





# Higher Production Costs Facing Agriculture

Steven R. Koenig, ODAE Brent R. Duey, OE



### Agenda



- Inflation environment for 2022
- Cost inflation in agriculture
- Impact on FCS borrowers and portfolios
- Examination & oversight





#### Price "inflation" dominates economic concerns



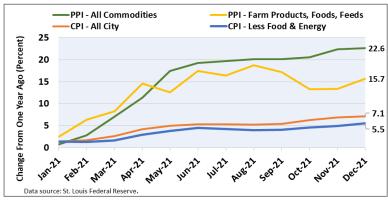


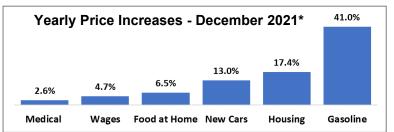




- Disrupted supply chains hinder ability to meet strong demand:
- Government stimulus continues
- Pandemic still impacting worldwide production
- Distribution bottlenecks slow to resolve
- Global energy supply not meeting demand
- Tight labor markets

#### **Broad Price Rise**





\* CPI-U.S. Medical Care Services, BLS-Average Hourly Private Wages, CPI-At Home Food Prices, JD Powers-Average New Car Price, FHFA House Price Index, USIA-Regular All Formulations Gas.



#### Rising production costs in agriculture



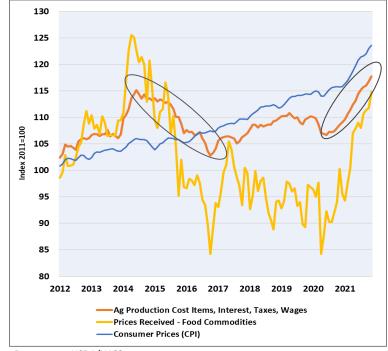






- Prices paid for farm inputs increased 10% from mid-2020 to December 2021
- Prices received by farmers jumped 24% during the same period
- Prices paid by farmers are sticky, prices received by farmers are volatile

#### **Indexes of Ag Prices and Production Prices Paid**



Data source: USDA/NASS.



#### **Broad rise in farm input costs**



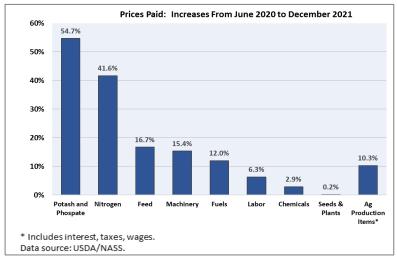






- Historically high fertilizer costs are a big challenge for crop producers
- Certain chemicals and seeds are higher this year
- Higher labor, feed, and capital costs are challenges for livestock

#### **Broad Rise in Farm Input Costs**





Data source: USDA/AMS.



#### Higher capital costs: farmland







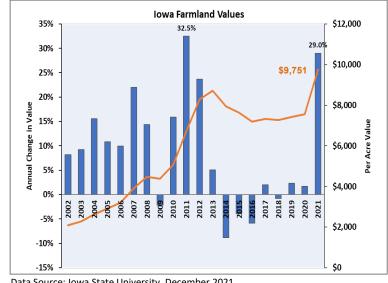


- Strong farm profits, particularly in cash grains, have translated into higher farm real estate values
- Higher rental rates in 2022
- Land rents are stickier than land prices

Average Sale Price Increase per Acre for High Quality Land, 2020 to 2022



**Land Prices Take Off Again** 



Data Source: Iowa State University, December 2021.







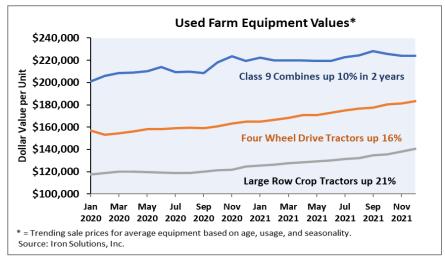




## Higher capital costs: machinery and improvements

- New and used farm machinery values are higher on strong demand, lean inventories, and supply chain issues
- Higher material and labor costs are increasing building costs across the food system

#### **Tractor and Combine Prices Rise**



Annual New Equipment Sales	2020	2021	Yearly Change					
	Units sold							
Self-Propelled Combines	5,030	6,272	24.7%					
Four Wheel Drive Tractors	2,988	3,536	18.3%					
100+ Horsepower Tractors	19,144	23,762	24.1%					
Source: Association of Equipment Manufactures.								



#### Higher capital costs: interest rates

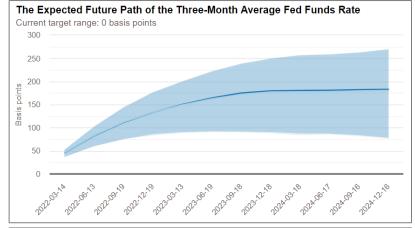








- Rising borrowing costs are ahead for the \$450 billion in total farm debt
- More System loan rates are now locked in for longer time periods but still about half of System loans carry floating rates



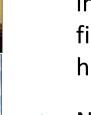
Loan Repricing Intervals for System Loans								
						Total Gross		
	0 to 6	6 Months	1 to 5	Over 5		Loans		
	Months	to 1 Year	Years	Years	Total	(millions)		
Share of total								
9/30/2021	46.9%	6.8%	26.3%	20.1%	100%	\$325,784		
12/31/2020	54.0%	8.3%	23.1%	14.5%	100%	\$315,490		
12/31/2019	51.9%	7.1%	24.3%	16.8%	100%	\$286,964		

Sources: Atlanta Federal Reserve Bank (accessed 2/1/22) and FCS Funding Corporation Information Statements.



## Farm finances are strong going into 2022



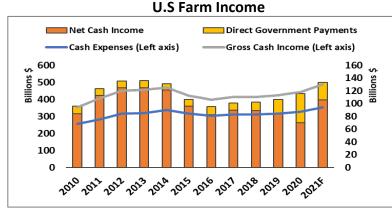




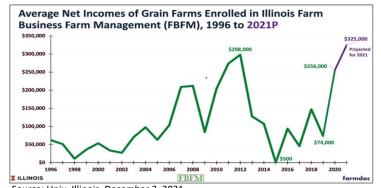




- Farmers, and the food industry in general, have the financial health to weather higher costs - at least initially
- Near-term outlook is encouraging
- ► Longer-term concern: Risk of a "Cost-Price Squeeze" for some parts of the ag industry



Source: USDA/ERS, December 1, 2021.



Source: Univ. Illinois, December 3, 2021.



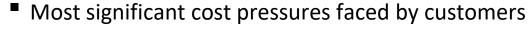
#### Lender outreach



Surveyed System lenders to gain additional insight on how the current environment is impacting customers/portfolios



Questions focused on:



- Estimated impact on borrowers and portfolio in 2022 and beyond
- Growth and volume implications
- Underwriting considerations











## Lender responses: most significant cost pressures

- Inputs particularly fertilizer, substantially higher
- Labor cost and availability will encourage automation
- Land prices and cash rents at/near record levels
- Infrastructure/Equipment increasing construction costs for facilities and machinery in short supply
- Transportation trucking availability and shipping rates
- Water cost and availability



#### Lender responses: key takeaways



- Margins projected favorable in 2022, yet lower than 2021
- Input prices will likely cycle down based on supply/demand
- Higher fixed cost structure may be more permanent
- Borrowers can absorb expected increases in interest rates from the current low levels
- Pricing, risk management, and contract discipline necessary





#### FCS portfolio impact: credit quality



- CIUS I

- Most institutions have included high-cost scenarios as part of existing stress-testing efforts
- ► Lenders do not expect significant adversity in 2022 as projected margins remain generally favorable, but lower than 2021
- ▶ Possible decline in credit quality is "down the road" as both borrowers and portfolios are starting from a position of strength
- Deterioration could occur sooner in Agribusiness portfolio versus producers as more sensitivity to interest rates, labor and supply chain issues
- FCS portfolios are diversified which provides some risk mitigation



## FCS portfolio impact: growth/volume





- Operating loan usage is generally down from historical levels as profitability is more than offsetting higher costs
- Mortgage loan volume has increased as rising land values and higher sales activity have largely offset lower demand from capital improvement projects
- Moderate overall growth is expected for 2022



#### FCS underwriting considerations



Front-end guidance and projections have been updated to account for the current environment



- Underwriting standards and practices are designed to be "through the cycle"
- Near-term and long-term repayment analysis is typically completed
- Higher costs but also higher revenues thus far margins are projected to be narrower, yet remain favorable
- ► Lenders believe underwriting and risk rating systems are designed to account for various cyclical factors, including higher costs





#### FCA examination & oversight



- ► Fiscal 2022 National Oversight Plan includes risk topic of "Loan Underwriting in a Period of Significant Volatility"
- Examination work to evaluate:
  - Analyzing, underwriting and servicing of accounts in 2022, with a focus on the cash grains sector
  - Sources and quality of new loans/growth
  - Cost increases and related volatility
- ► Will continue to focus management discussions and monitoring activities on impacts of the current high-cost environment





## **Questions**



