} \\
\hline
Cotton & $0.08/\text{lb.}$ & $276,900$ \\
\hline
Corn & $0.01/\text{bu.}$ & $86,000$ \\
\hline
Dairy (milk) & $0.12/\text{cwt.}$ & $127,400$ \\
\hline
Pork (hogs) & $8.00/\text{head}$ & $290,300$ \\
\hline
Soybeans & $1.65/\text{bu.}$ & $3,829,700$ \\
\hline
Sorghum & $0.85/\text{bu.}$ & $156,800$ \\
\hline
Wheat & $0.14/\text{bu.}$ & $119,200$ \\
\hline
\textbf{Total} & & $4,695,300$ \\
\hline
\end{tabular}
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Real Net Farm Income (2018 USD), 1929-2018
Summary Points

• Initially: text-book global oversupply issue
  • Yields haven’t helped

• Today: Demand (a different ball game)

• Improvements have been underway... more needed
  • Lower Variable Costs, Lower Fixed Costs, (Mostly) Higher Commodity Prices

• The “impacts” have varied by commodity, region, farm

• Liquidity issues
David’s Watch List – Known Unknown

• Net Farm Income
  • Recovery in 2019? 2020?

• Trade and Demand Destruction
  • How Long Does Trade War Last. Recovery?
  • E15 to save the day?

• Macro Economy
  • Interest Rates
  • Impact of U.S Imposed Tariffs
What’s Going Well-

• Wheat Economics Have Improved
  • Combined Corn/Soybean Acres Turned Lower in 2018
• Global Acreage Expansion Has Stalled
• Budgets have greatly improved
• Trade Aid will provide temporary help (a band aid)
• The Starting Point Matters- Farm Economy Started From a Strong Position
• USMCA Trade Agreement... or NAFTA 2.0
Farm Booms Always End.

How they end is the concern.
Where are we in the cycle?
The Future is Bright

"May your choices reflect your hopes, not your fears."

- Nelson Mandela
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