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Trade and the Ag Economy

Michigan Agricultural Credit Conference

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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?



PRODUCTION AG BUSINESS CYCLE

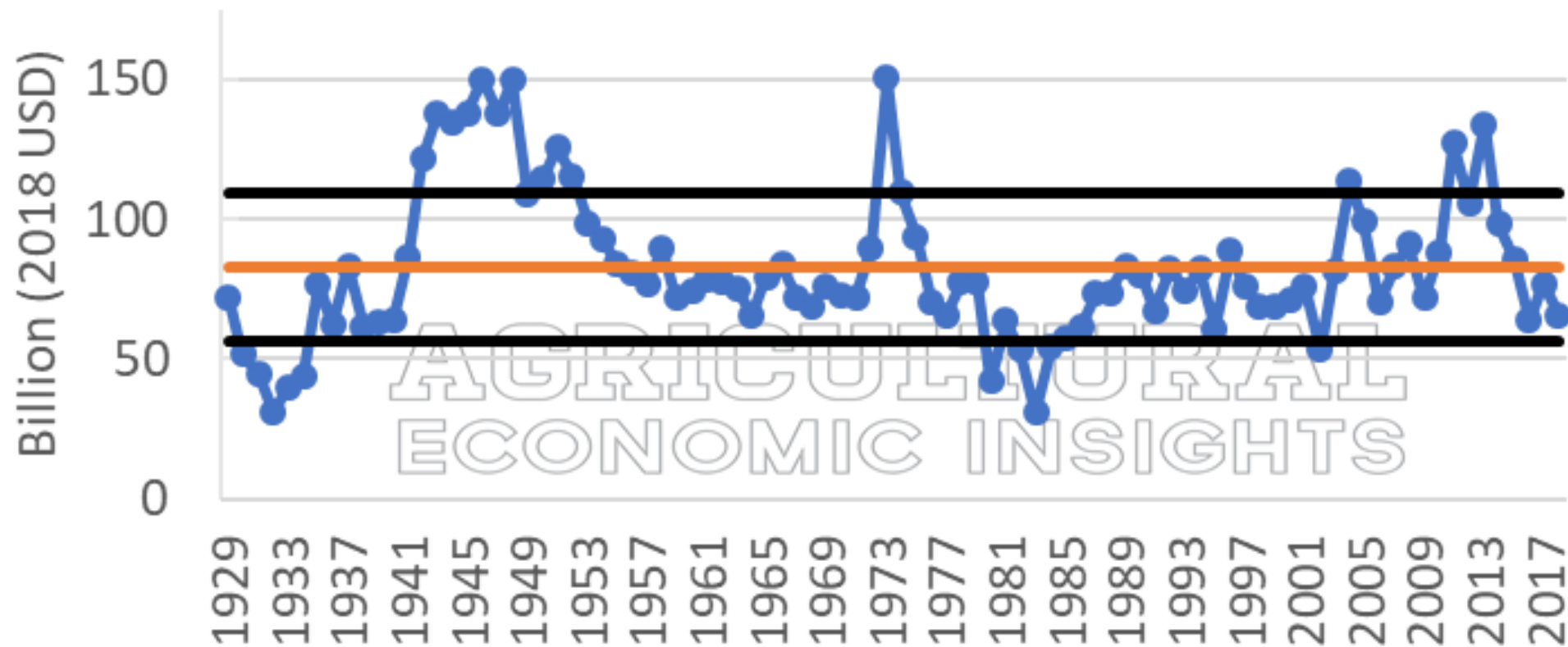

AGRICULTURAL
ECONOMIC INSIGHTS



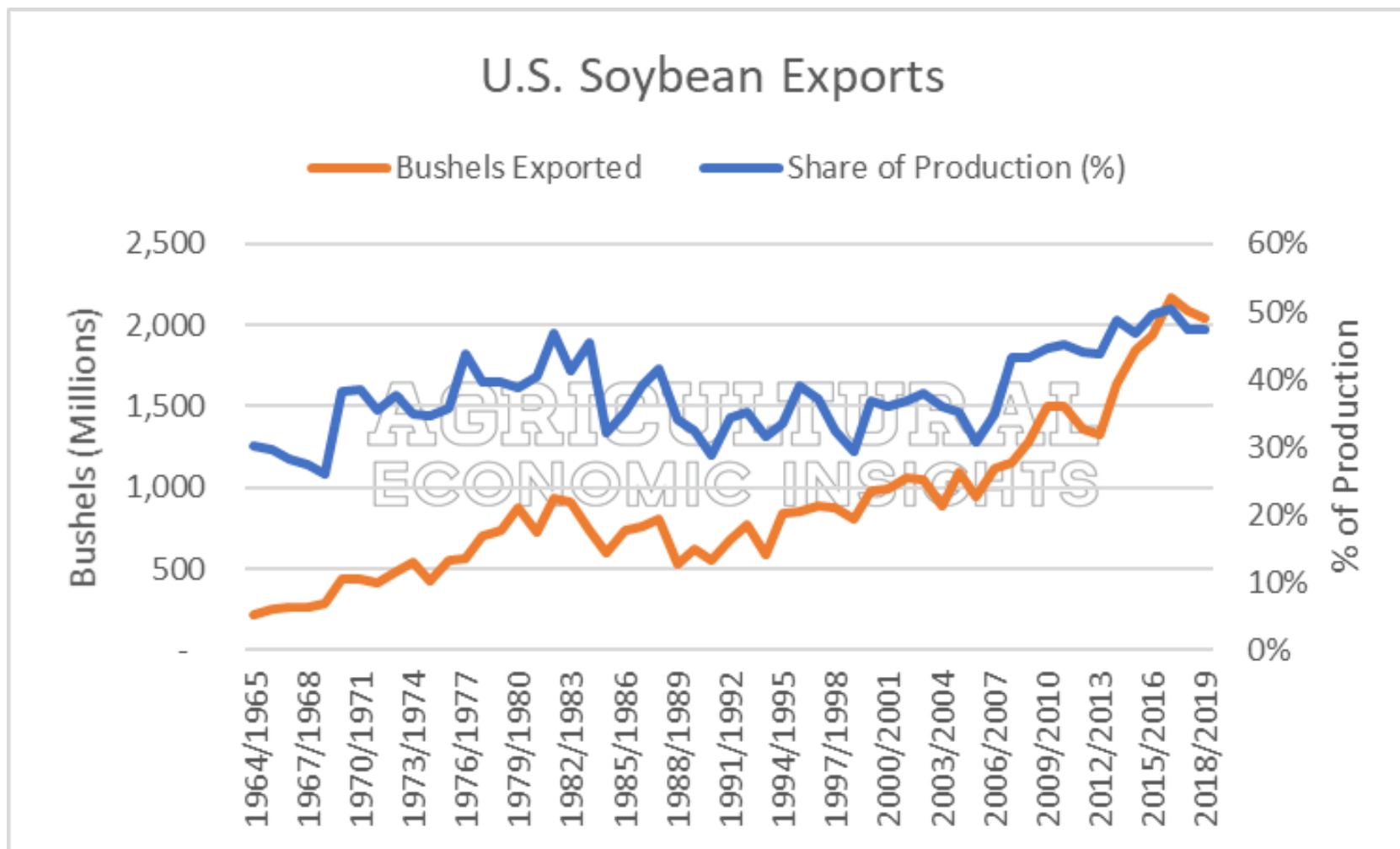
- 1 DEMAND SHIFT CREATES STRONG PROFITS
- 2 COST STRUCTURE RISES AND ACRES EXPAND
- 3 EXPANDED PRODUCTION MATCHING/
EXCEEDING DEMAND

- 4 VARIABLE EXPENSES DECLINE
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COMMODITY PRICES MODERATE

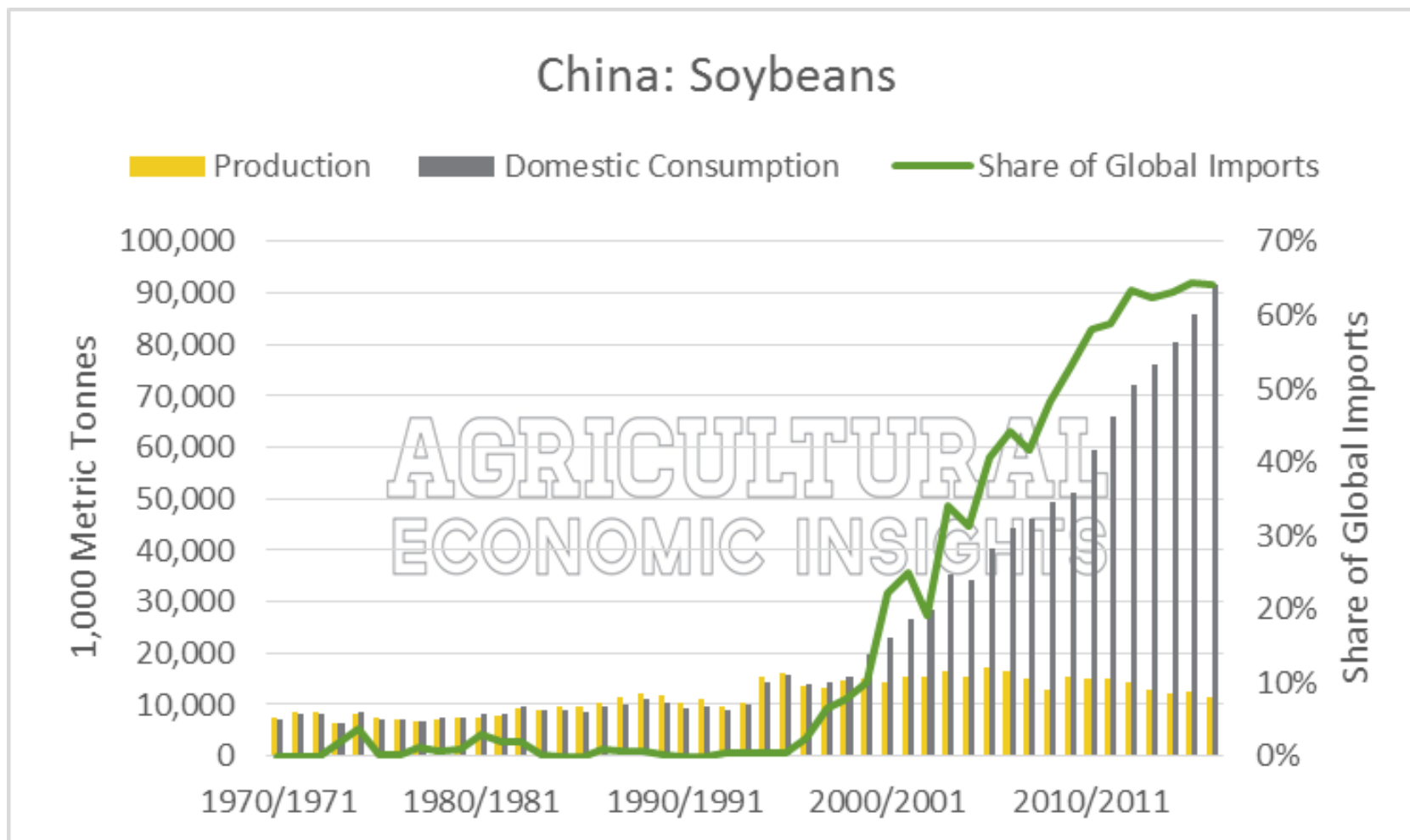
Real Net Farm Income (2018 USD), 1929-2018



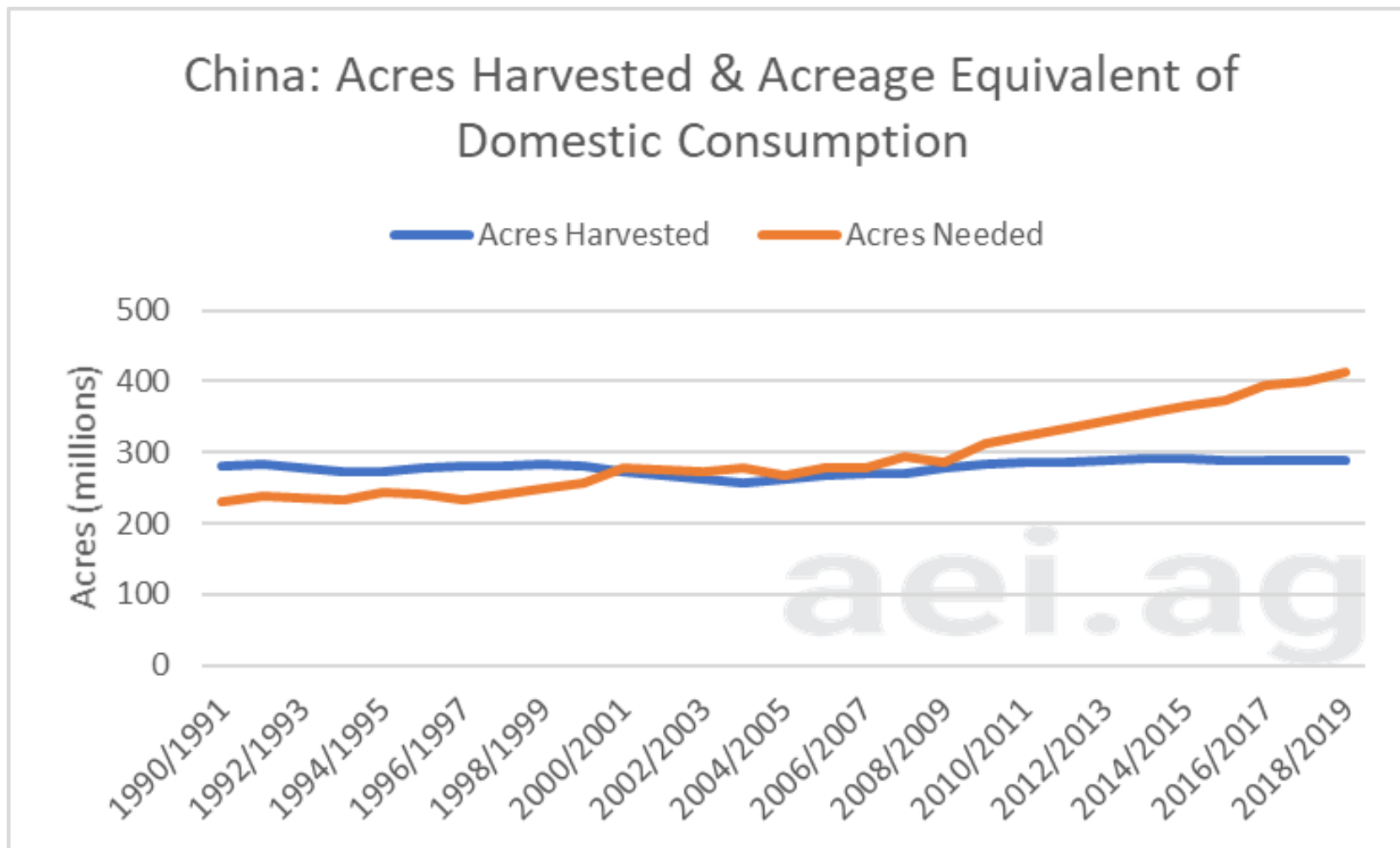
Demand



Demand



China's Acreage Gap



Consumption:

413 million

Harvested Acres:

289 million

Gap:

-124 million

(43% of harvested acres)

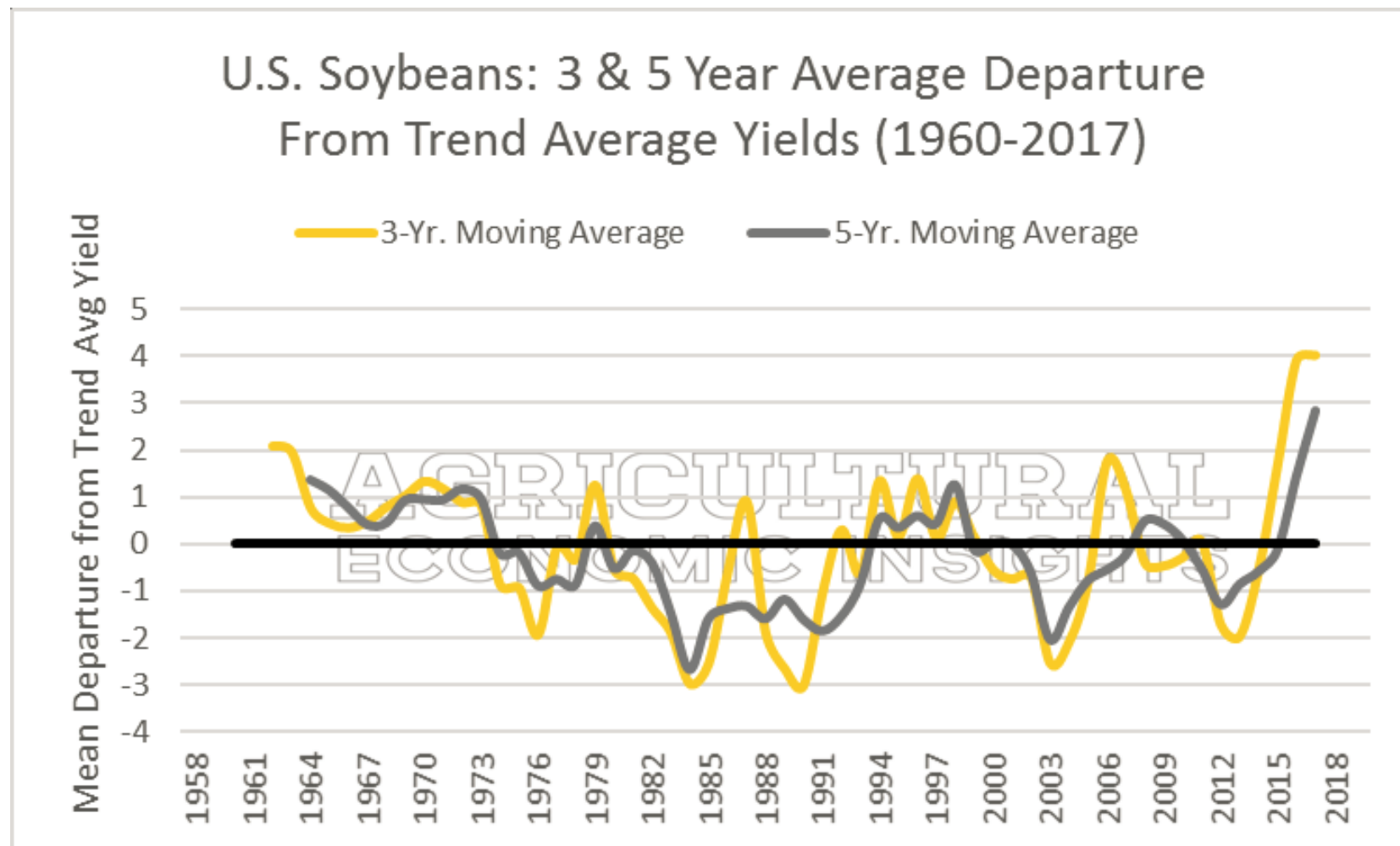
Supply Response: Global acres

- 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

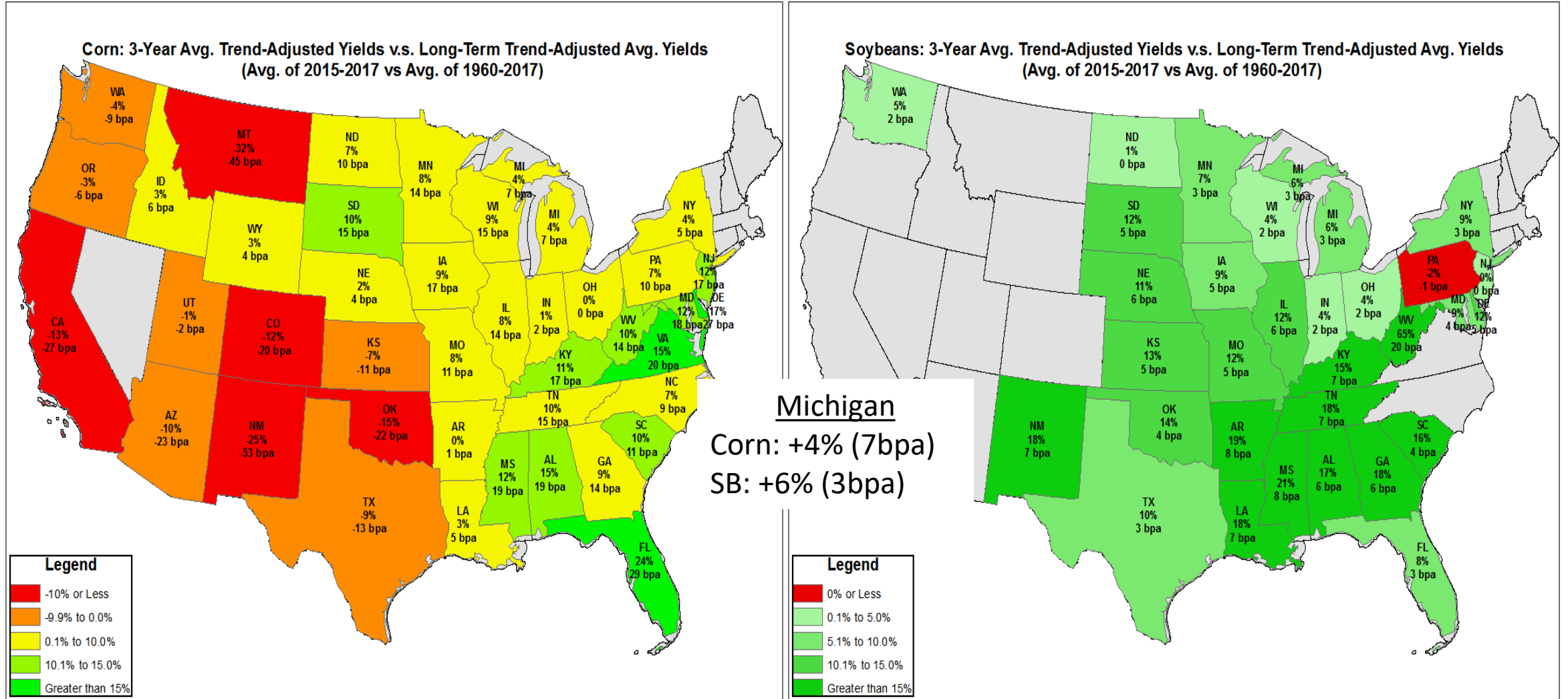


Recent Yields Have Been Really Good

Use some caution
when budgeting!



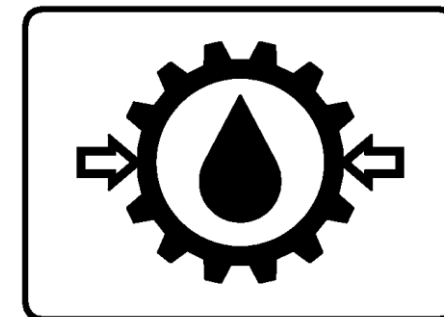
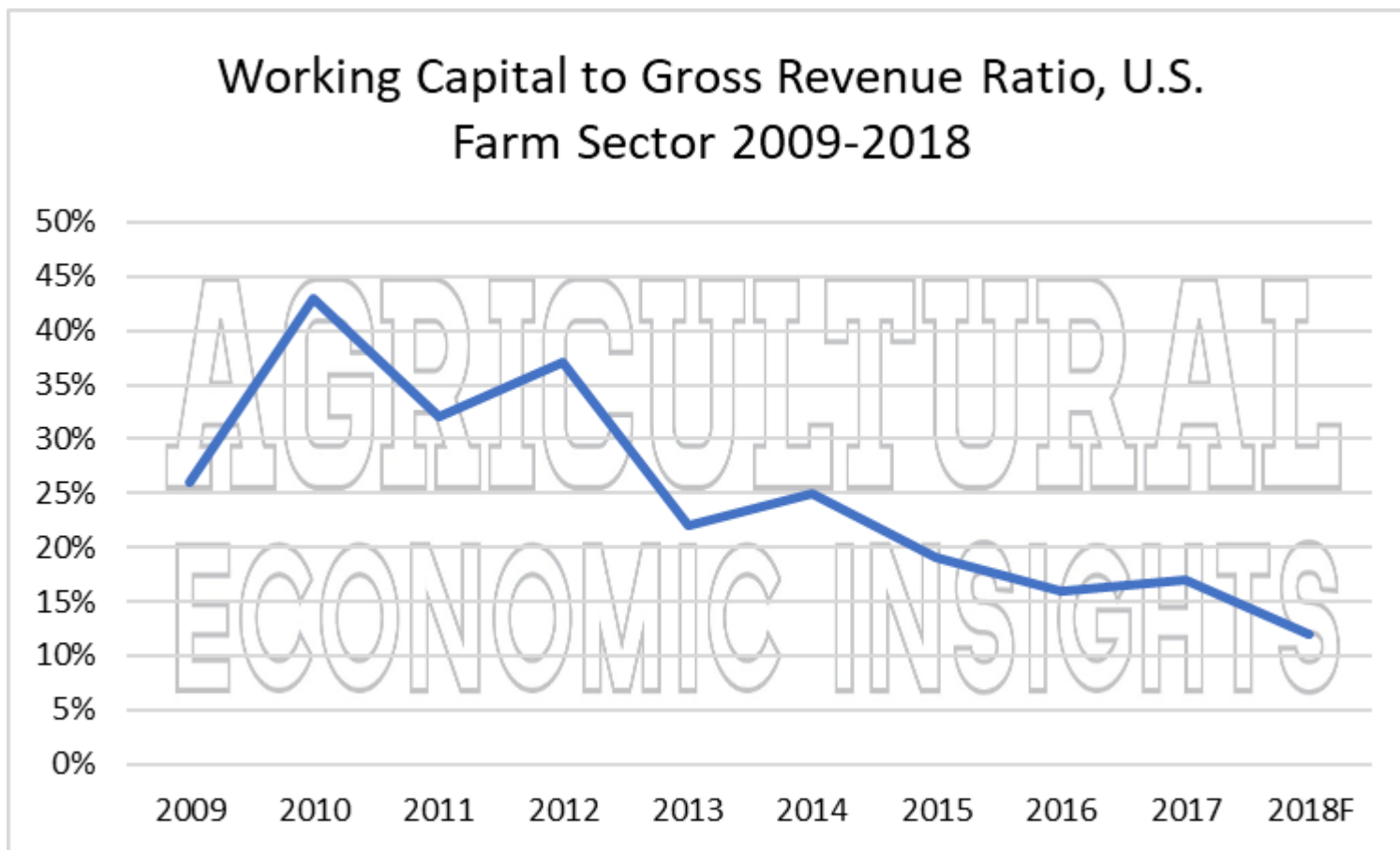
Corn vs Soybean: Be Careful



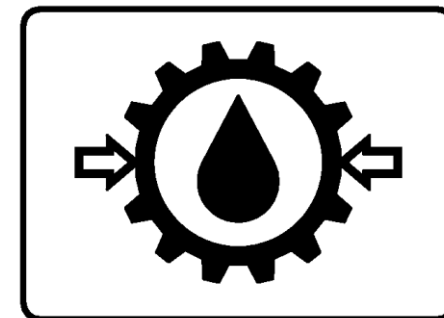
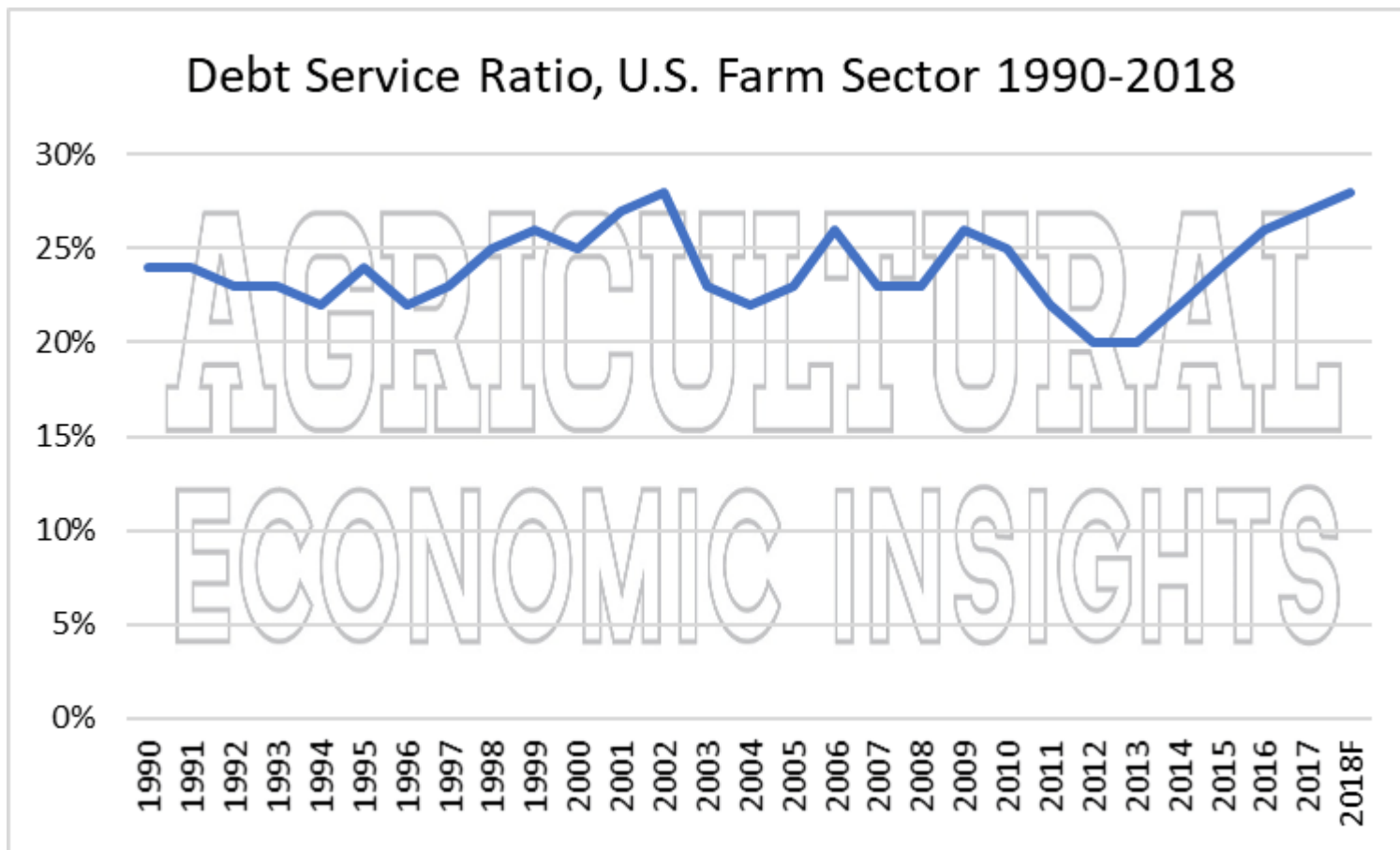


Farm Financial Conditions

Working Capital: Warning Signal

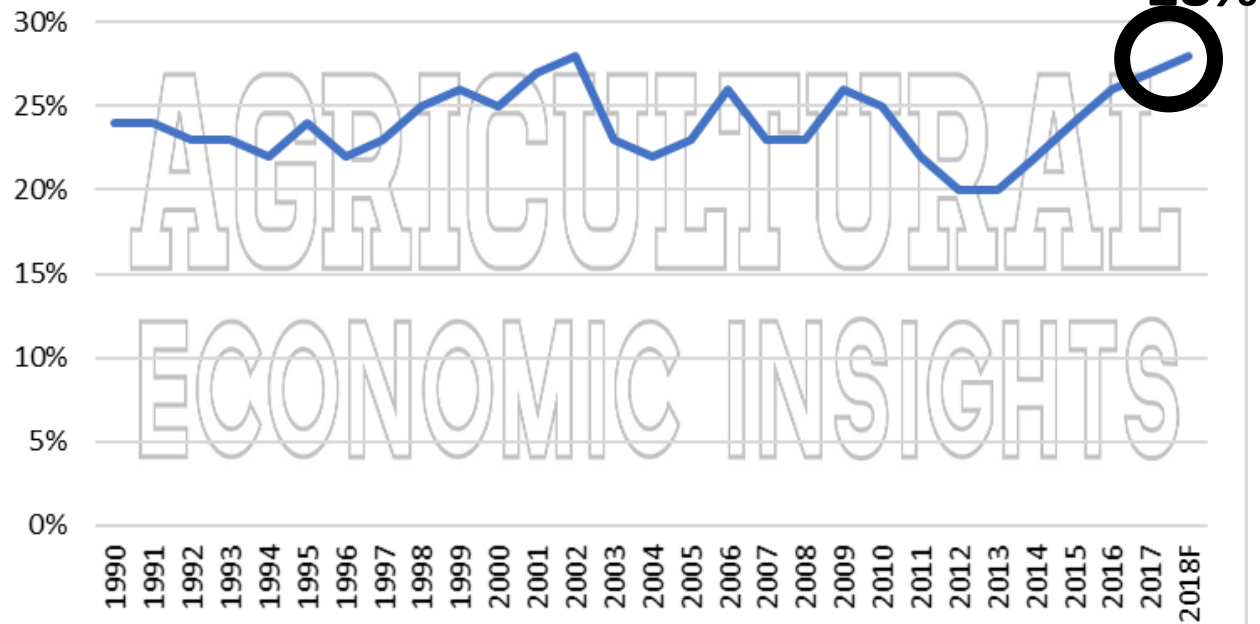


Debt Service: Warning Signal

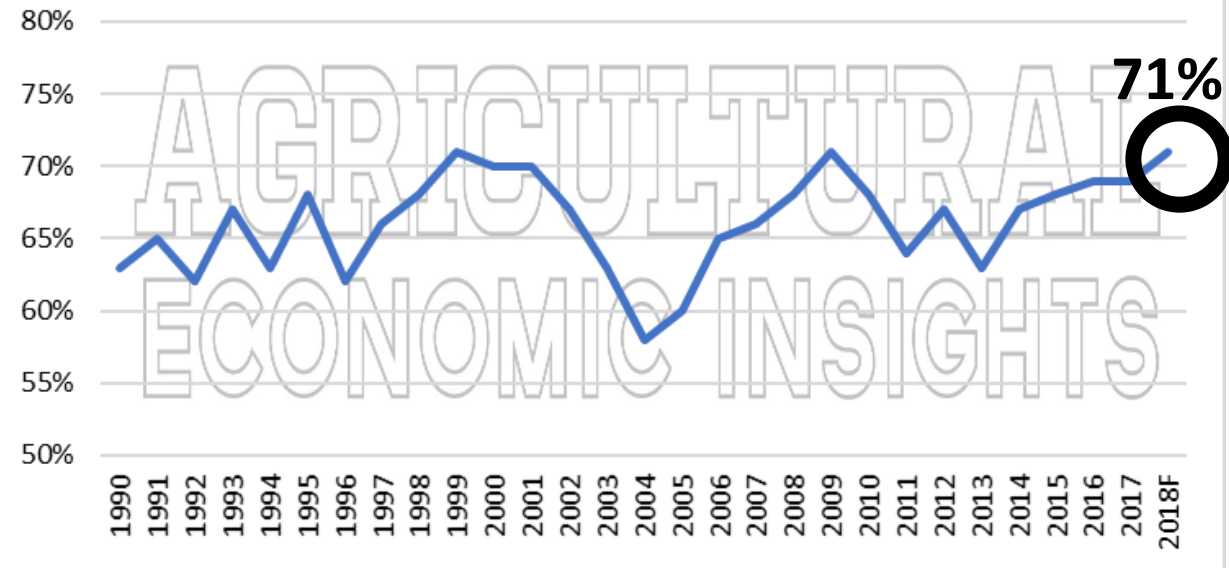


Debt Service + Operating Exp.

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

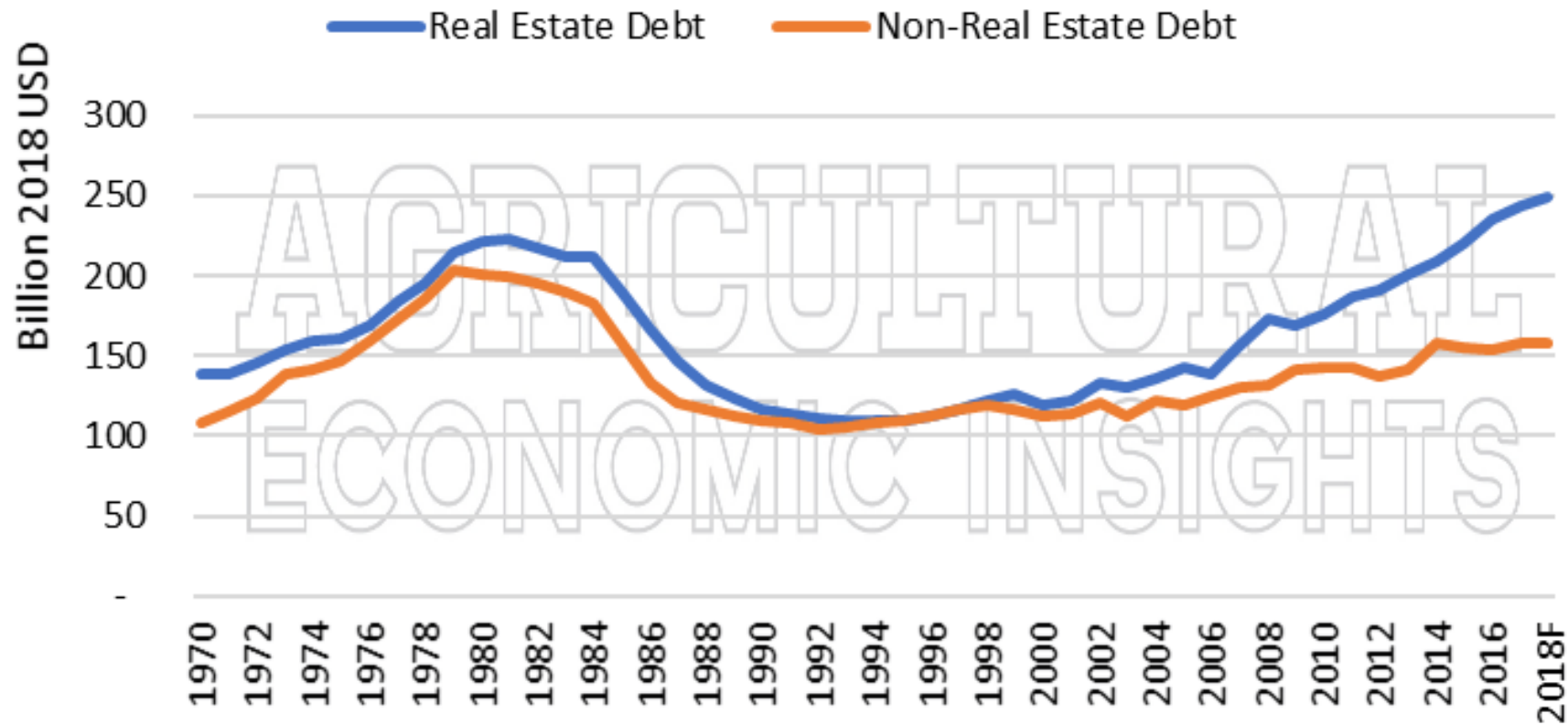


Operating Expense Ratio, U.S. Farm Sector 1990-2018



Farm Debt

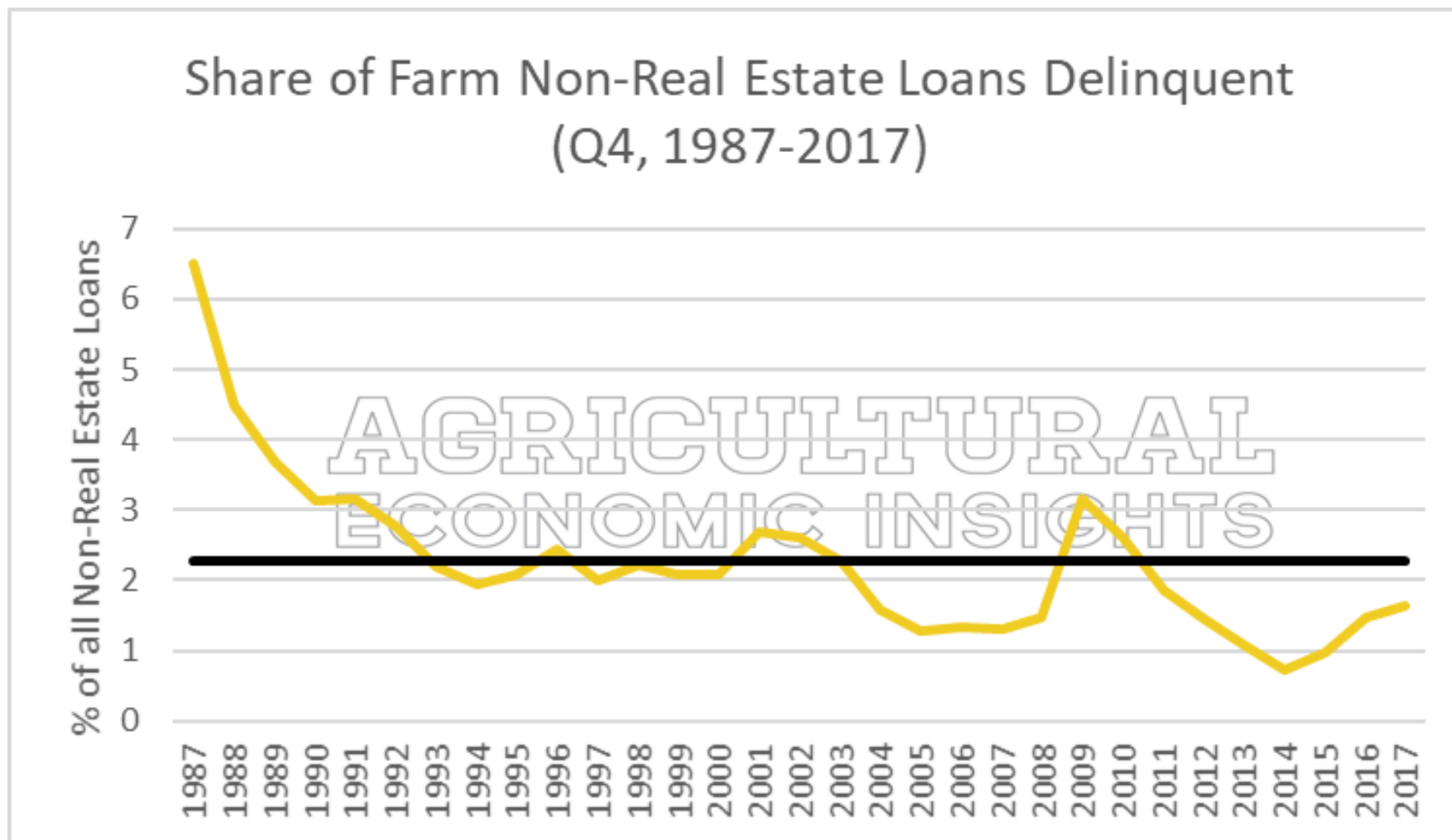
U.S. Farm Sector Real Estate and Non Real Estate Debt (Real 2018 USD), 1970-2018f



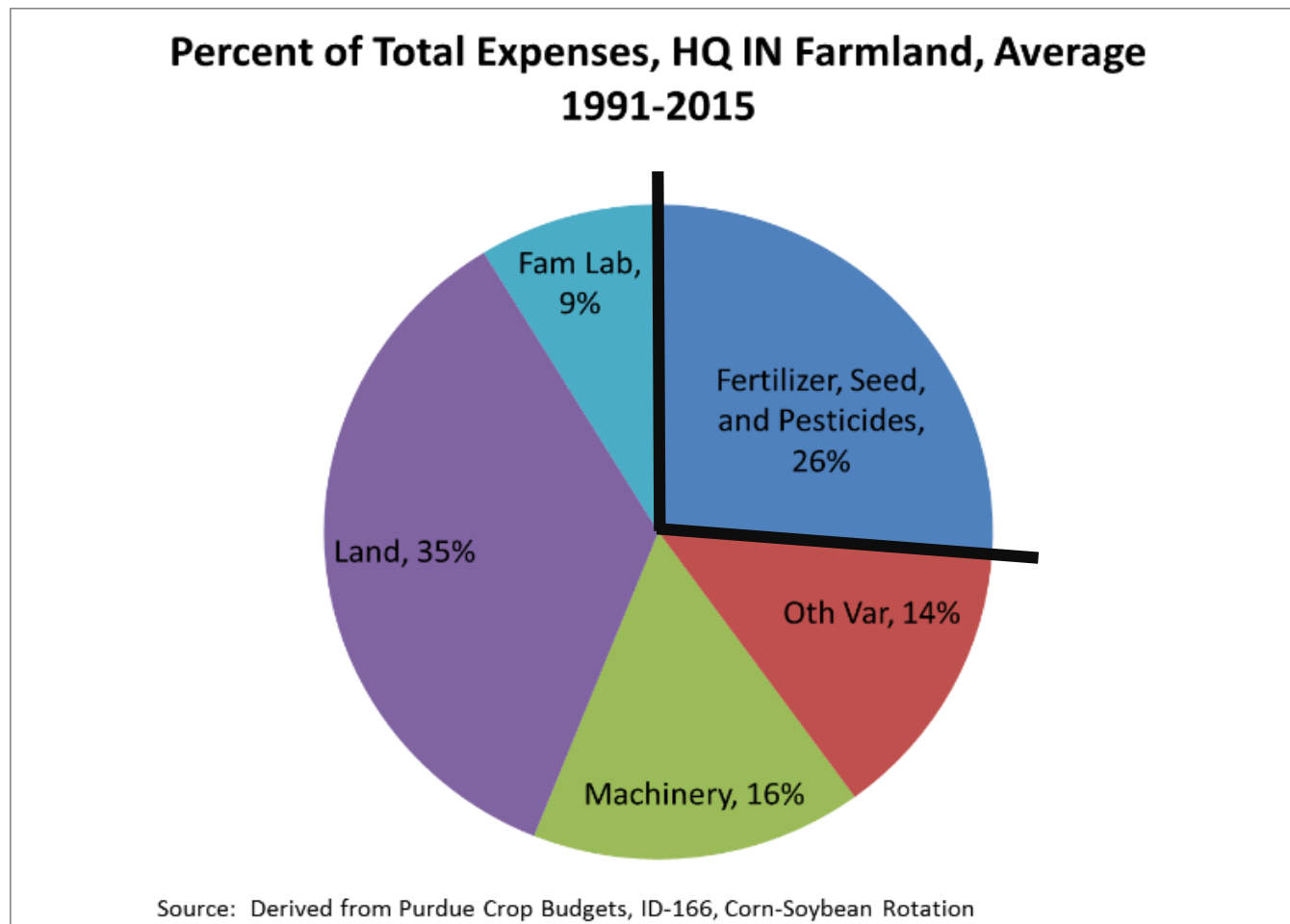
About 65% of all farms have no debt

Farms with >\$1 million in sales = 50% of all farm debt

Farm Loan Delinquency Higher, Historically Low



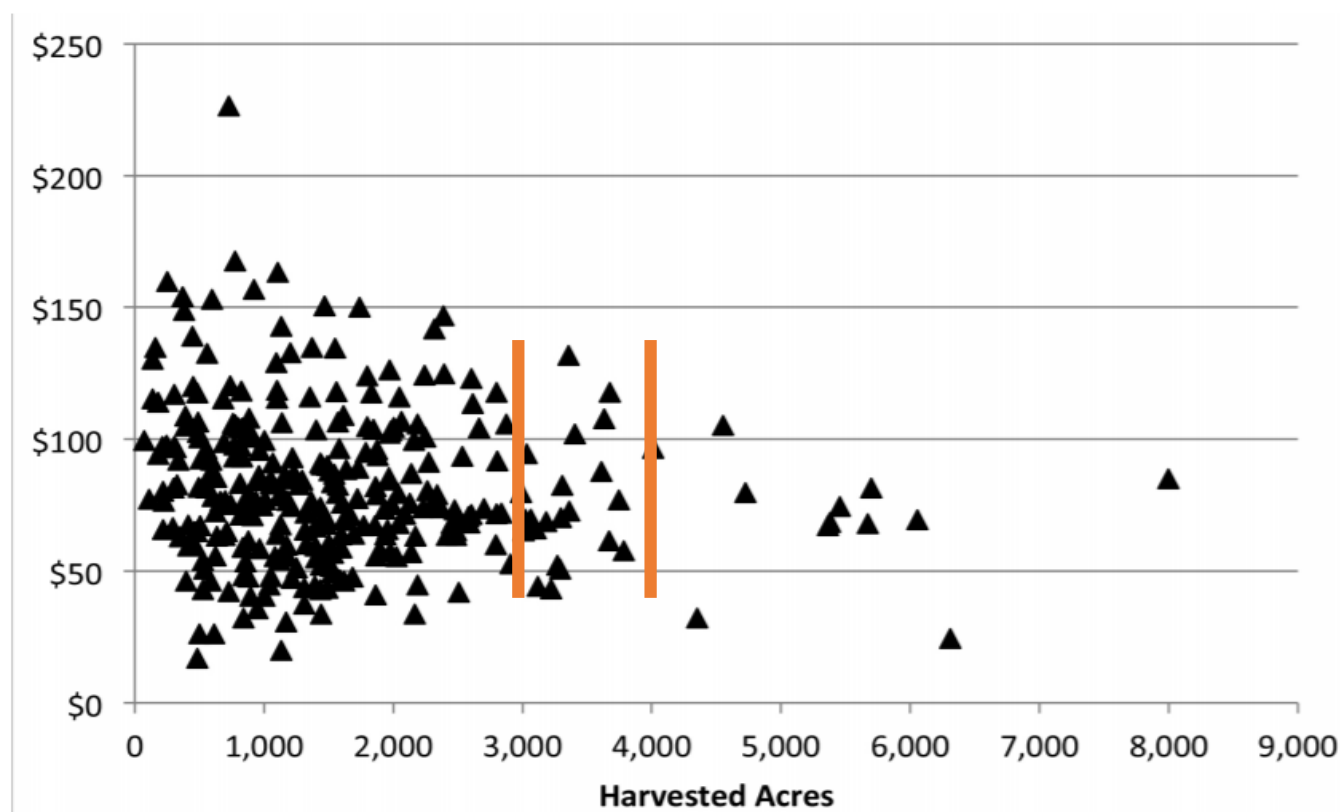
What Costs Will Adjust to Alleviate Margin Pressure?



Machinery Costs and Investment

Crop Machinery Cost per Acre

- Machinery investment varies drastically
- This is one of the fixed costs that needs to adjust





Farmland

Farmland Valuation: A Review

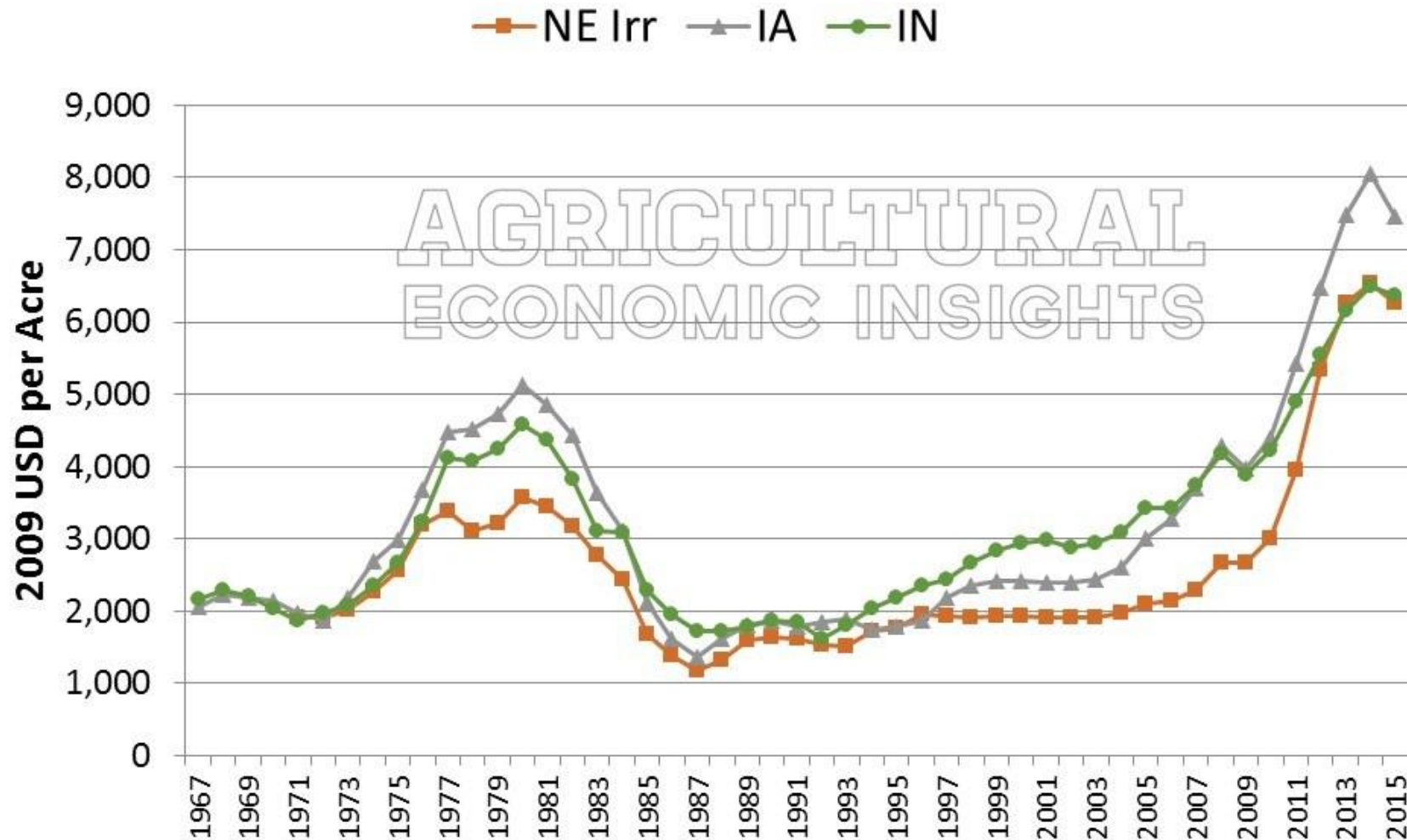
- Asset Value
- Income
- Capitalization Rate

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

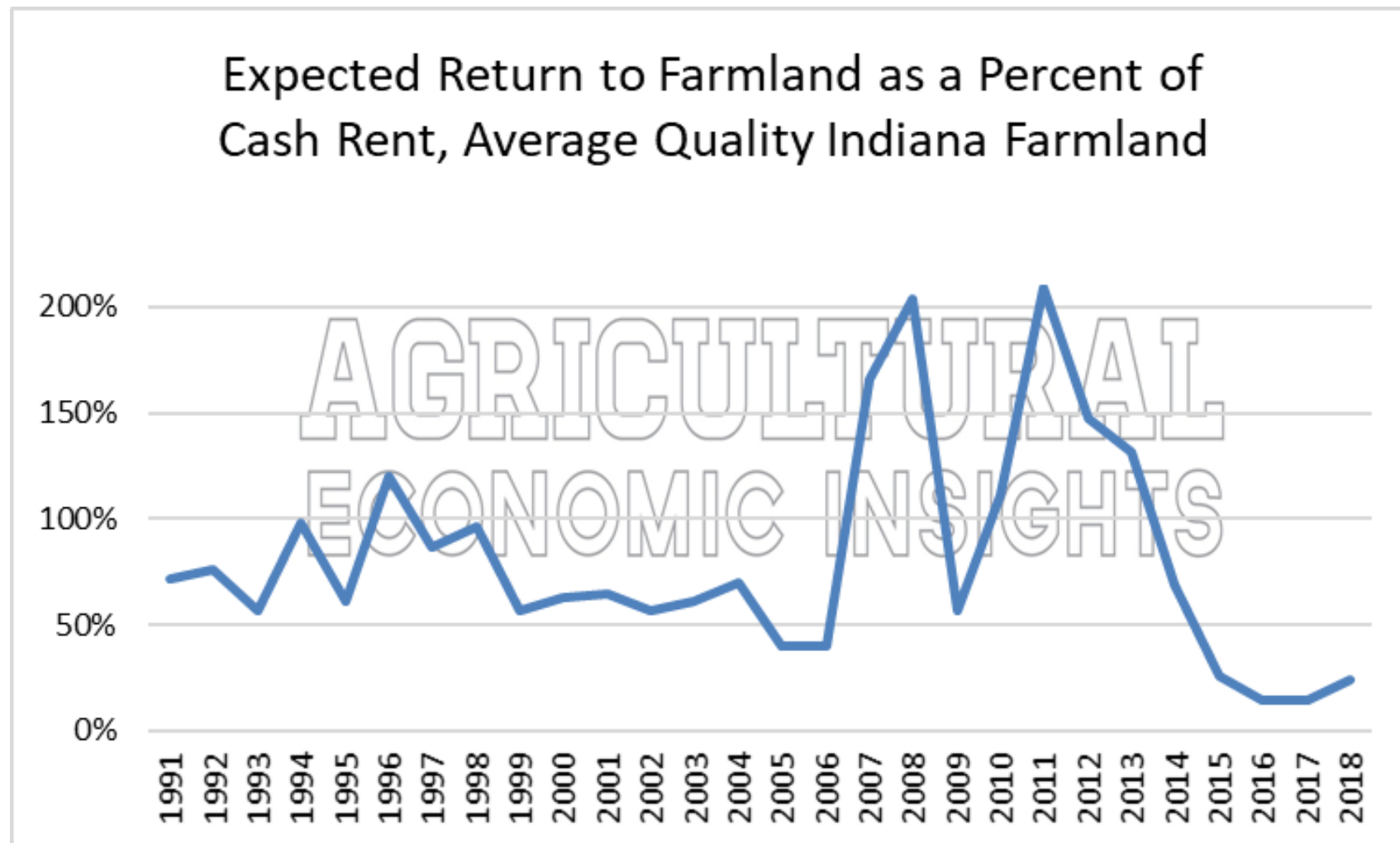
$$\frac{(\$210)}{(\$7,000)} = 3\%$$

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

Real Farmland Values (2009 \$'s) for IA, IN, and NE Cropland, 1967-2015

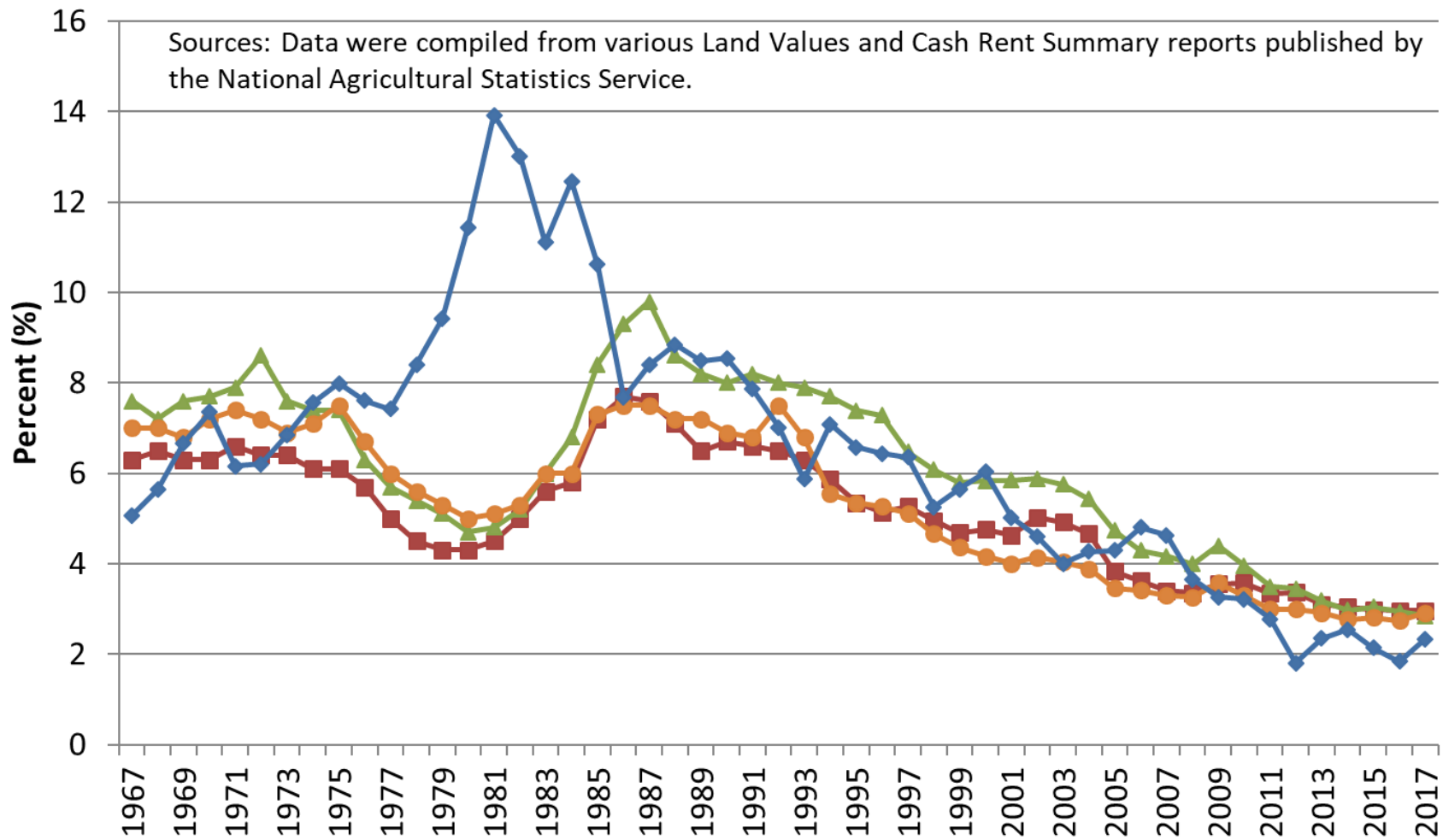


Income cannot
support rents at
these levels



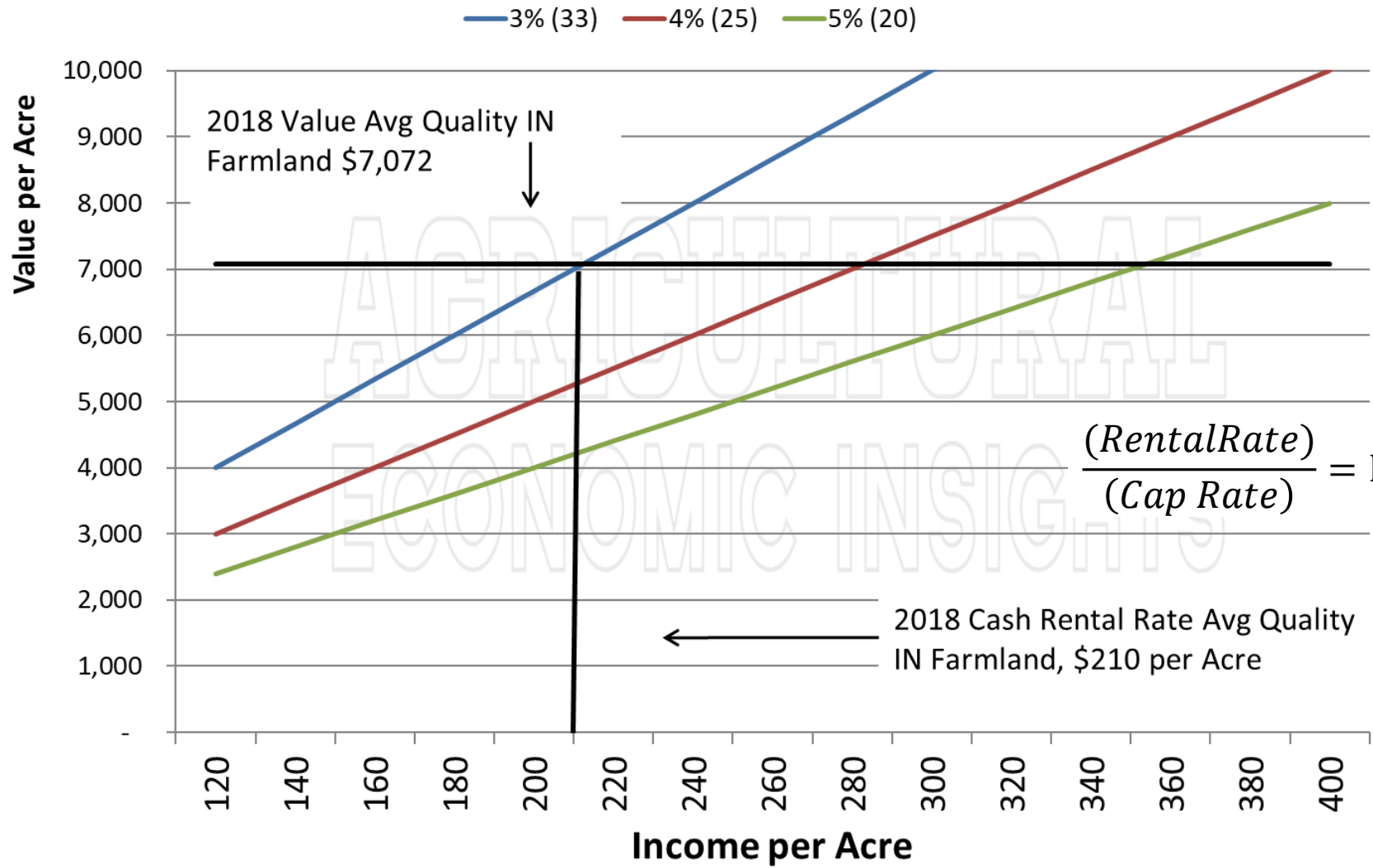
Farmland Capitalization Rates and Interest Rates on 10 Year US Treasury Bonds, 1967-2017

■ IL
 ▲ IA
 ● IN
 ◆ 10Y T-Bond



**Very
dependent
upon low
cap rates**

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



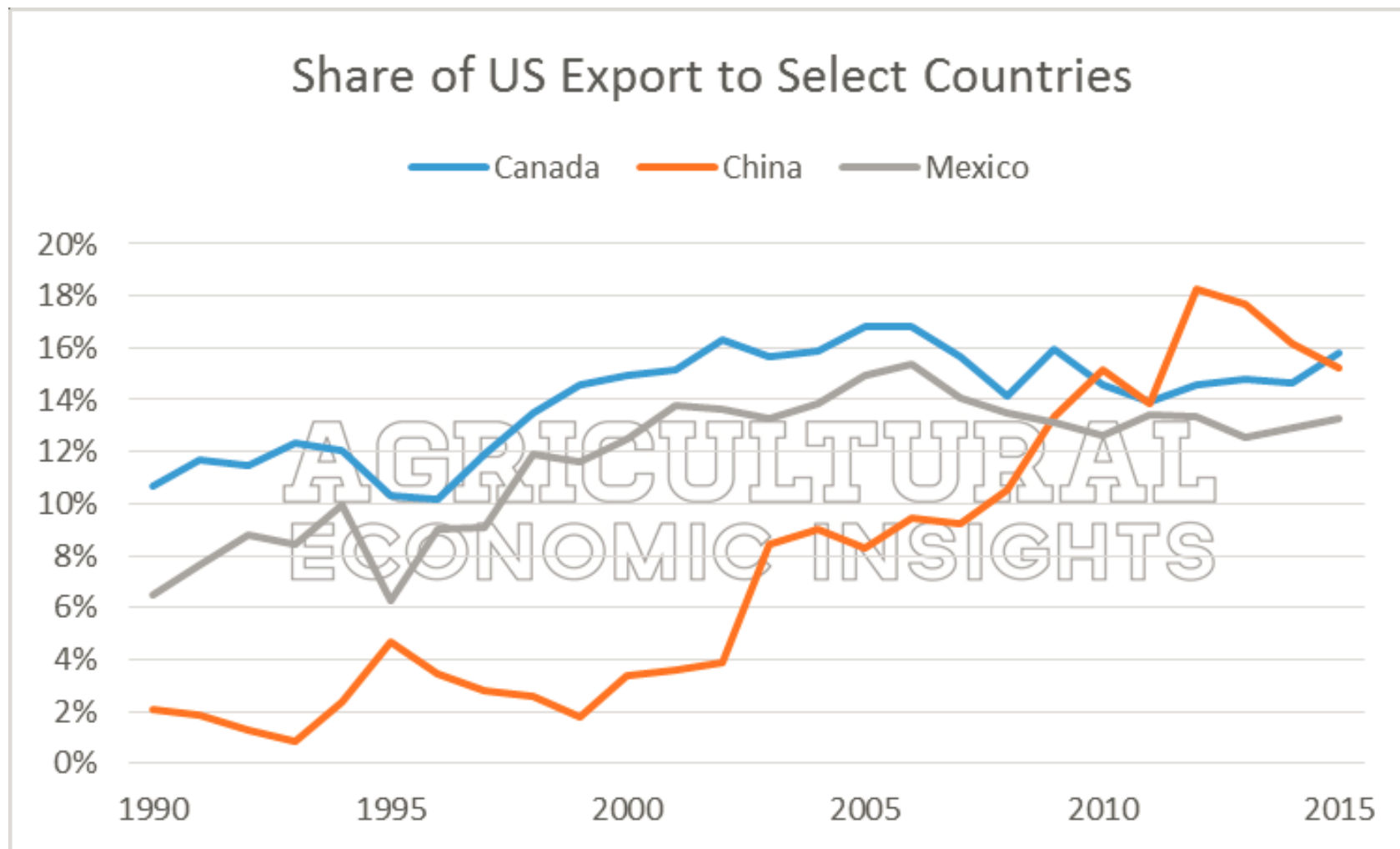
$$\frac{(RentalRate)}{(Cap Rate)} = FarmlandValues$$



Trade

Where do US Ag Exports Go?

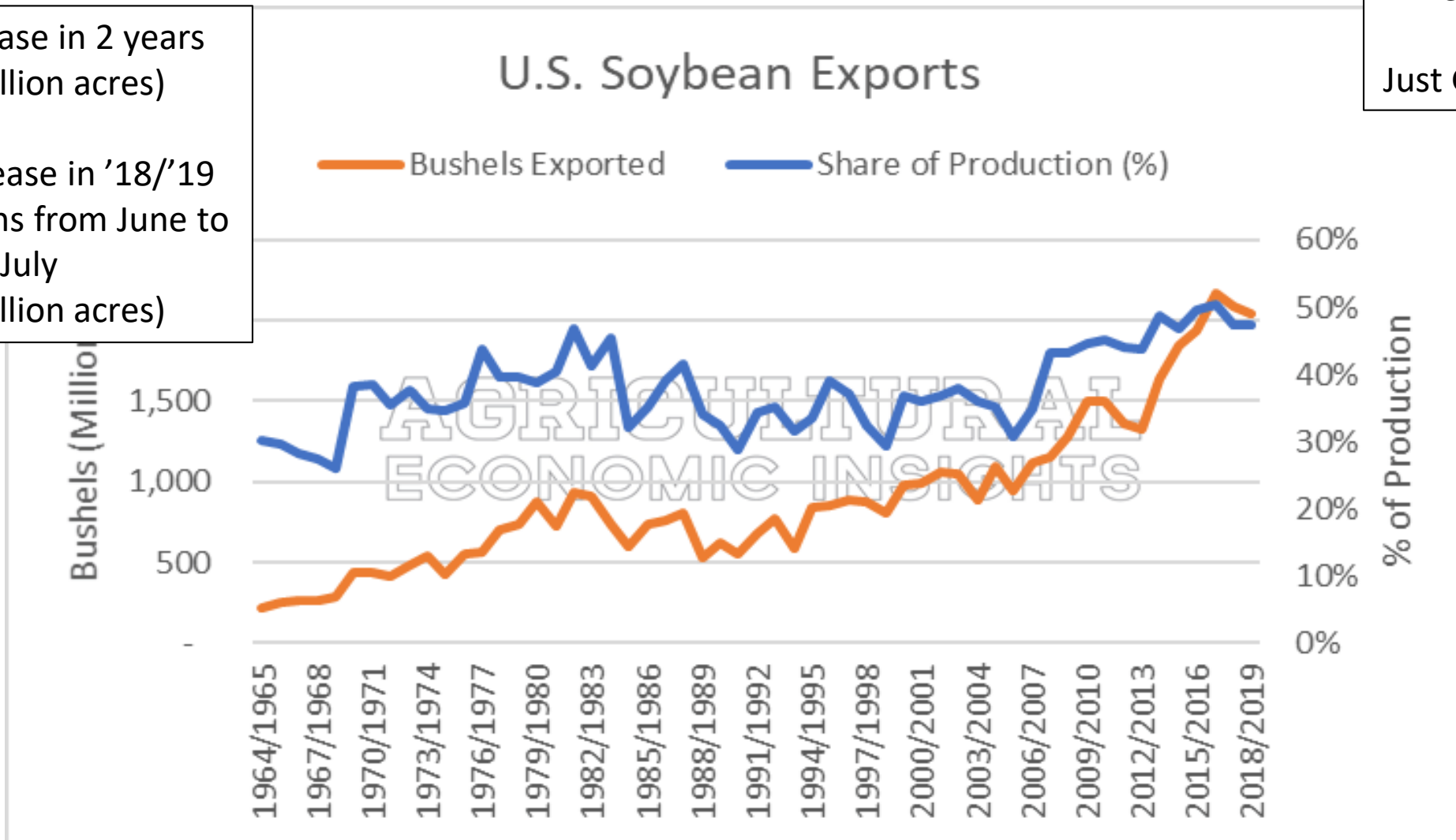
- Three largest export markets in 2015
- Combined: 44% of total U.S. ag exports
- 1990 = 19%



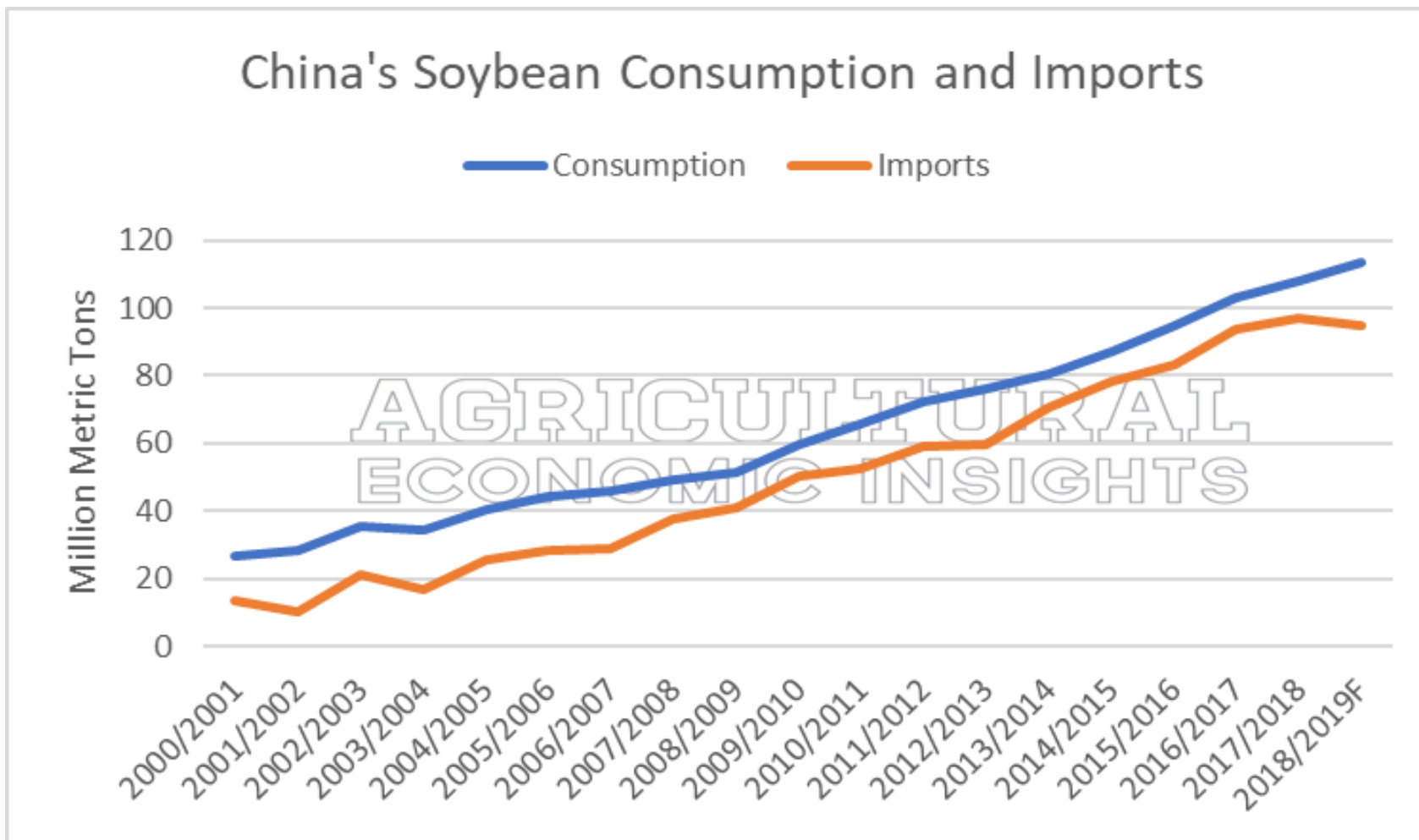
U.S. Soybean Exports

- 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?

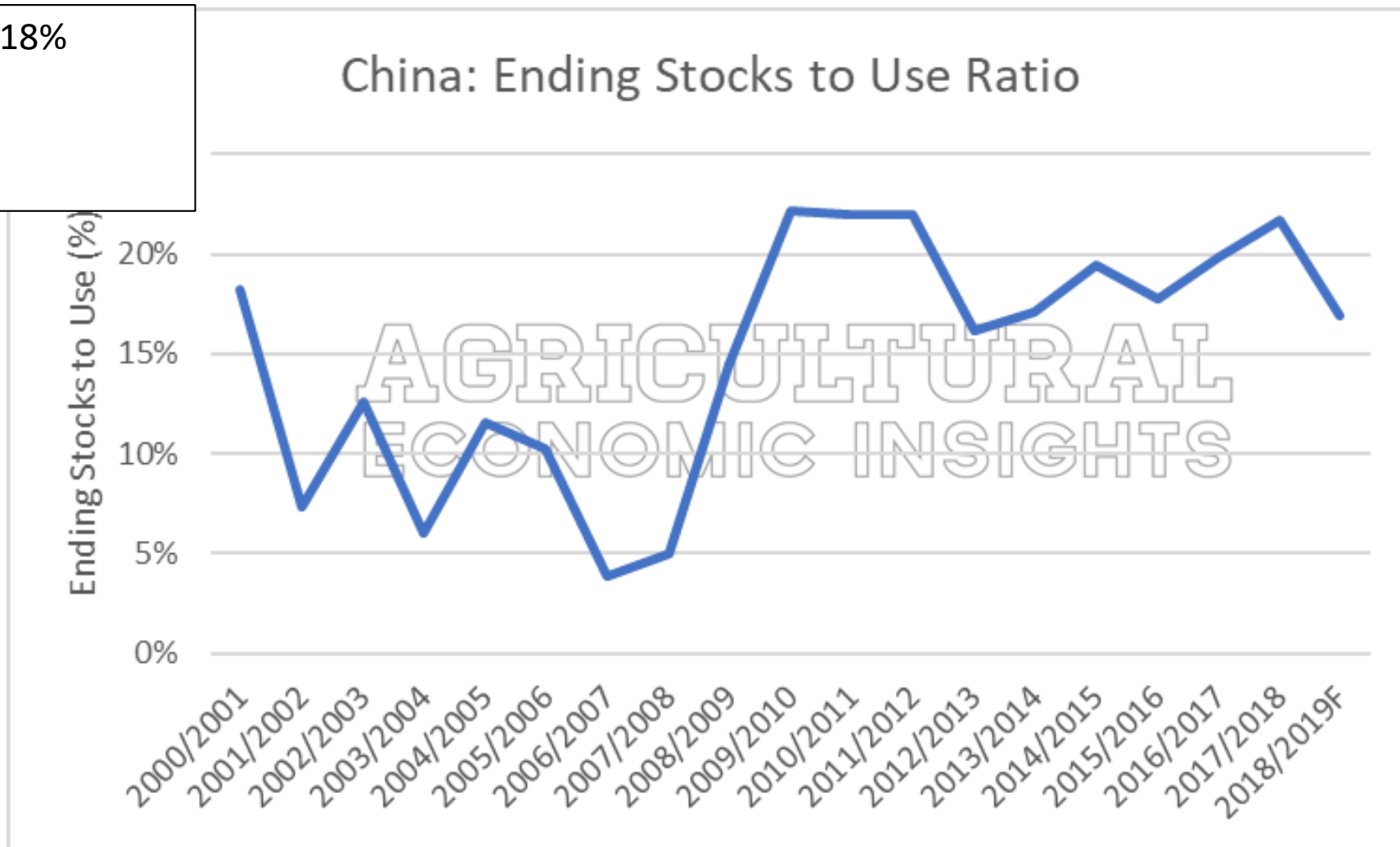


China & Soybeans Consumption, Imports, & Ending Stocks:

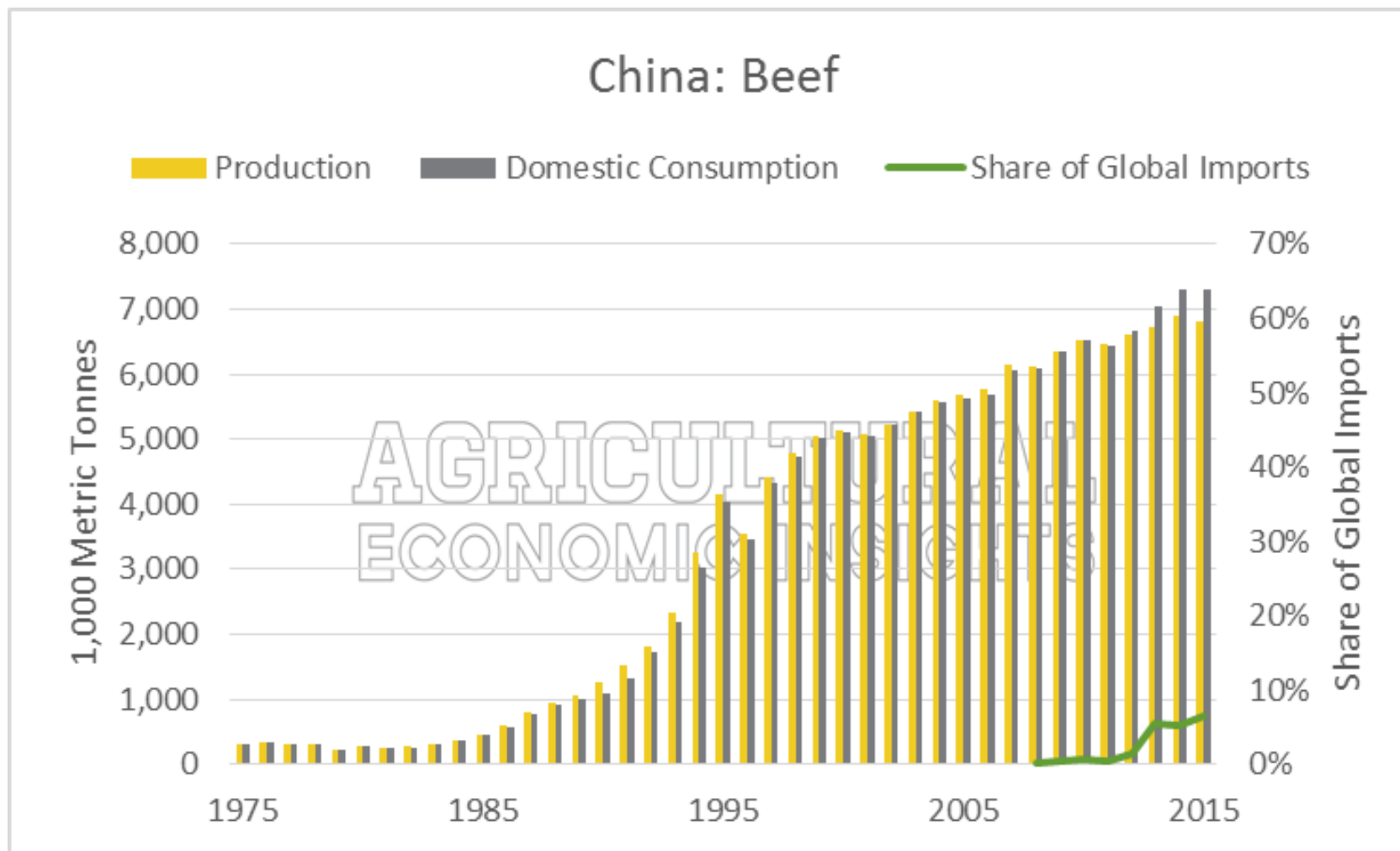


China & Soybeans: The Starting Point Matters

- 1) Ending Stocks: -18%
- 2) Stock to Use:
 - >22% ('17/'18)
 - >15% ('18/'19)



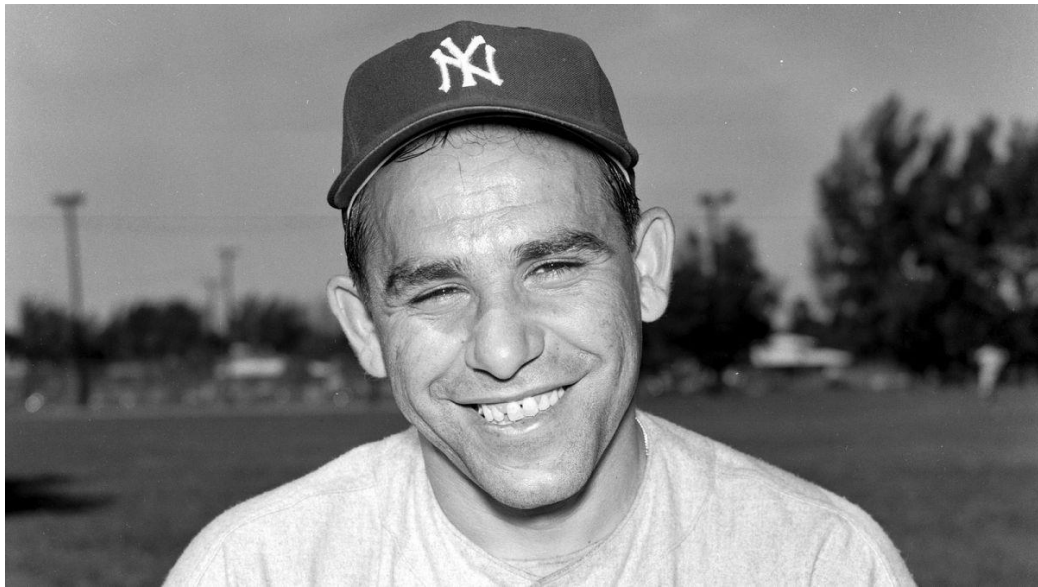
China & Beef: The New Soybean?



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

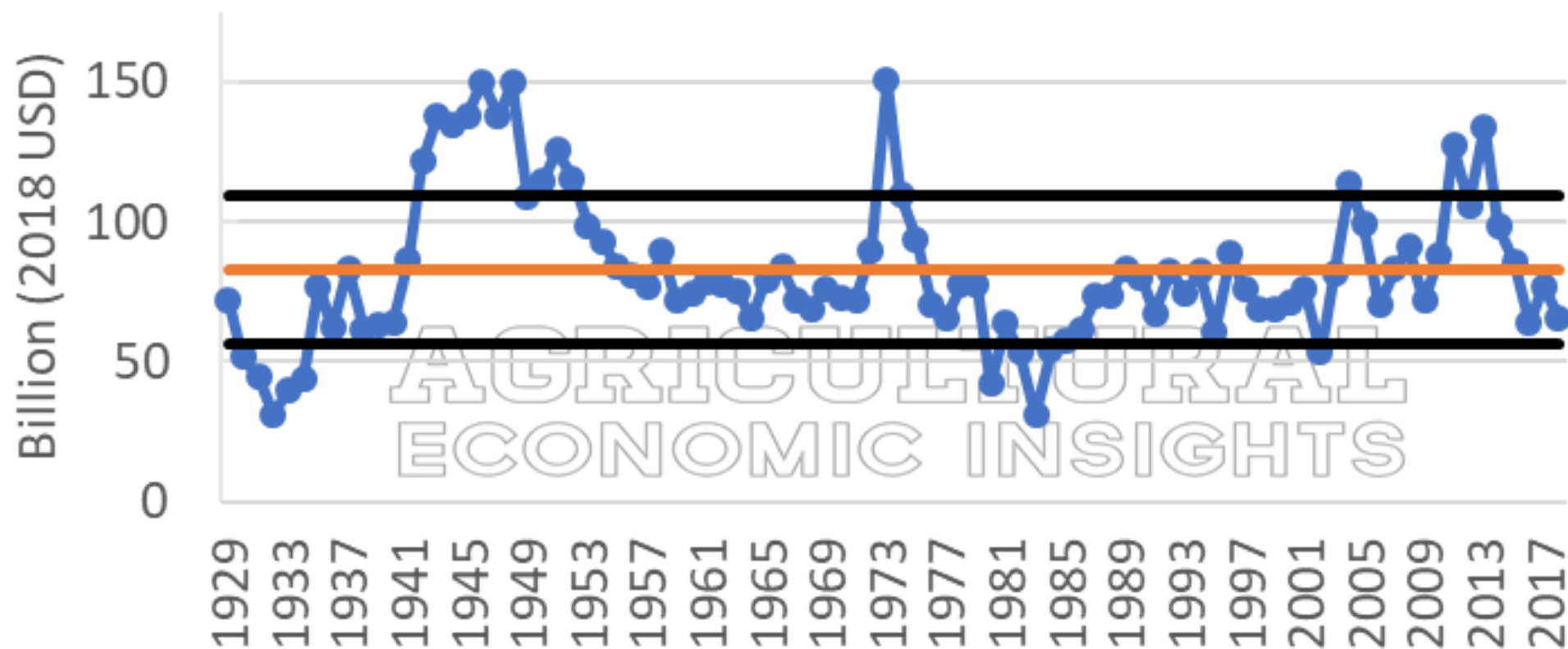
What about Trade Aid??

- Direct payments through the Market Facilitation Program
- Big checks: soybeans and cotton
- 2nd 50% of production payment in limbo...

Market Facilitation Program

Commodity	Initial Payment Rate	Est. Initial Payment** (in \$1,000s)
Cotton	\$0.06 / lb.	\$276,900
Corn	\$0.01 / bu.	\$96,000
Dairy (milk)	\$0.12 / cwt.	\$127,400
Pork (hogs)	\$8.00 / head	\$290,300
Soybeans	\$1.65 / bu.	\$3,629,700
Sorghum	\$0.86 / bu.	\$156,800
Wheat	\$0.14 / bu.	\$119,200
Total		\$4,696,300

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.**

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Interested in learning more?

Weekly Insights email: weekly@aei.ag

The logo for Agricultural Economic Insights (aei) is displayed against a background of a dark green field with rows of crops receding into the distance. The letters 'aei' are in a bold, white, sans-serif font. The letter 'i' is a solid green color, with a small green circle above it. To the right of 'aei', the words 'agricultural', 'economic', and 'insights' are stacked vertically in a smaller, white, sans-serif font.

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