

***AG ECONOMY OUTLOOK &
FINANCIAL & RISK MANAGEMENT STRATEGIES FOR 2023***

James Mintert, Director, Center for Commercial Agriculture

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Center for Commercial Agriculture

Ag Economy Barometer Survey Details

Monthly phone survey of 400 U.S. agricultural producers, focused on major crop & livestock enterprises

Respondents estimated value of production is equal to or greater than U.S. \$500,000

Not same producers surveyed each month, but characteristics of survey sample are held constant from month-to-month

Respondents are stratified by enterprise, based on USDA's *Census of Agriculture*

Representative of U.S. producers that provide vast majority of U.S. agricultural production

Survey accuracy is +/- 5% @ 95% confidence level for population we sample

Survey Respondents By Enterprise Every Month

Corn/Soybeans 53%

Beef 19%

Wheat 14%

Hogs 6%

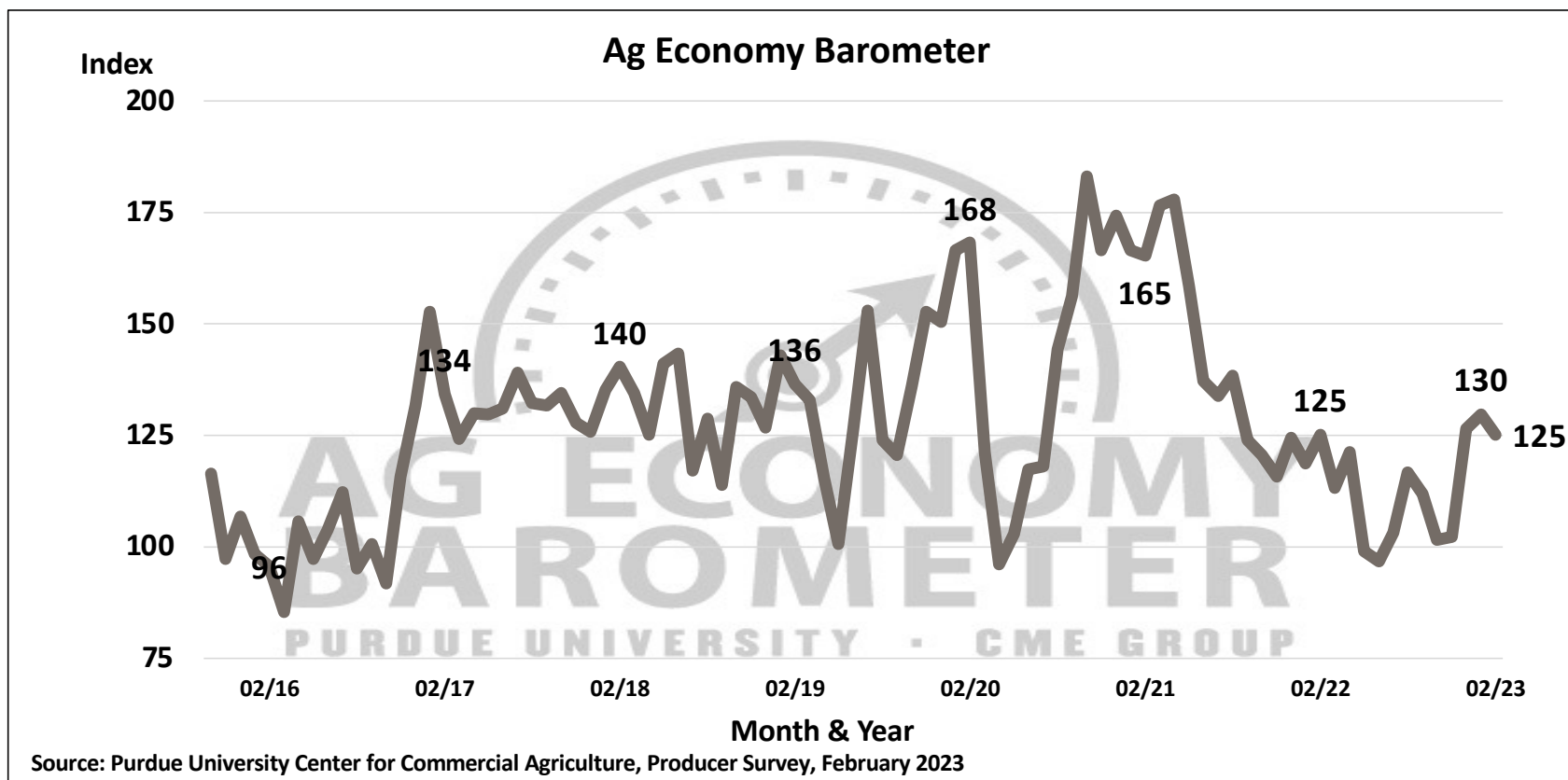
Dairy 5%

Cotton 3%

100%

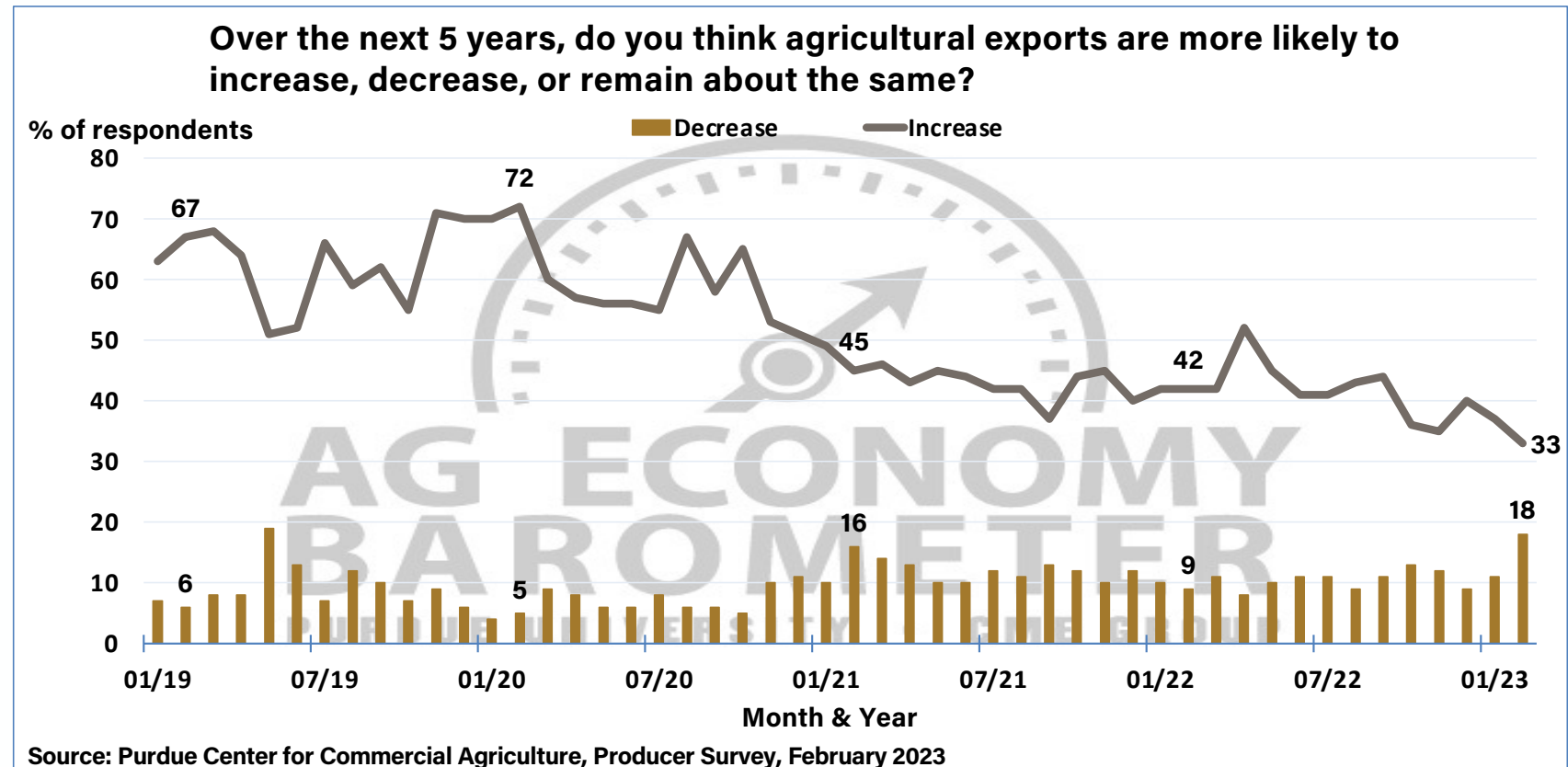
%'s are minimum targets since some farms are engaged in more than 1 enterprise

Although It Rebounded Recently, Farmer Sentiment Remains Much Weaker Than 2 Years Ago, Despite Record High Farm Income

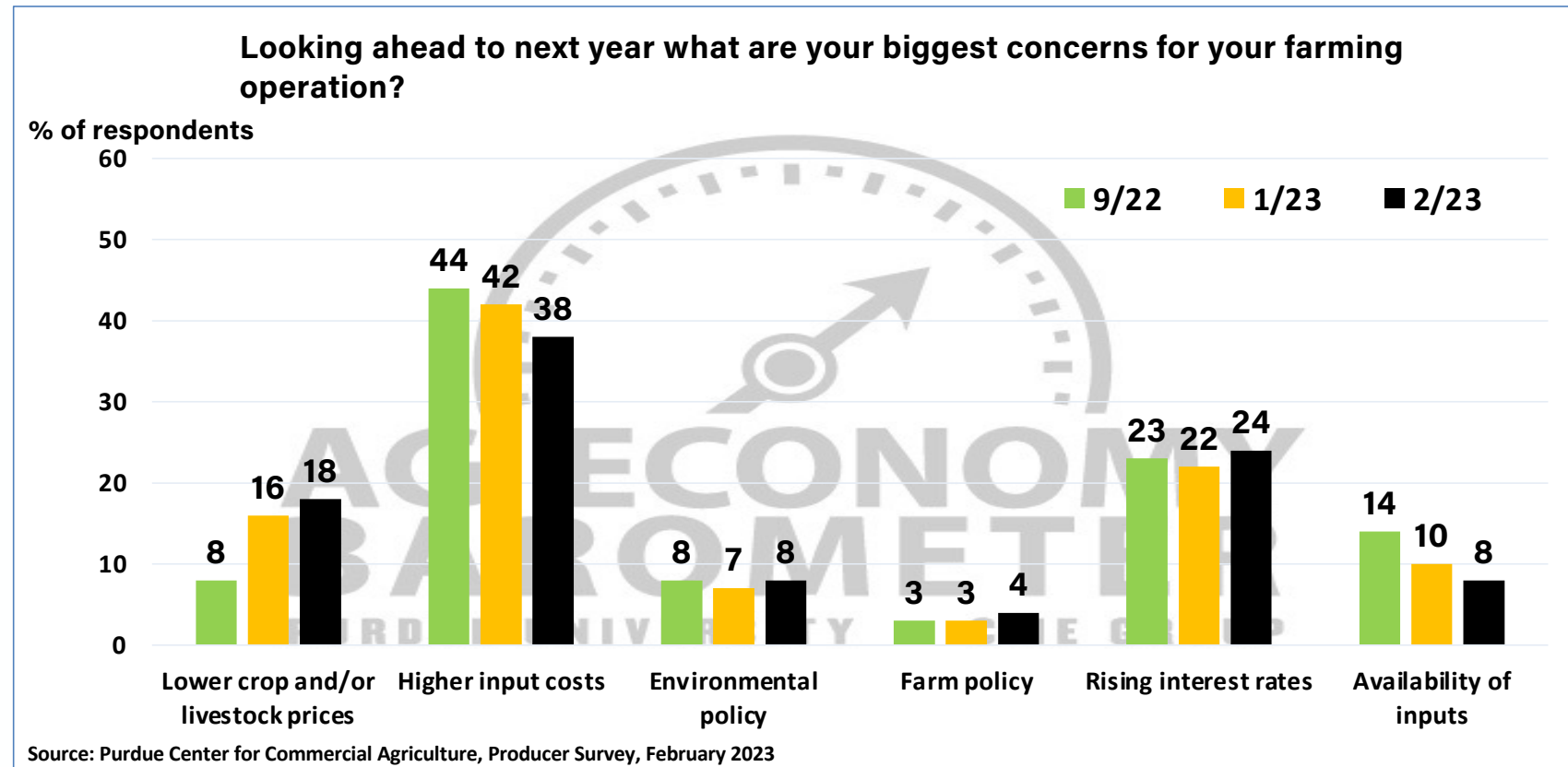


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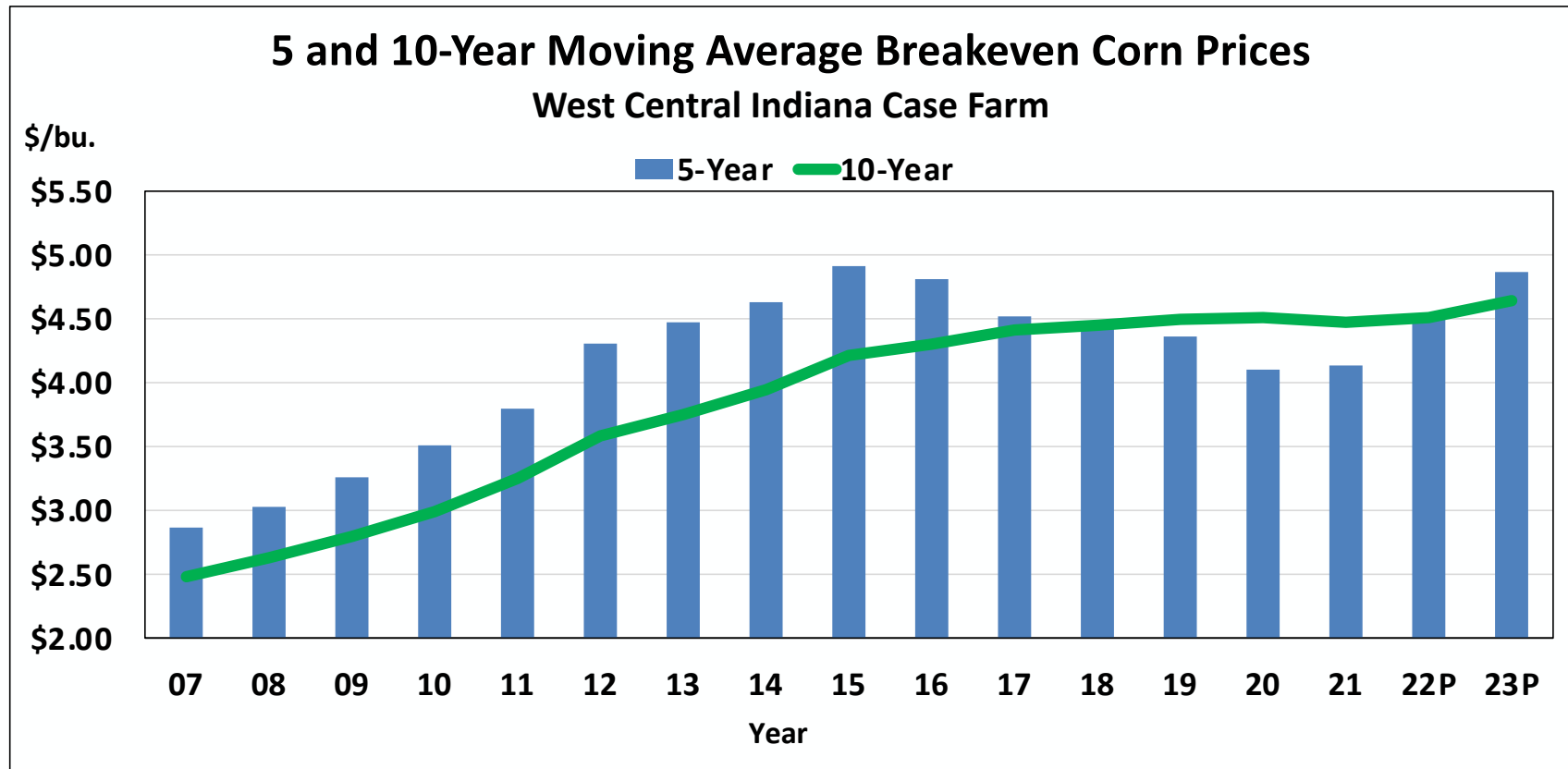
Producers Are Losing Confidence in Ag Exports as a Growth Engine for Ag



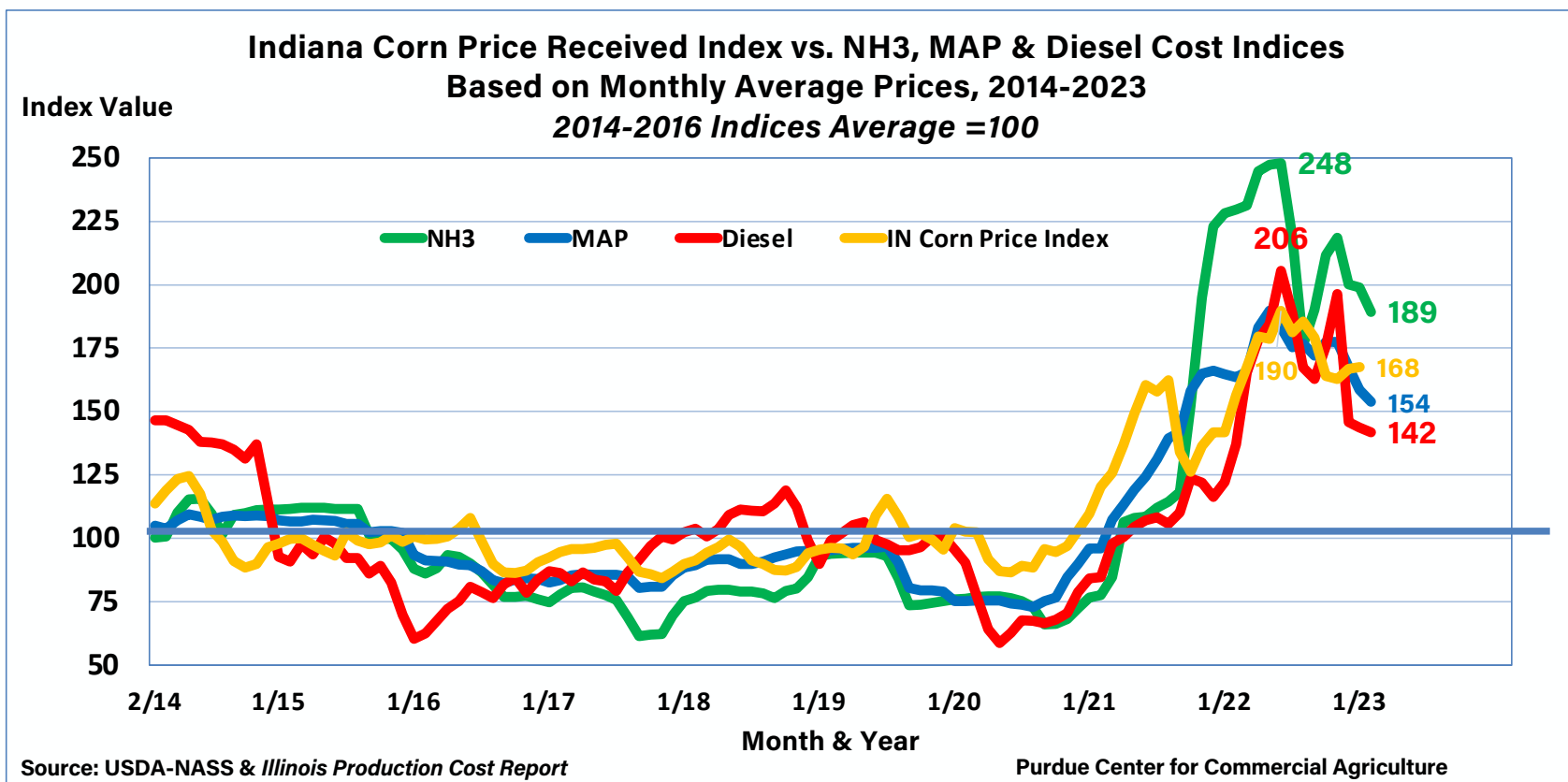
Input Costs Still #1 Concern, More Are Worried About Rising Interest Rates & Declining Output Prices



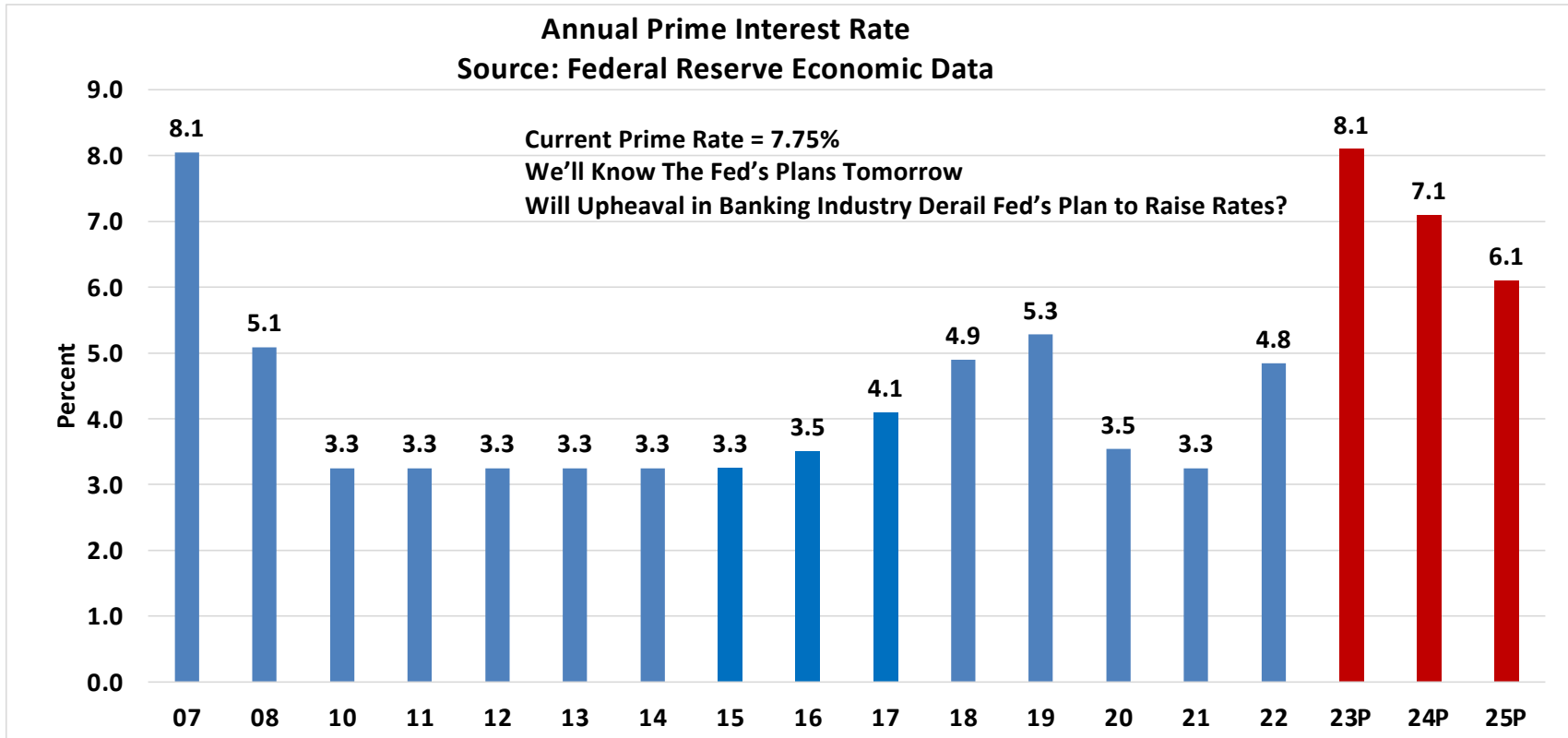
Breakeven Prices for Corn Are Near Their Peak...Will They Adjust Downward?



Although Input Prices Have Started to Decline, Farmers Are Concerned About a Possible Cost-Price Squeeze

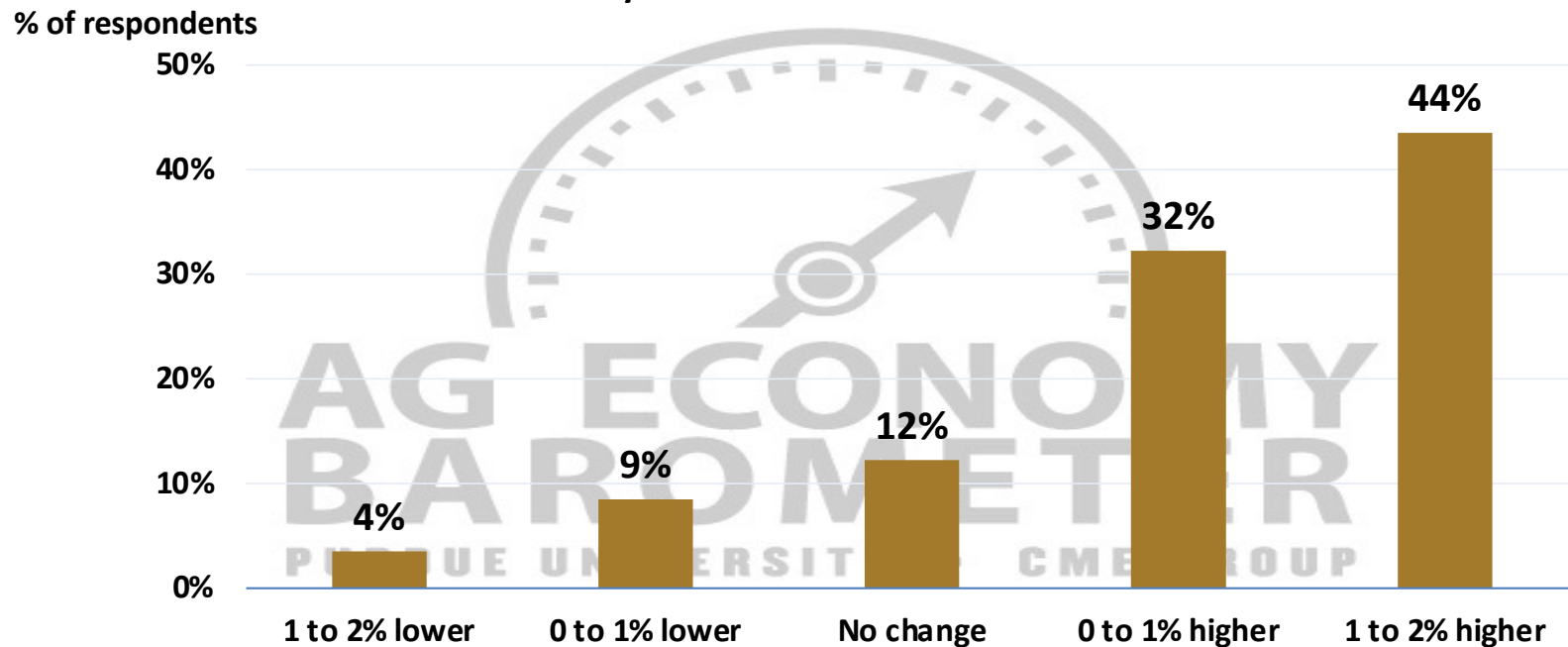


Fed's Projections Suggest Prime Rate Climbing Above 8% & Then Weakening



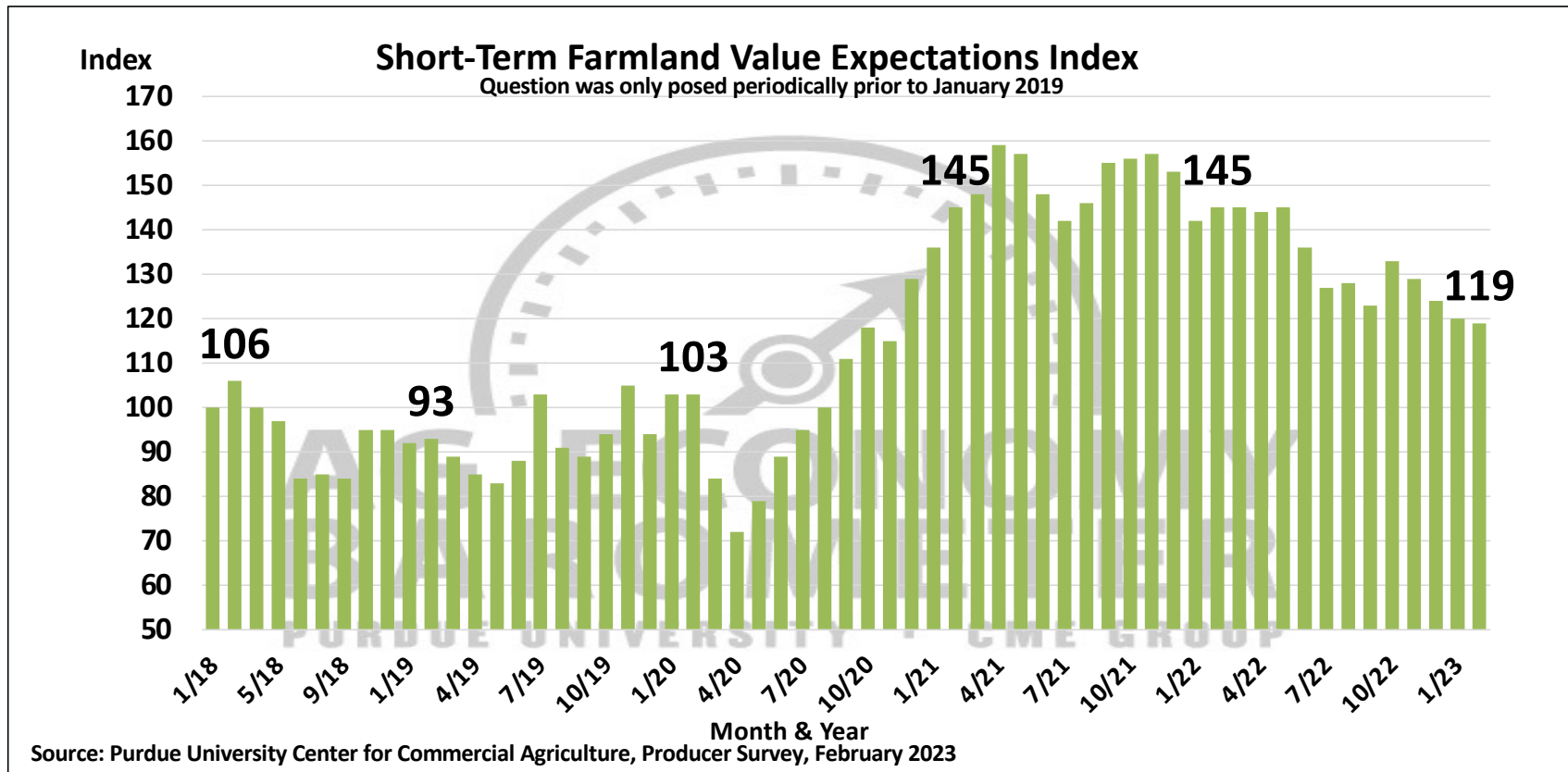
44% of Farmers Expect Prime Rate to Reach 8.75-9.75% By Early 2024

The U.S. prime interest rate is currently 7.75%...What do you expect the U.S. prime interest rate to be one year from now?

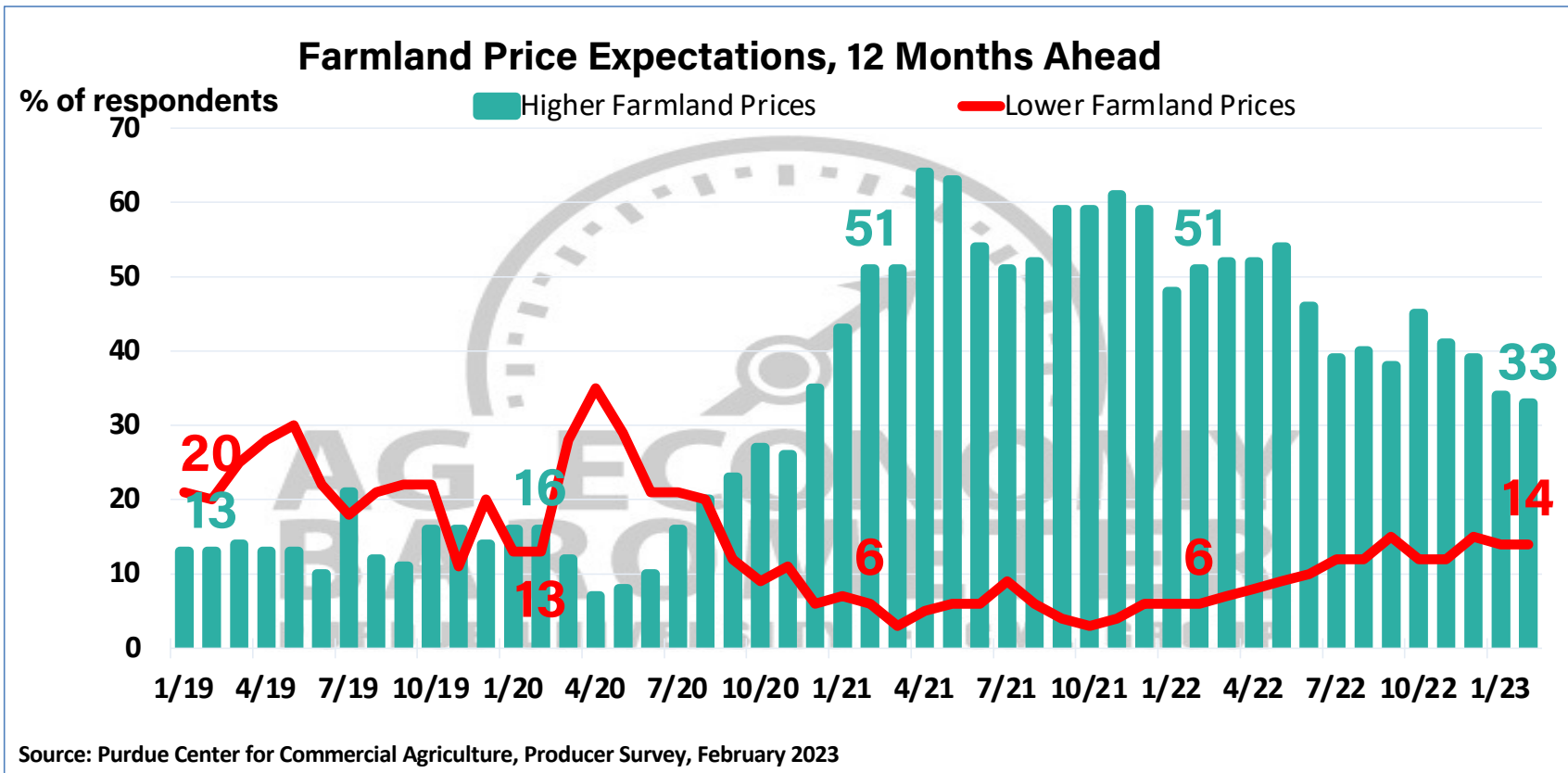


Source: Purdue Center for Commercial Agriculture, Producer Survey, February 2023

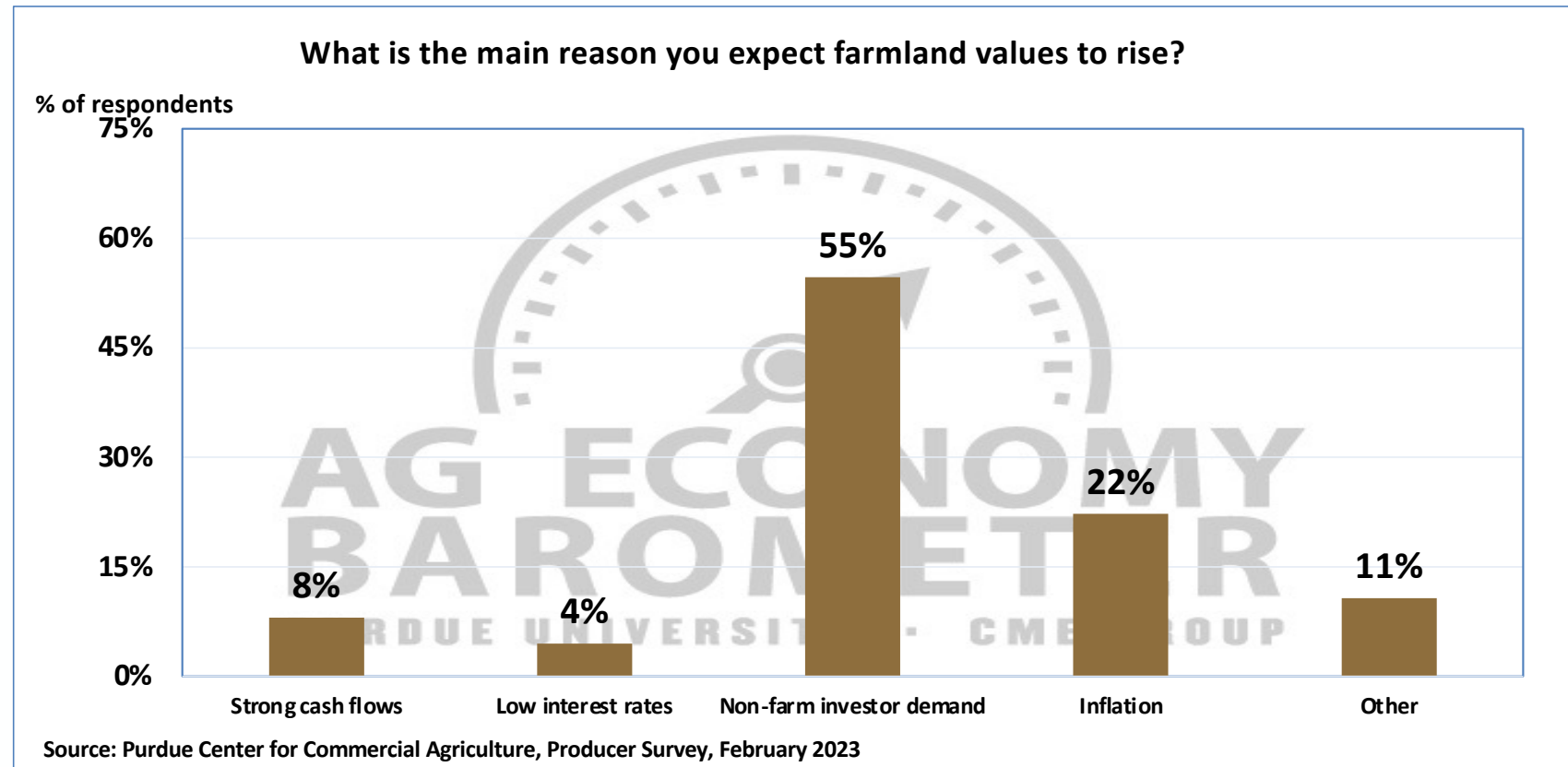
Farmland Sentiment Is Still Positive, But Noticeably Weaker than a Year Ago



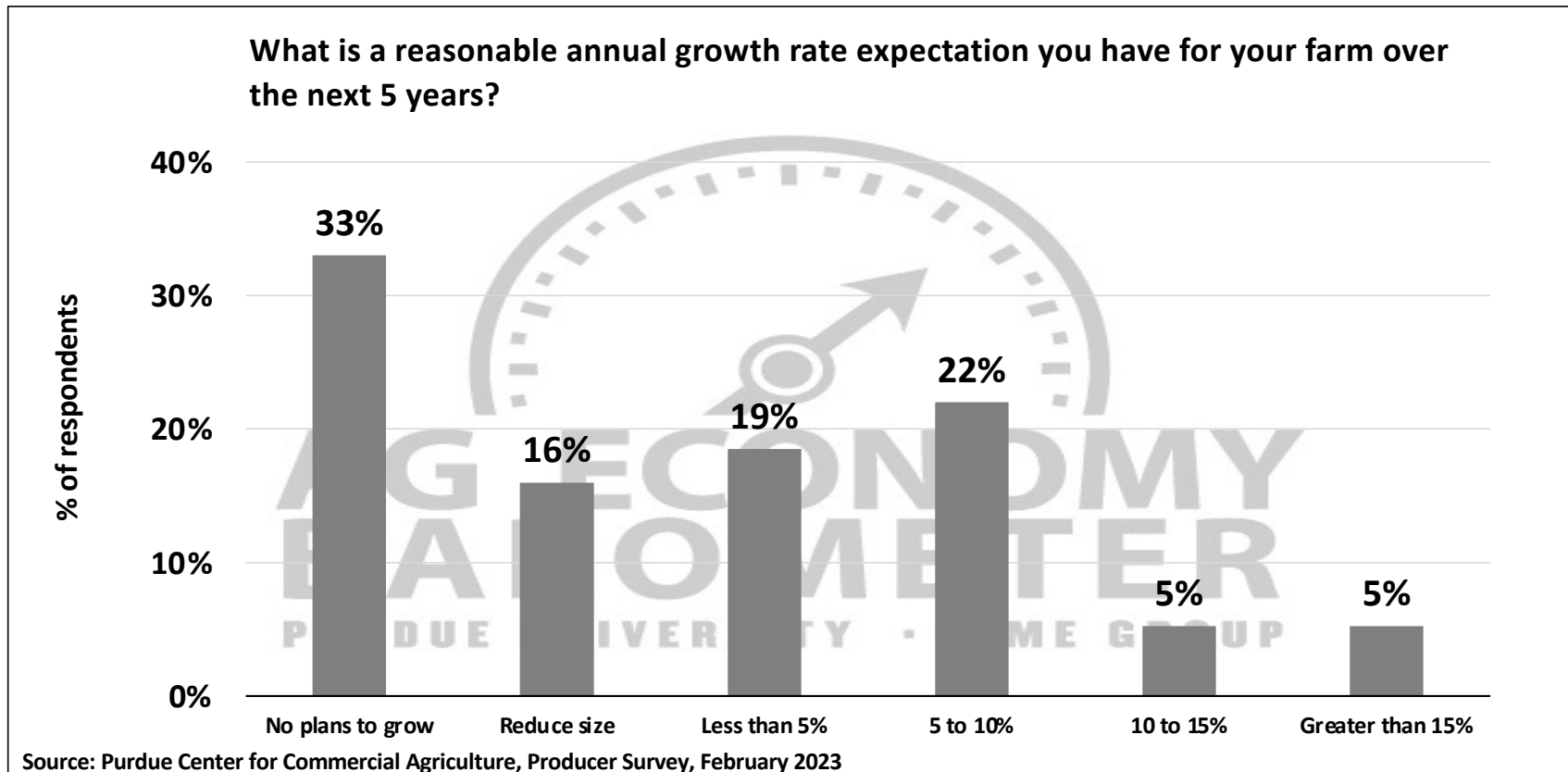
Fewer Farmers Expect Values to Rise & More Farmers Expect A Decline Than in the Last 3 Years



Producers Say Investment From Outside Agriculture is #1 Reason for Expecting Values to Rise

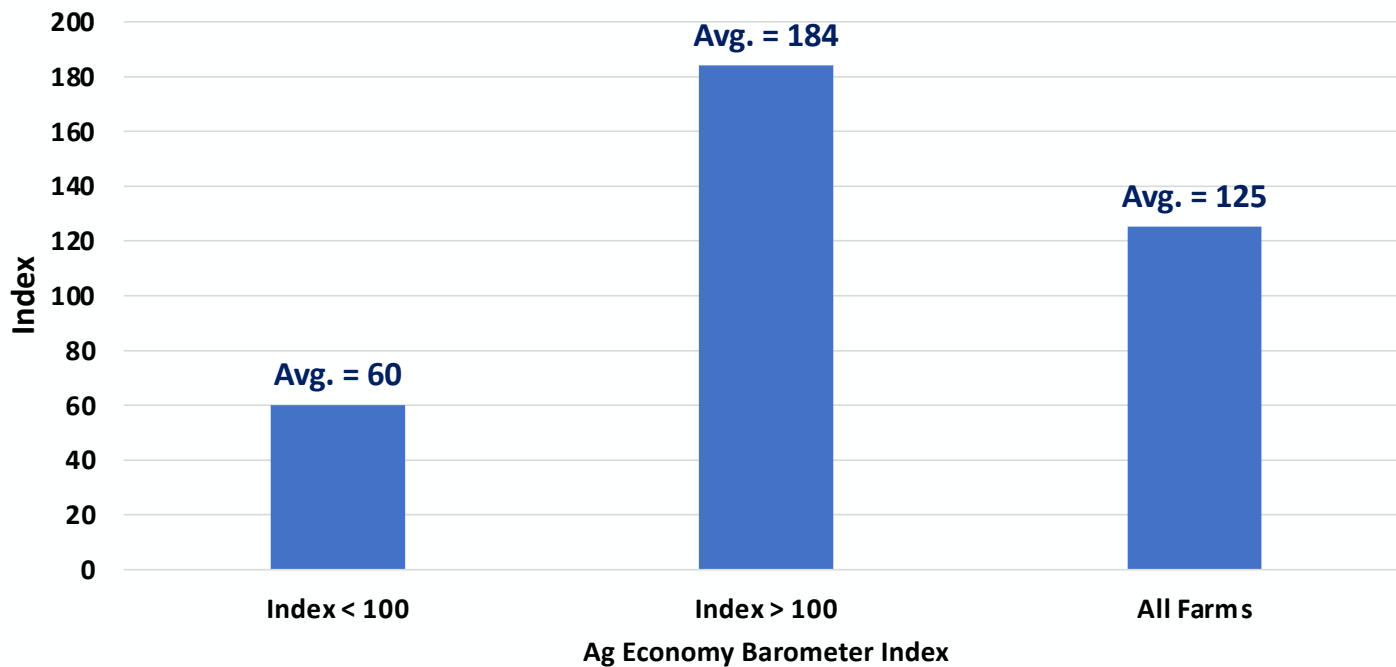


Our Surveys Reveal Wide Variations in Farm Operations' Plans for Growth



There Are Big Differences in Sentiment Among Survey Respondents

Individual Survey Respondents Ag Barometer Index Value
By Category, February 2023



Examining Each Respondents Index Values Provides Insights Into Growth Strategies

Differences in Sentiment by Farm Growth (G) Categories

	Growth < 0	Growth = 0	Growth > 0
Index of Current Conditions			
Index of Future Expectations			
Ag Economy Barometer Index			

Farm Operators Who Plan to Retire or Reduce Operation Size Are More Pessimistic

Differences in Sentiment by Farm Growth (G) Categories

	Growth < 0	Growth = 0	Growth > 0
Index of Current Conditions	116		
Index of Future Expectations	107		
Ag Economy Barometer Index	110		

Farm Operators With No Plans to Grow Are A Bit More Optimistic...But Current Situation Might Be Holding Them Back

Differences in Sentiment by Farm Growth (G) Categories

	Growth < 0	Growth = 0	Growth > 0
Index of Current Conditions	116	115	
Index of Future Expectations	107	126	
Ag Economy Barometer Index	110	122	

Who Plans to Grow? It's The "Optimists"

Differences in Sentiment by Farm Growth (G) Categories

	Growth < 0	Growth = 0	Growth > 0
Index of Current Conditions	116	115	150
Index of Future Expectations	107	126	130
Ag Economy Barometer Index	110	122	136

In the Long Run, Growth Is Not Optional...Consider Key Reasons Why Growth Is Necessary

1. Adoption of New Technology
 - ✓ Reduce costs
 - ✓ Improve profit margins
2. Improve asset utilization
3. Bring in new family members
4. Invest retained earnings
5. More fully utilize the skills of key managers

Thinking About Farm Growth...

What Are The Key Factors Influencing Farmland Values?

1. Net Return to Land

- What is the long-run corn price?
 - \$5.00, \$5.50, \$6.00 or ?

2. Capitalization Rate

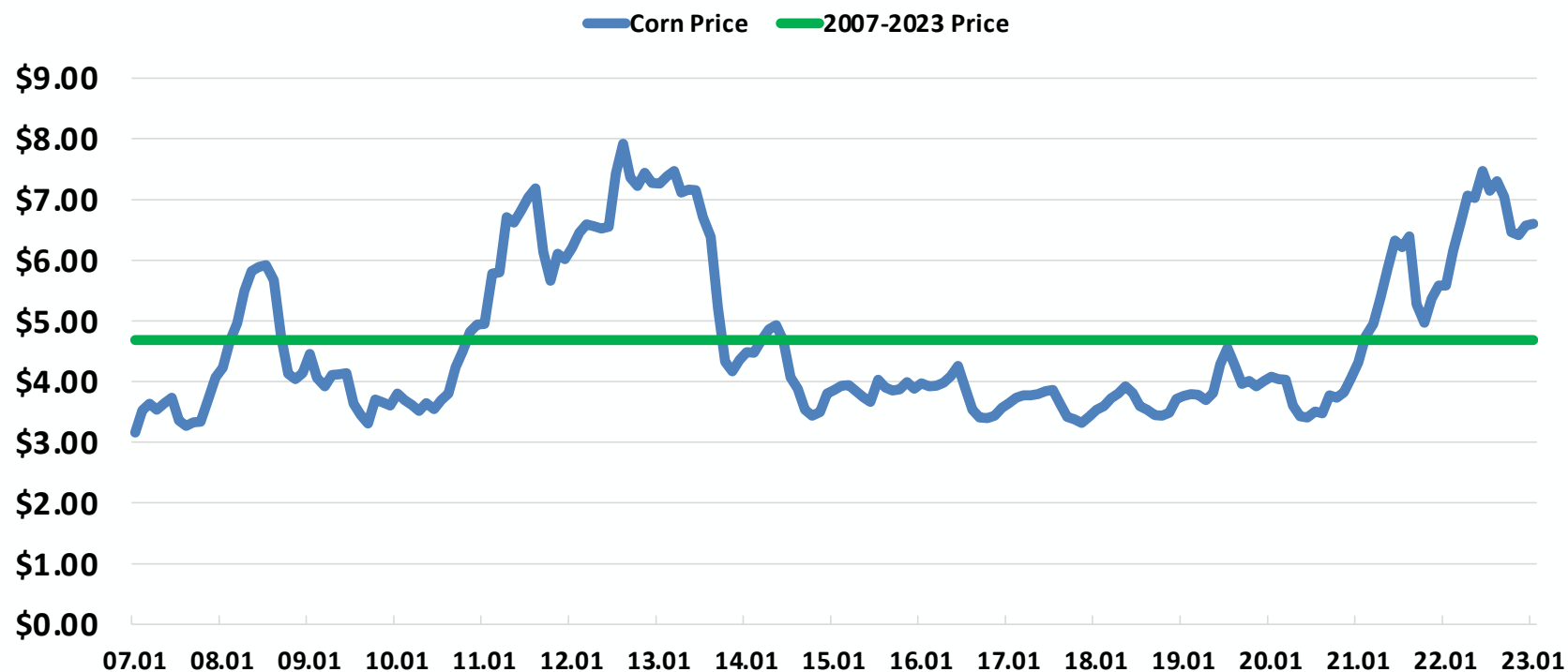
- Long-run average cap rate = 5.3%
- Recent history = 2.5% or less

3. Inflation

4. Alternative Investments

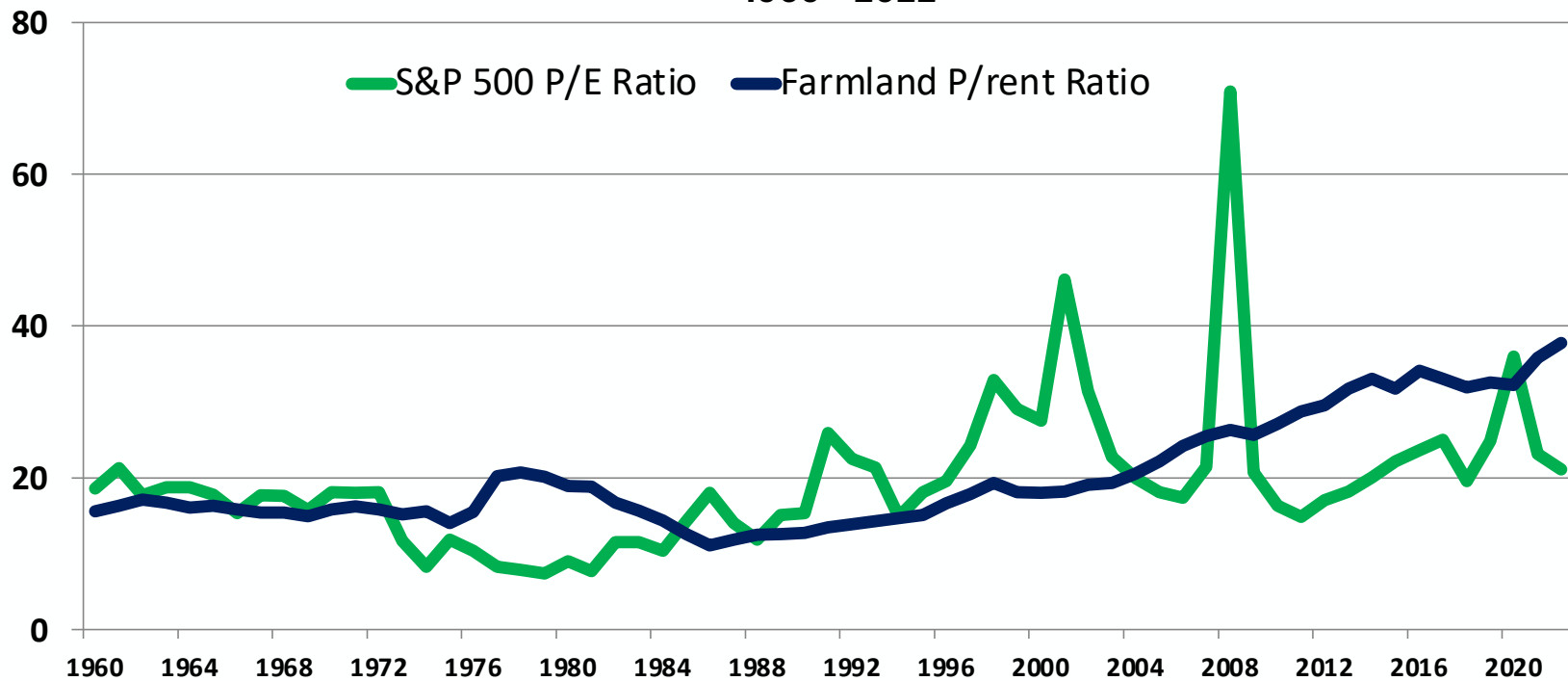
Will Corn Prices Revert to the Long Run Average?

Monthly Indiana Corn Prices, 2007 to 2023



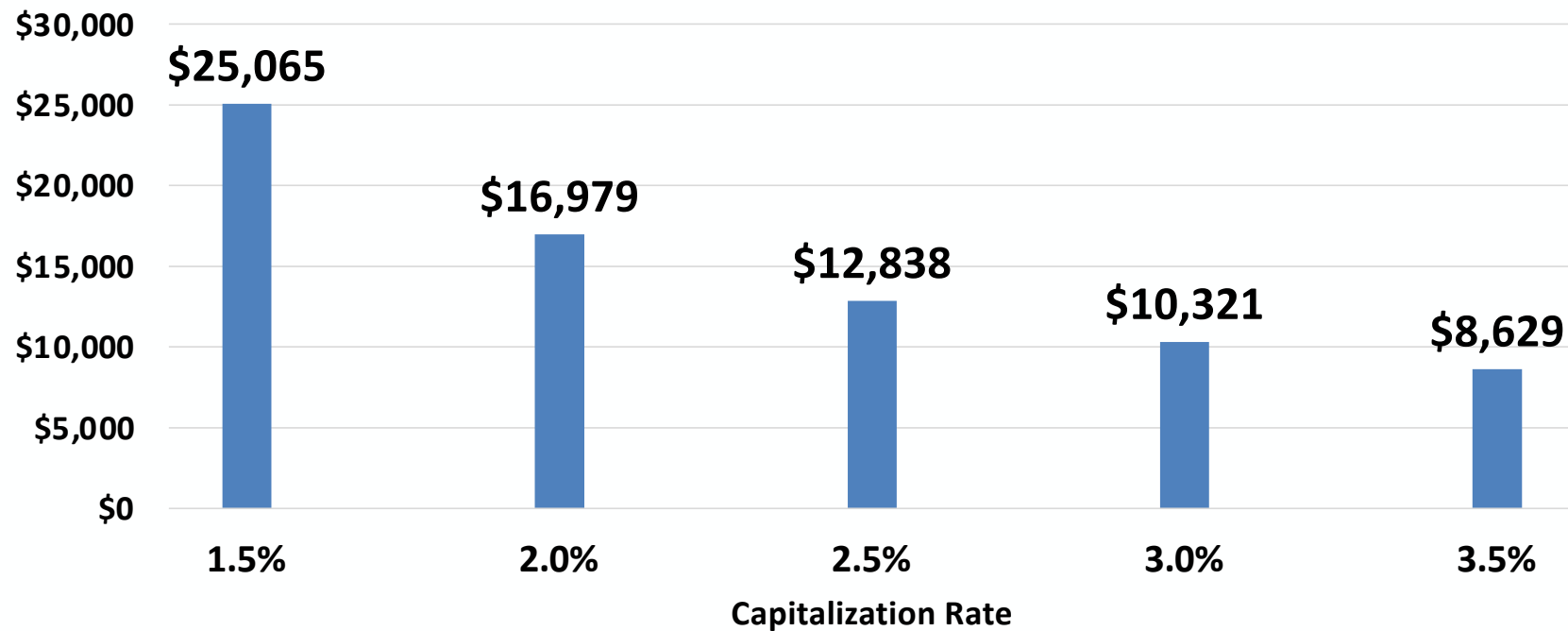
Thinking About Your Long-Run Reinvestment Plan for Growth

Farmland Price/Rent and S&P 500 Price/Earnings Ratios
1960 - 2022

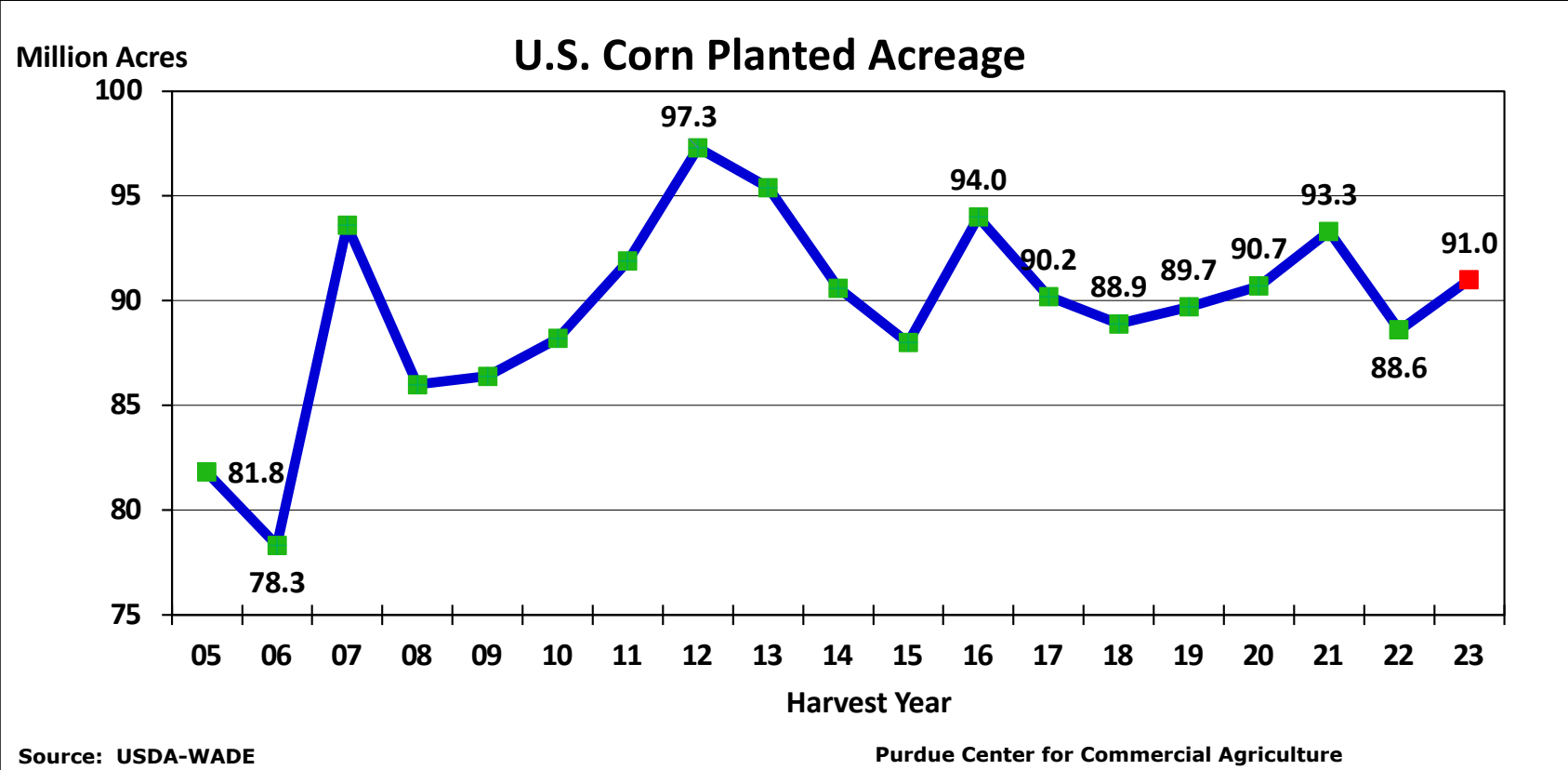


Land Values Are Also Very Sensitive to Changes in the Capitalization Rate

Present Value of Farmland At Various Capitalization Rates
Real Cash Rent = \$262 in Year 1, Growing @ 0.45%/Year



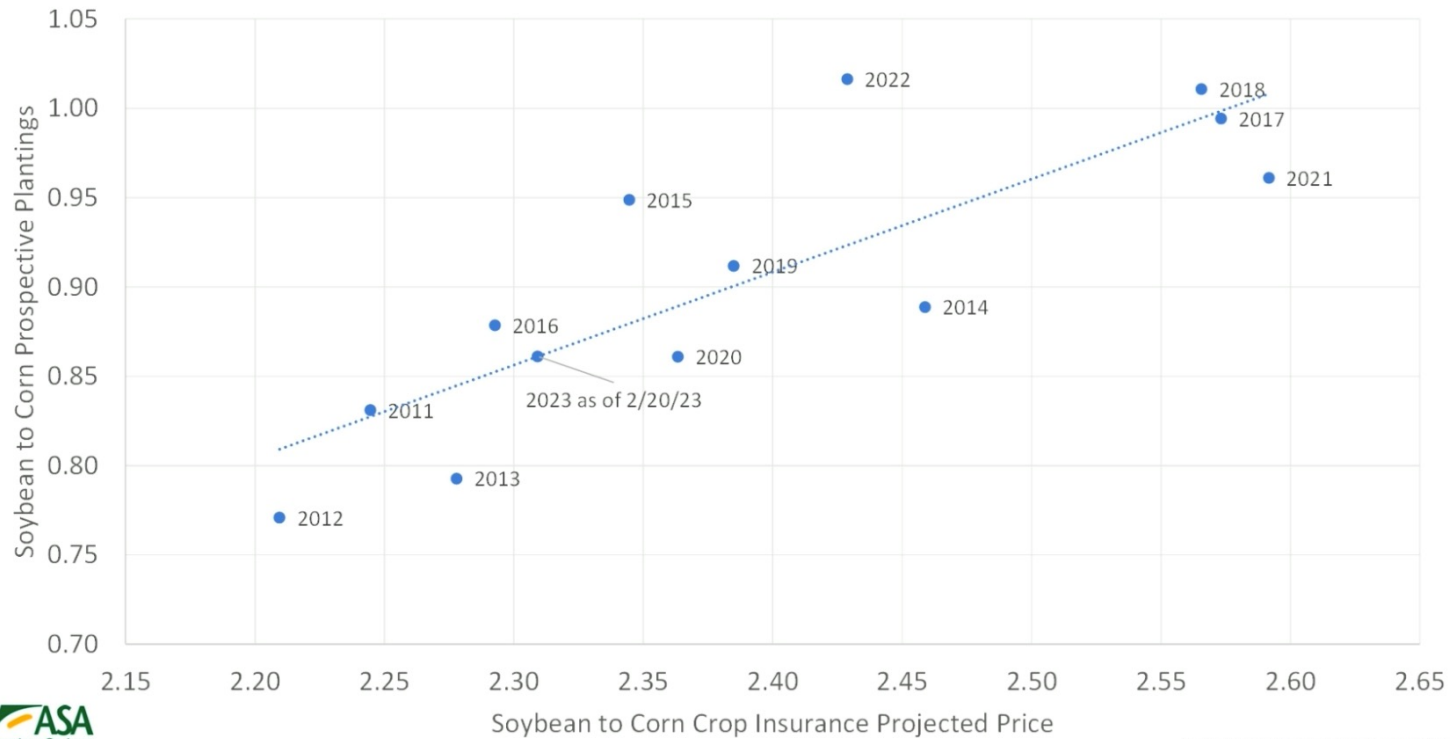
USDA Expects Corn Acreage in 2023 to Increase By 2.4 Million Acres



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USDA Basing Corn Acreage Increase on Soybean/Corn Price Ratio...Does That Reflect Profitability in '23?

Soybean and Corn Planting Intentions and Projected Prices

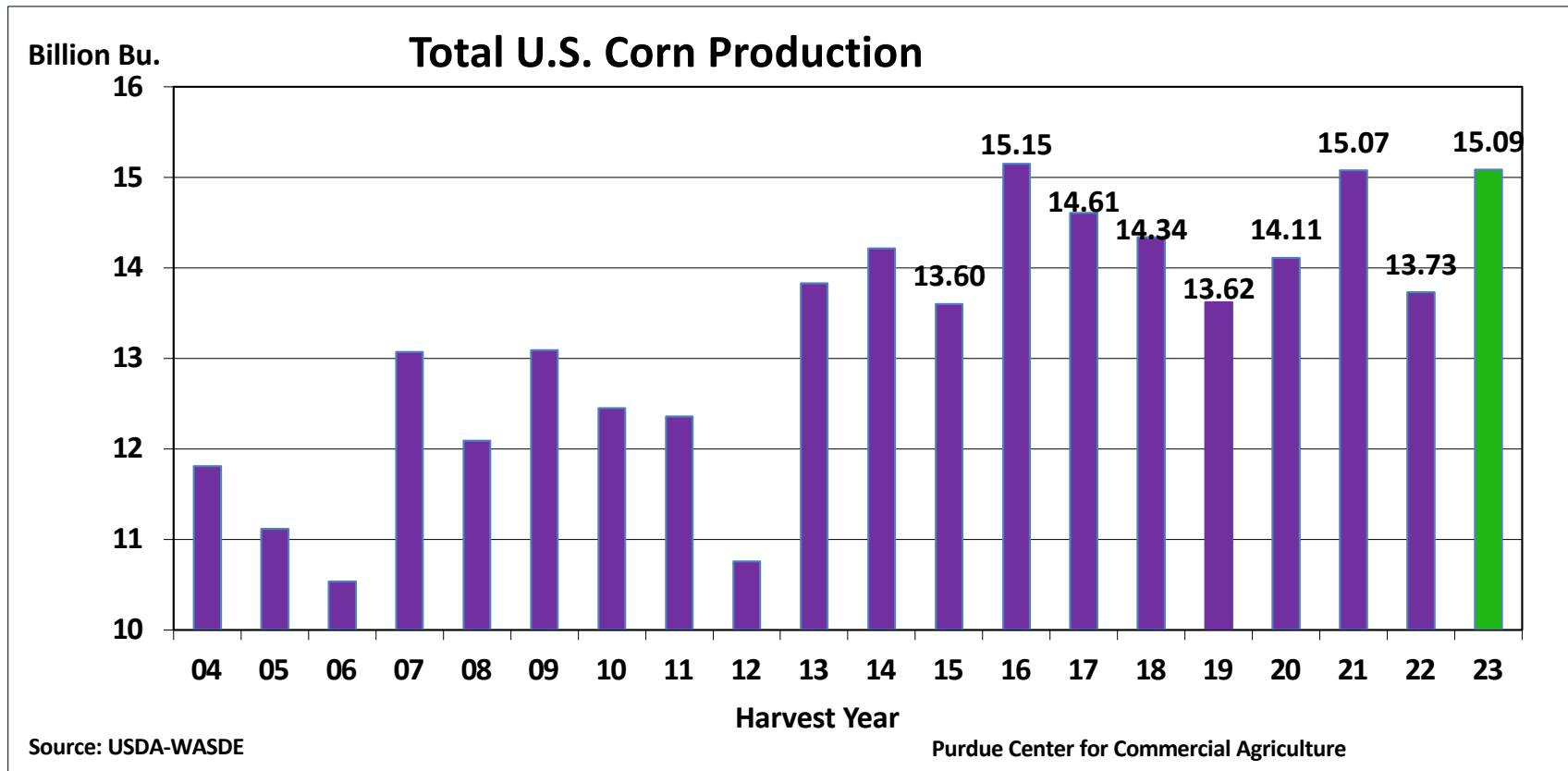


Source: USDA NASS and ASA calculations



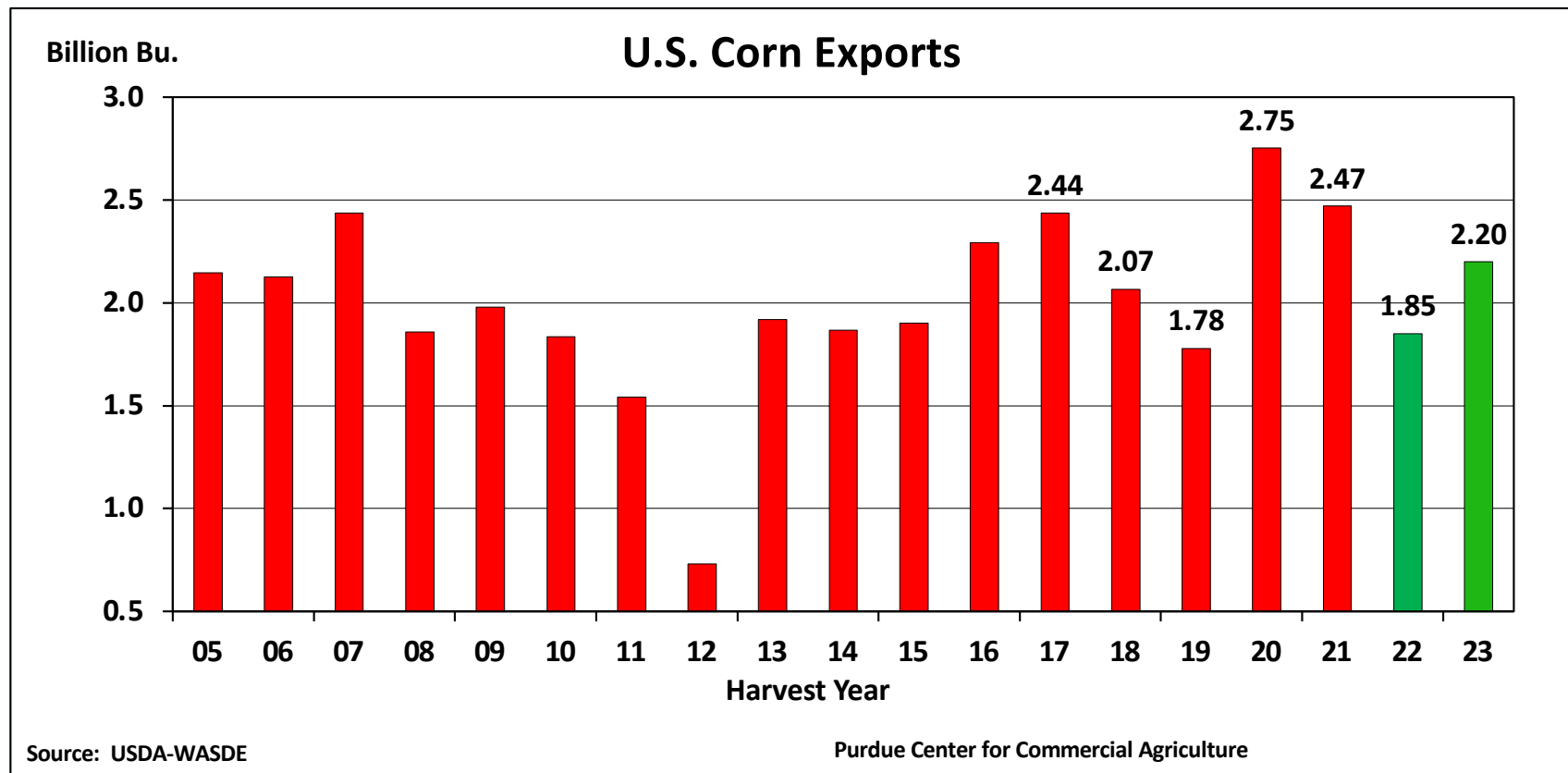
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Acreage Increase & Trend Yield Would Push Corn Production Up by 1.36 Billion Bu.



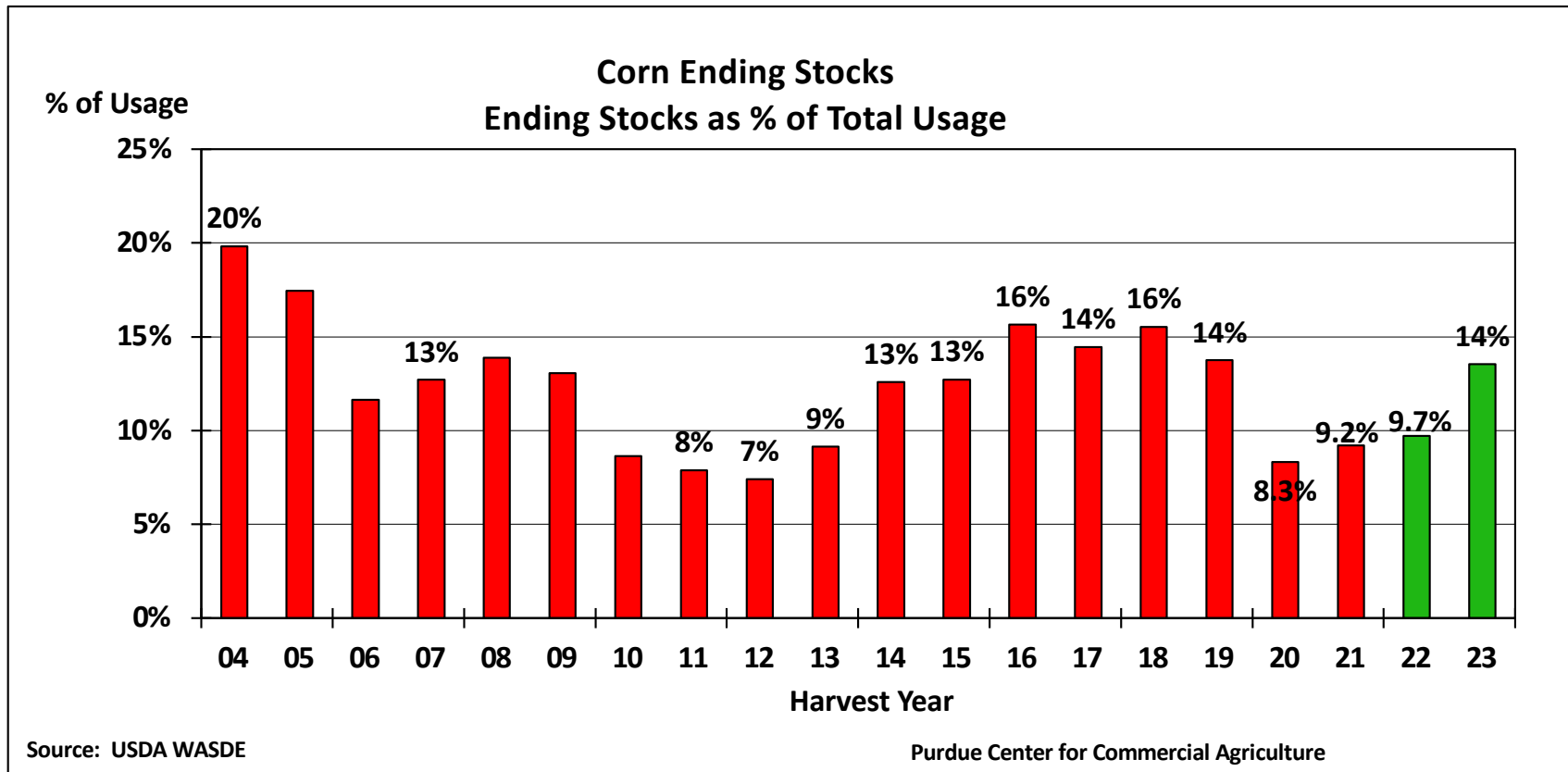
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'22 Crop Exports Have Been Weak, USDA Expects A Rebound of Nearly 20% in '23



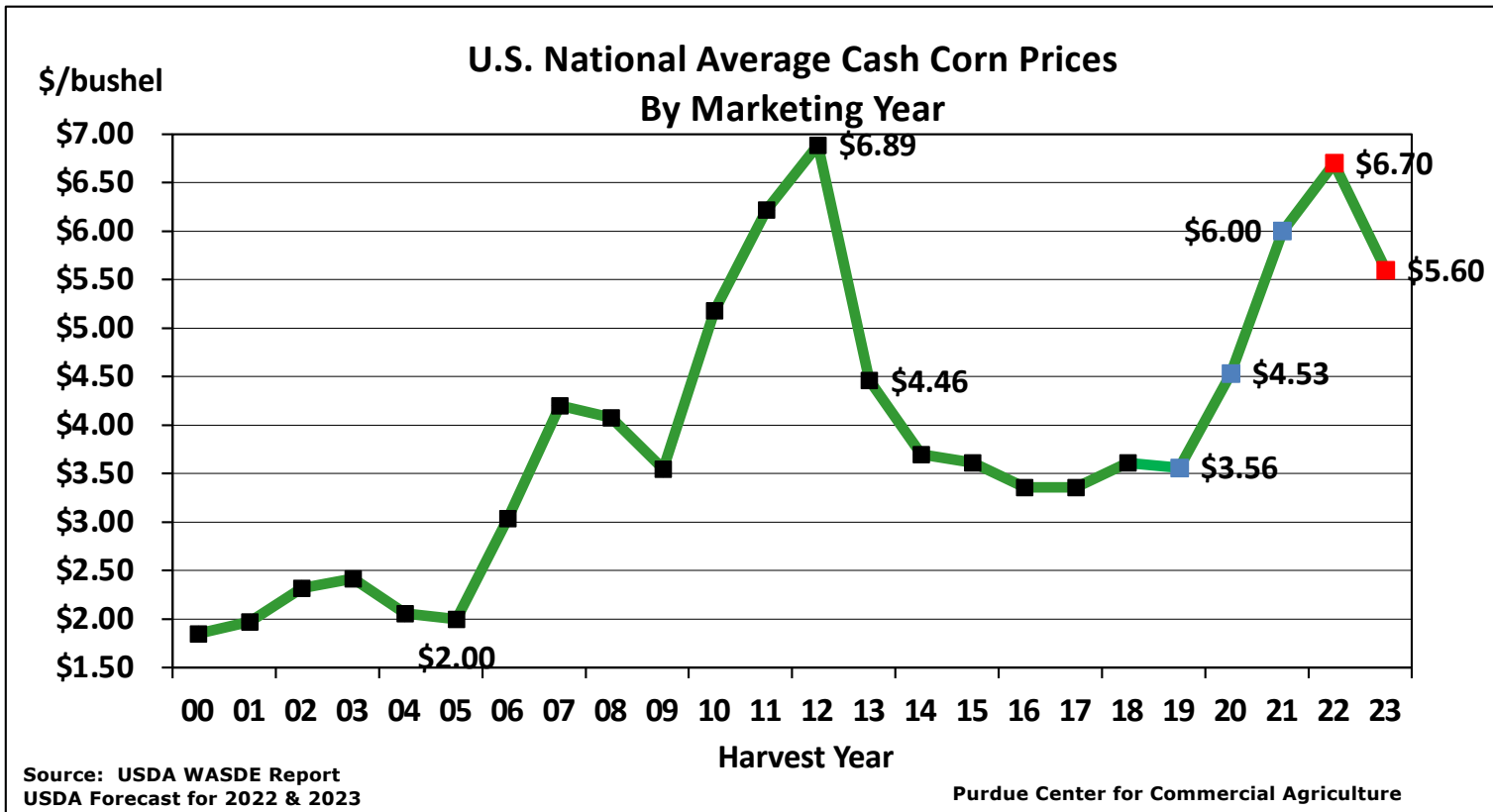
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IF...Acreage & Yield Increases Take Place, Ending Stocks Will Increase Sharply



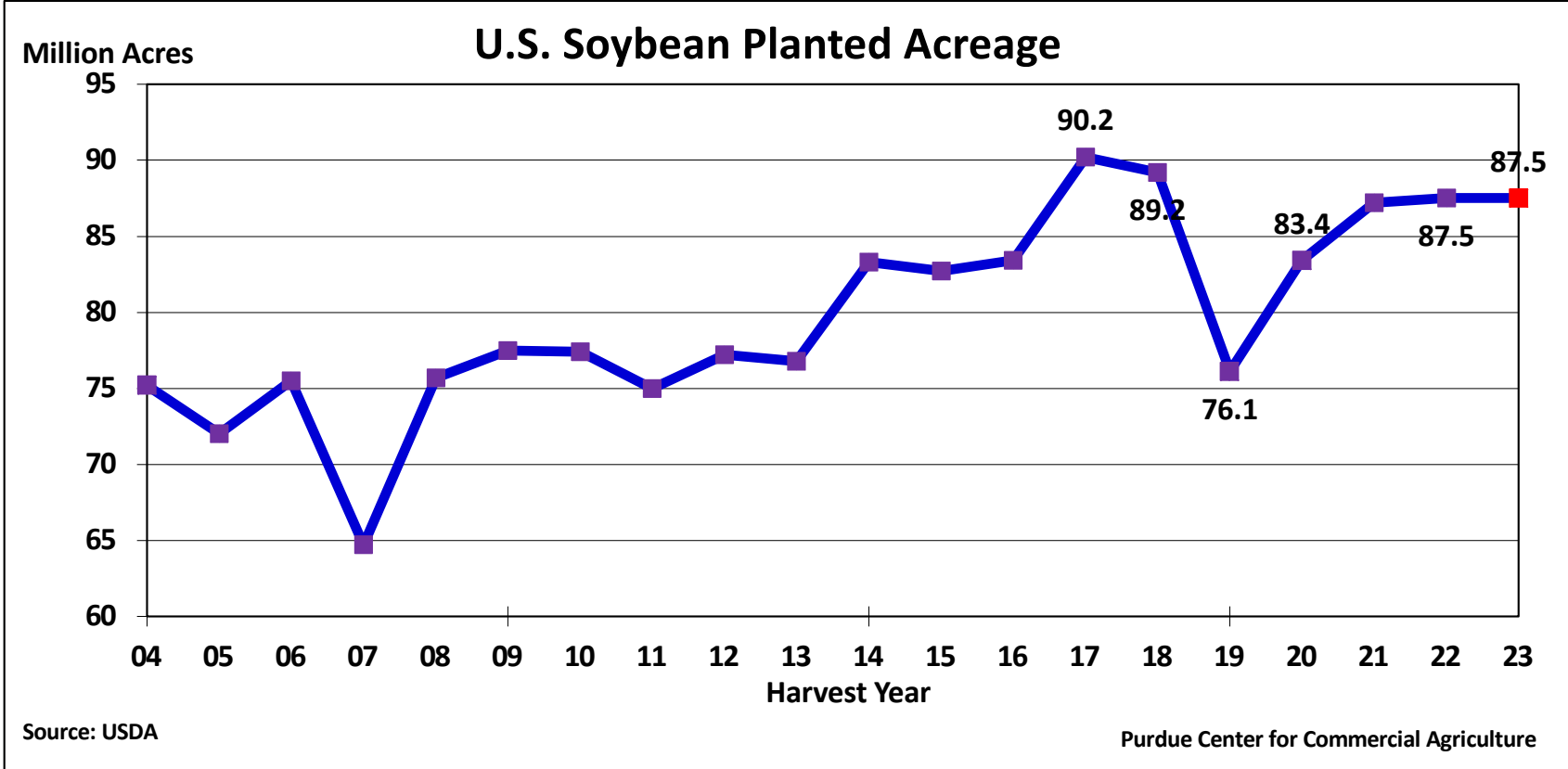
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Rising Ending Stocks Could Push Season Average Price Down Below \$6



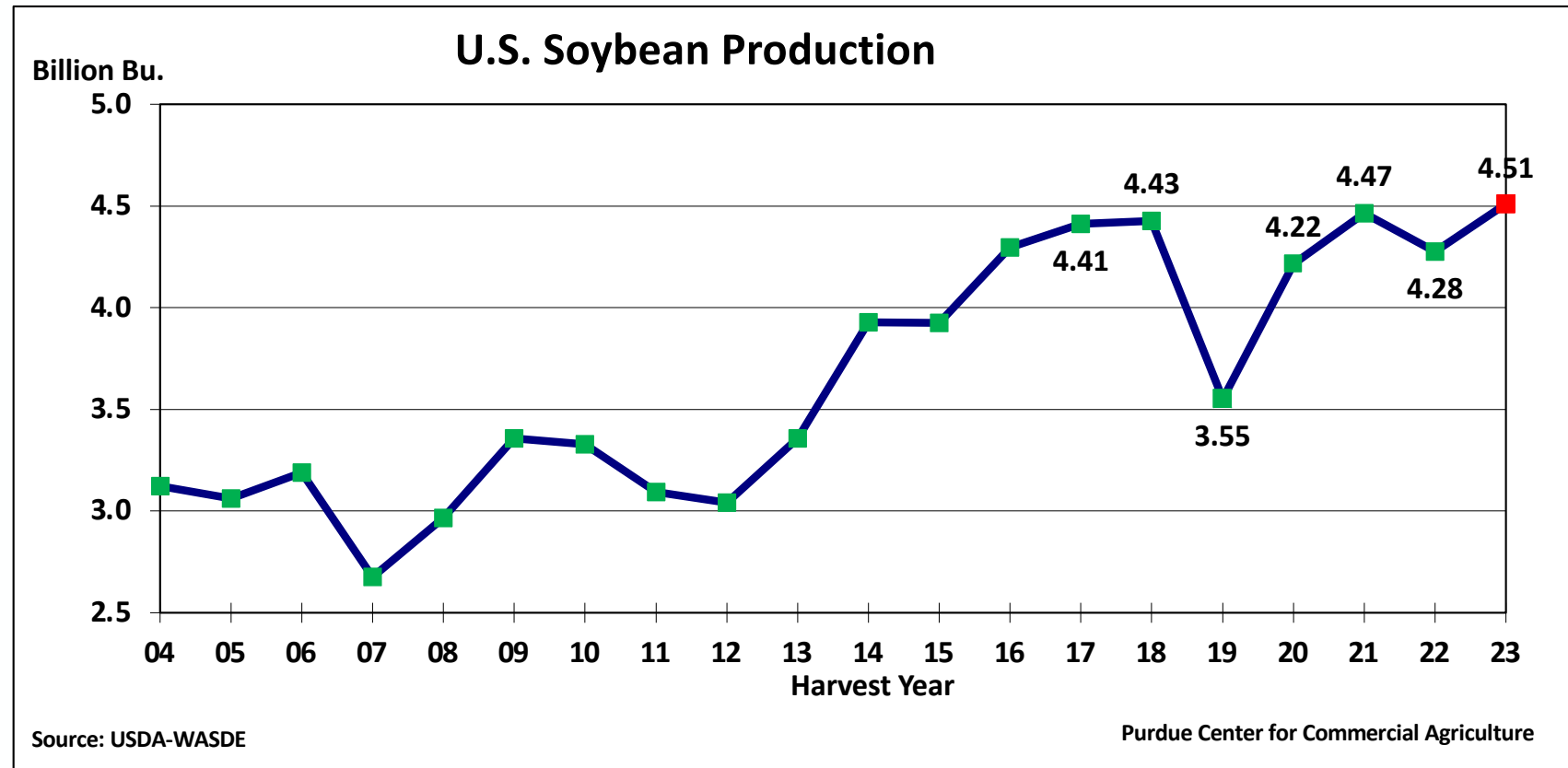
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USDA Expects No Change in Soybean Acreage in '23 Compared to '22

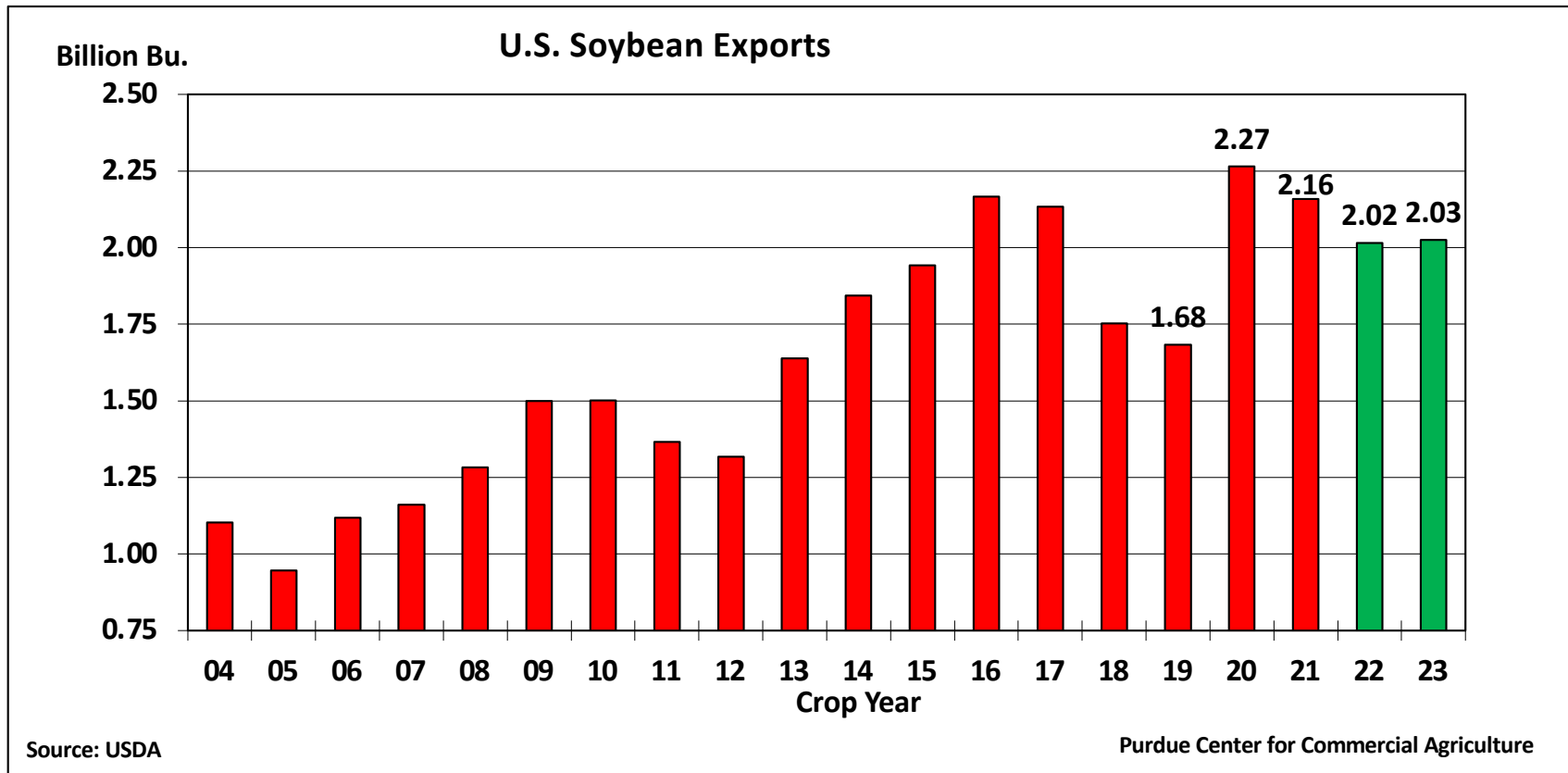


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But Trend Yield & Increase in Harvested Acreage Would Push Production Up 230 Million Bu.

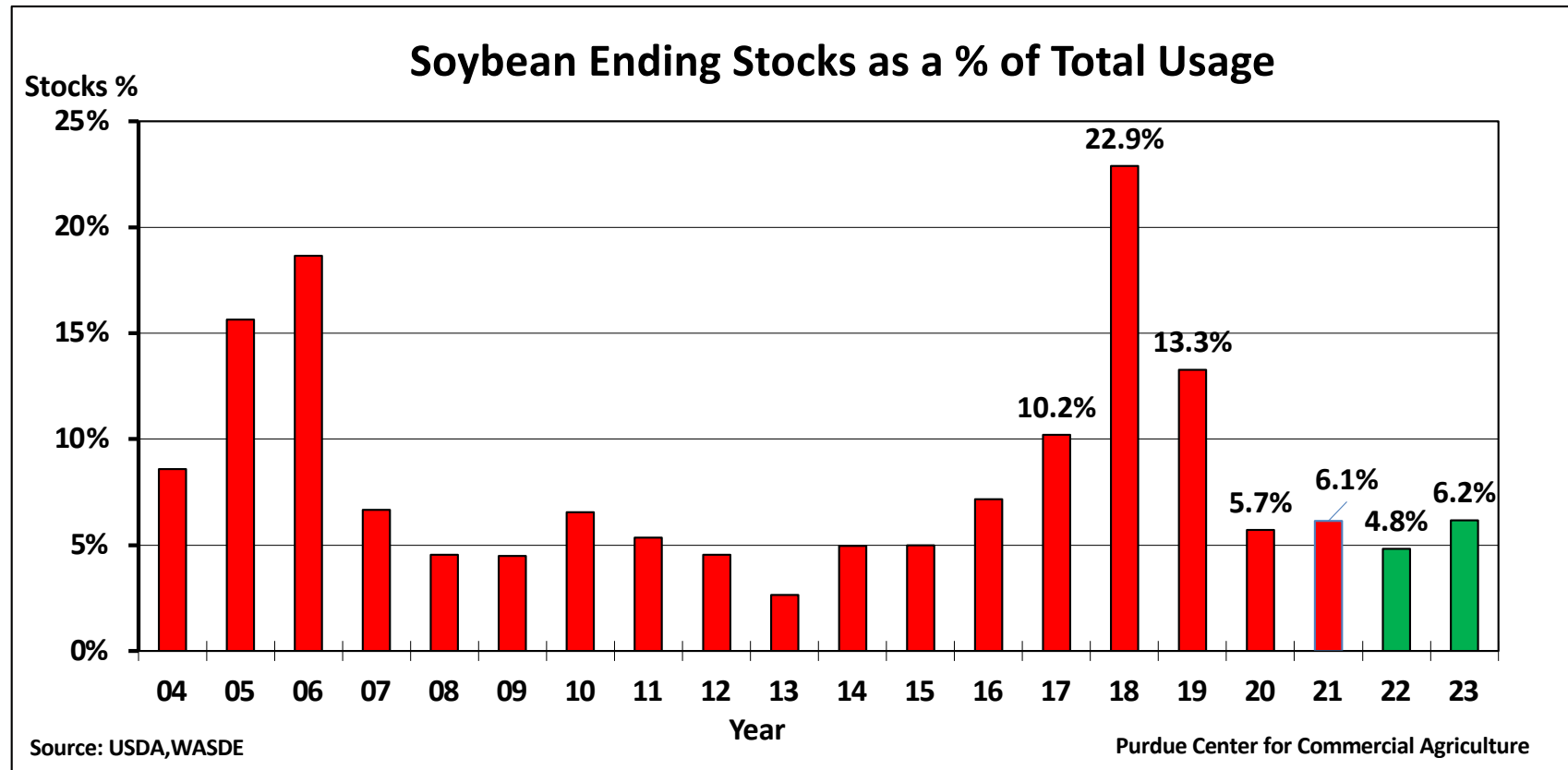


'22 Crop Export Forecast Down 6% vs. '21, USDA Expects Flat Exports for '23 Crop

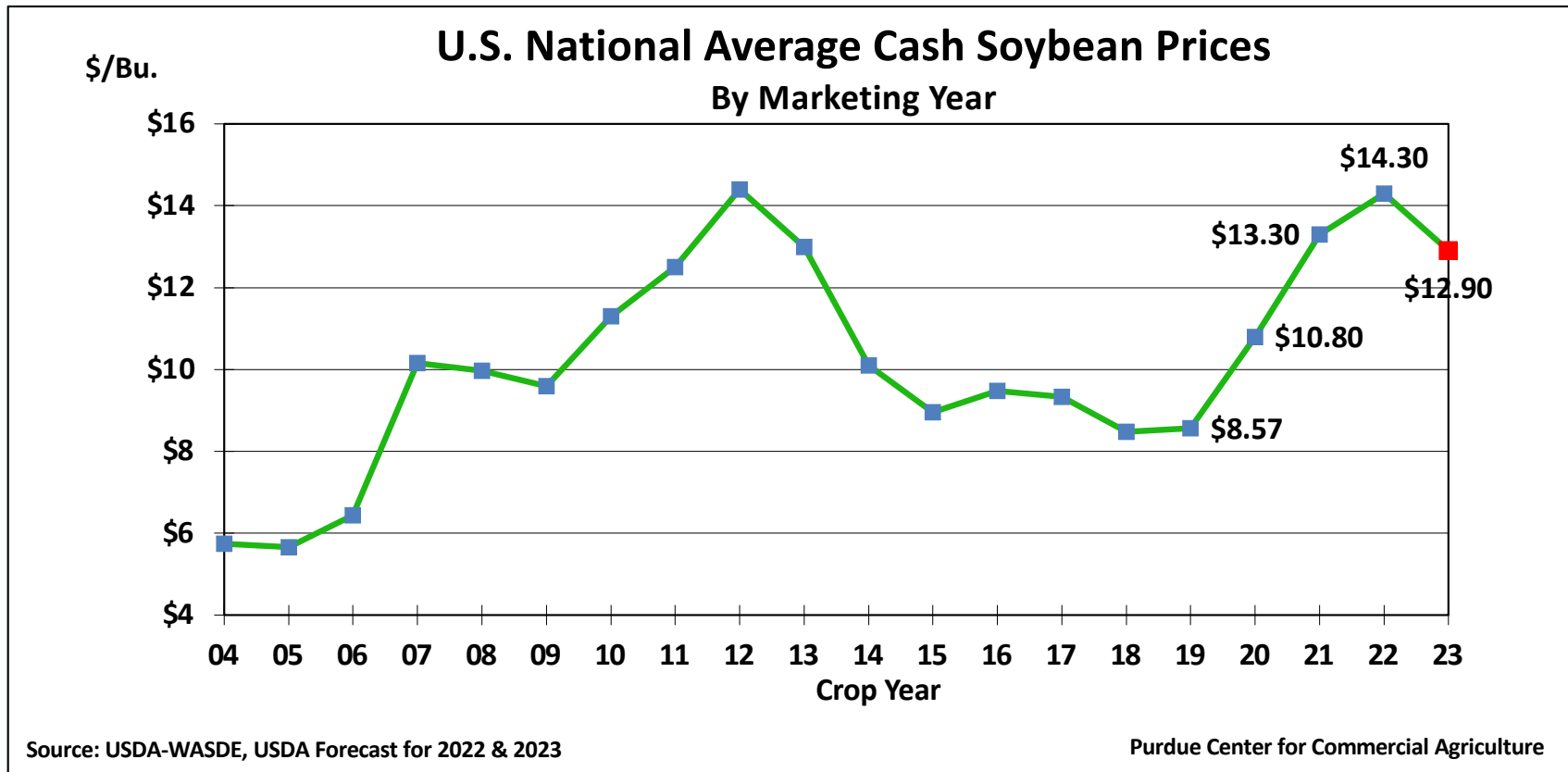


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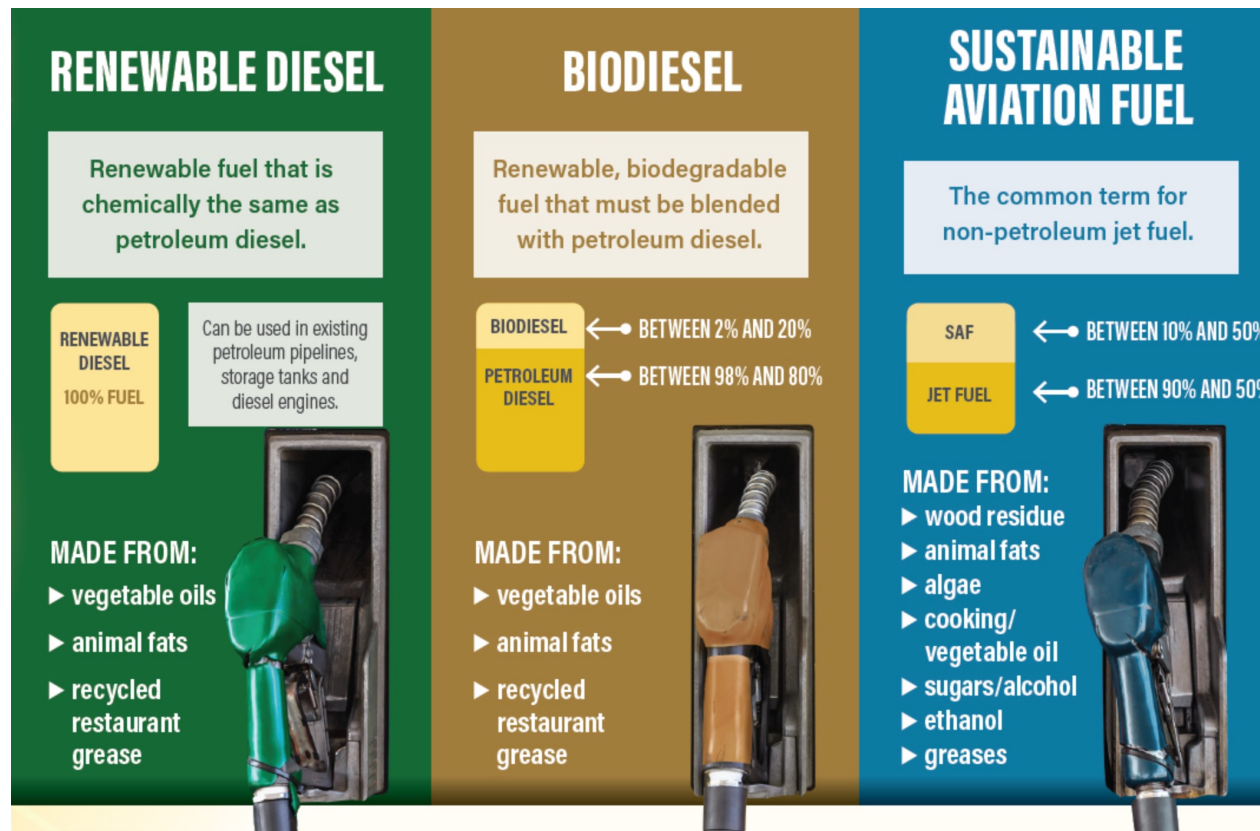
Yield & Harvested Acreage Boost Could Push Stocks Up Above The Last 3 Years



Increase in Ending Stocks Could Push Soybean Price Average Below \$13

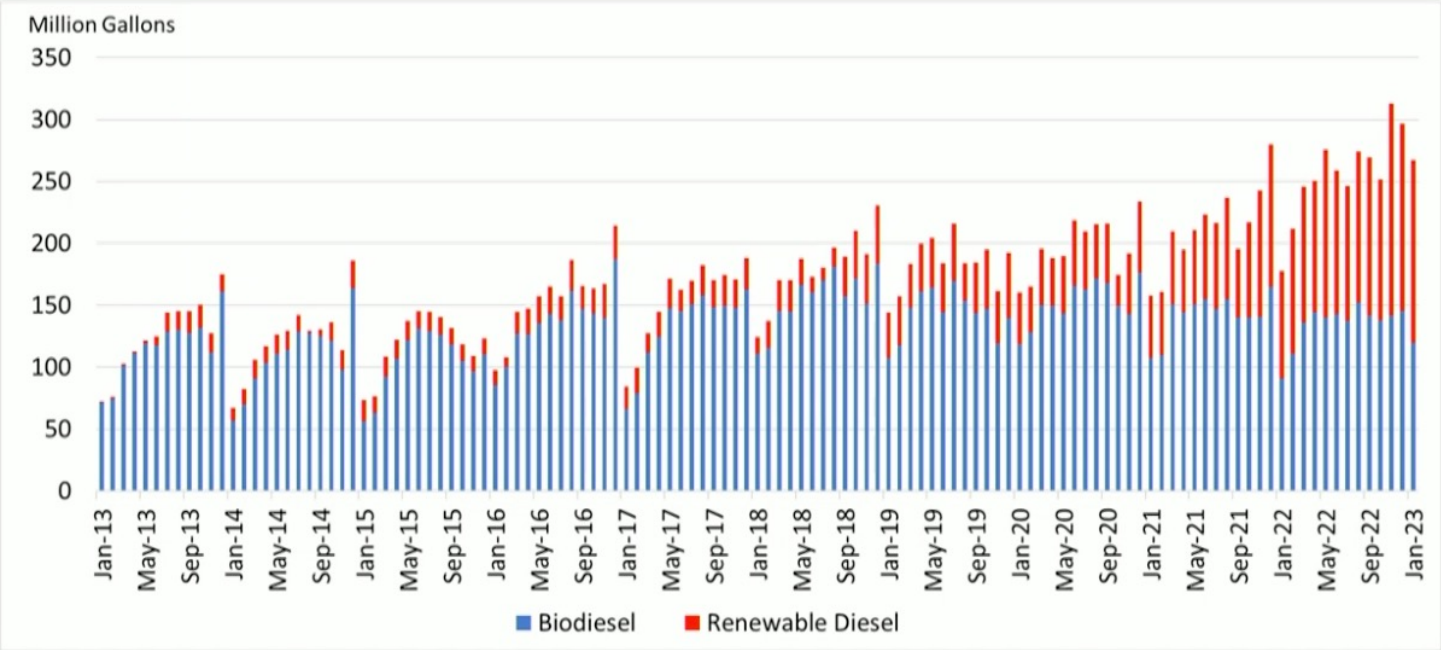


Bio-Based Fuels Are A Wild Card in the Longer-Term Outlook



Growth Market for Soybeans Is Renewable Diesel

Renewable Diesel Production is Expanding

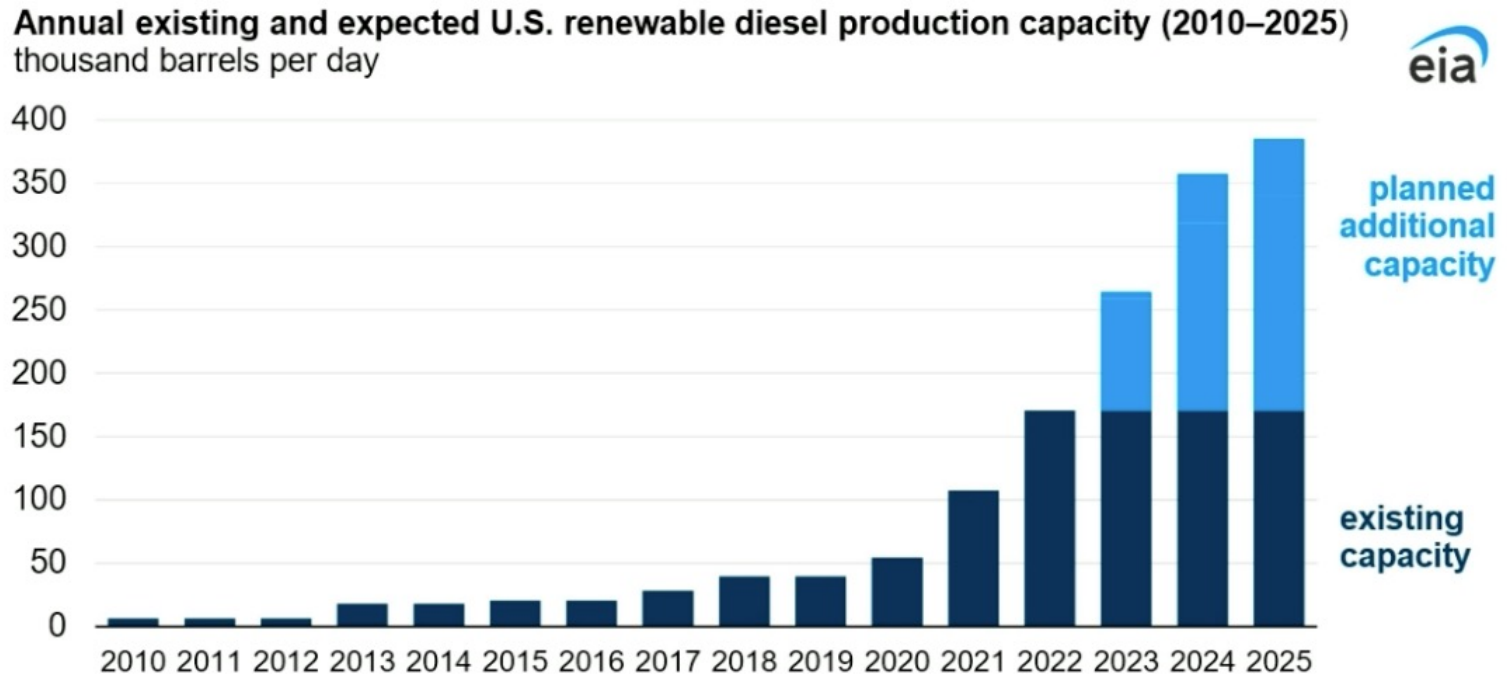


Source: EPA

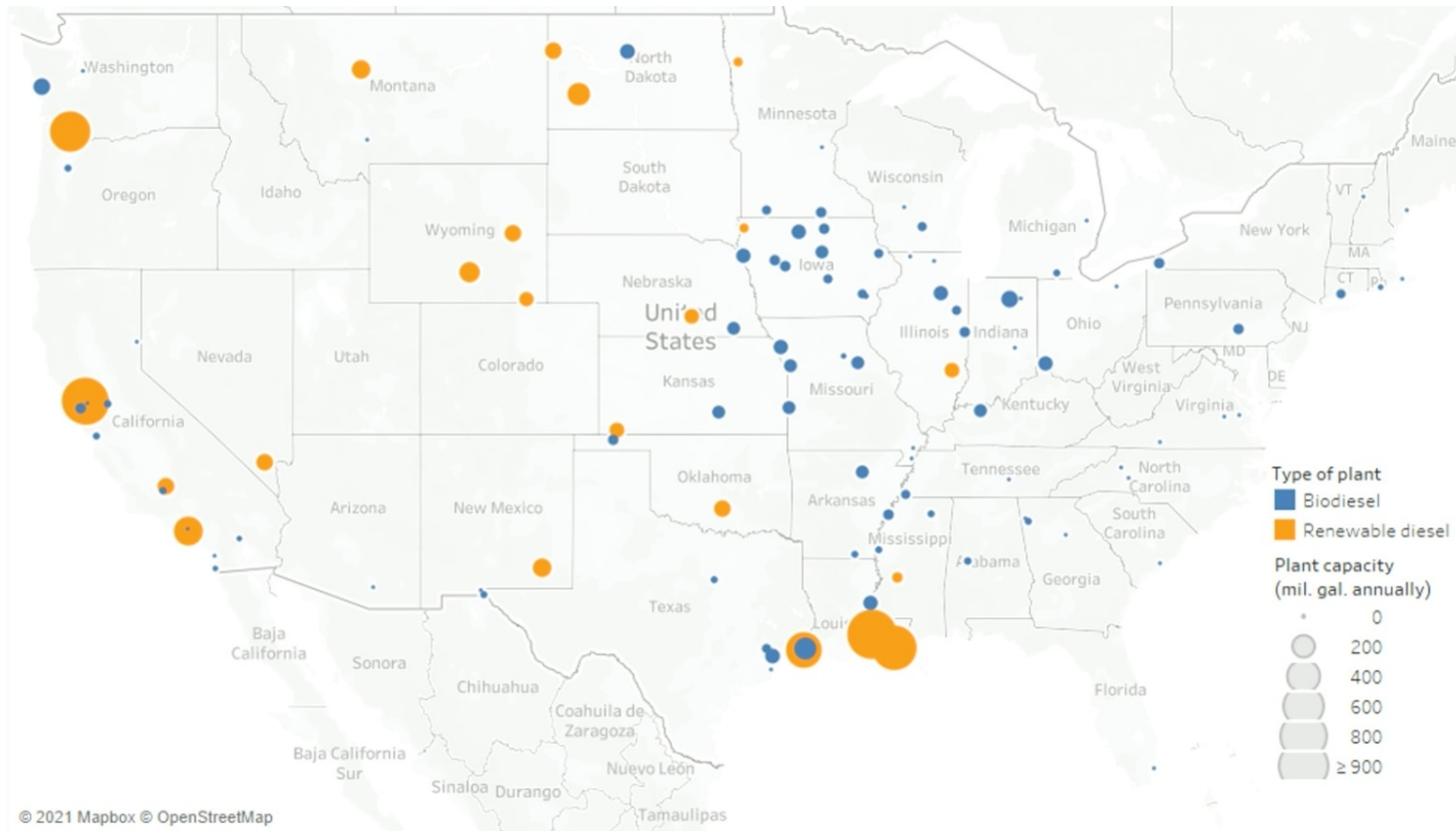


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Lots of Additional Capacity Announcements...How Many Will Be Built?

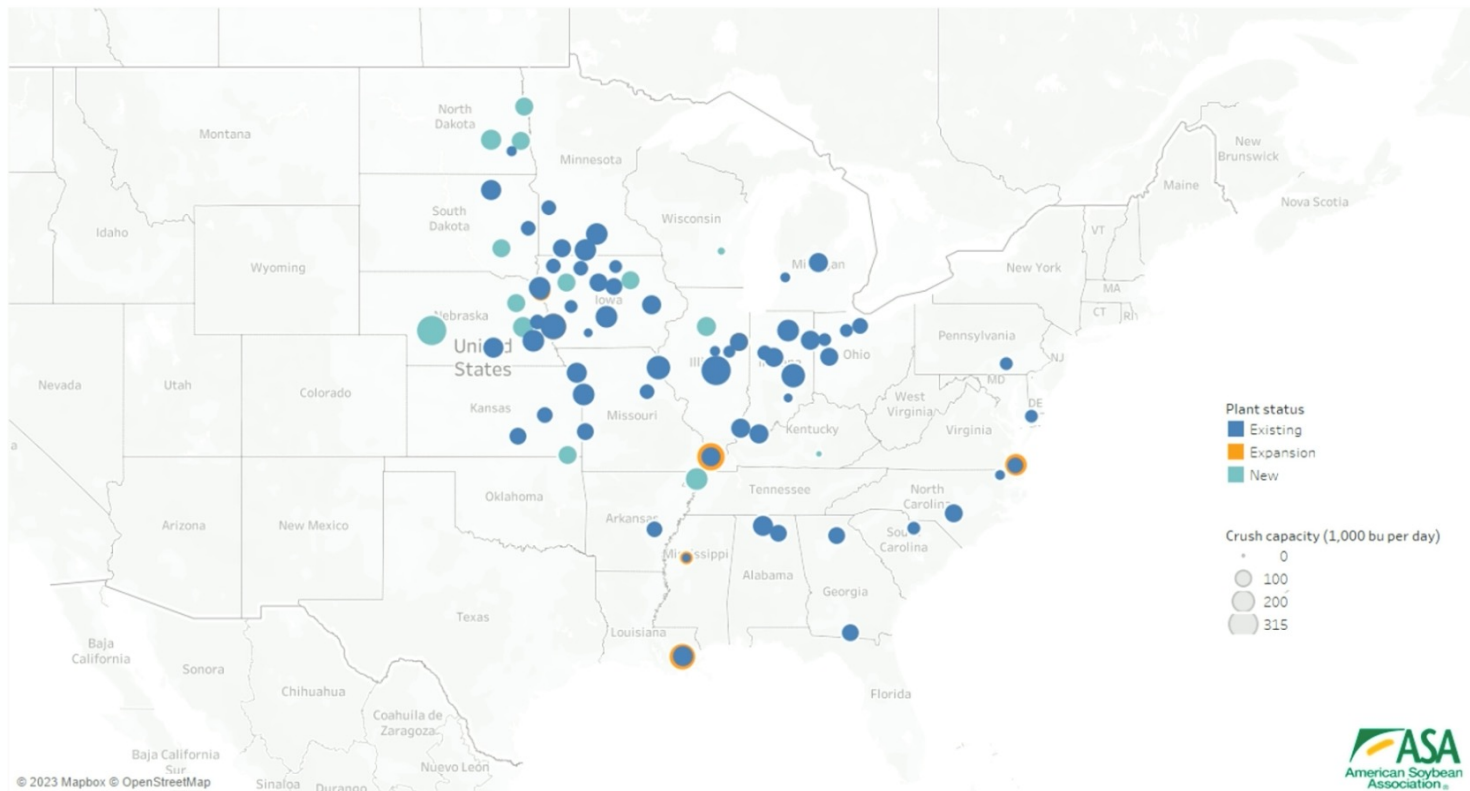


Biodiesel & Renewable Diesel Plants...Includes Announced Plants



Soybean Crush Plants...Includes Existing Plants, Plant Expansions & New Plants

U.S. Soybean Crush Plants



When Considering Management Strategies For Your Farm, Remember...

No One Actually Knows What's Going to Happen!

Good Managers Embrace Uncertainty and Develop Strategies to Increase the Odds of Success



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Long-Run Farm Management Strategies to Increase Your Odds of Success

1. **Decide what your competitive advantage is**
 - a) **Low cost strategy**
 - b) **Value added strategy**
2. **Identify strategies that increase your odds of success such as**
 1. **Taking advantage of seasonal trends in prices & basis**
 2. **Growing value added crops**
 3. **Upgrading farmland via improved drainage**
 4. ***Developing a long-run reinvestment plan for growth***
3. **Use scenarios to enable you to respond quickly to changing conditions**
 - a) **Develop 1) Favorable, 2) Most Likely, and 3) Worst case scenarios**
 - b) **Identify strategies you could pursue under each scenario**

Looking Ahead...Upside and Downside Risks

Upside

- Long-run world population growth
- Tight world supplies
- Growth in demand for renewable fuels

Looking Ahead...Upside and Downside Risks

Upside

- Long-run world population growth
- Tight world supplies
- Growth in demand for renewable fuels
- Limited expansion capacity in key growing regions
- Conflict continues to inhibit Black Sea region's production & exports

Downside

- Increasing S. American acreage & production
- Rebound from weak yields in N. & S. America increases exportable supplies
- Possible world recession
- Strong U.S. dollar inhibits U.S. exports
- Rising interest rates raises production costs and negatively impacts land values

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