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**An Analysis of the Relationship Between Agricultural Commodity Markets and Financial Markets:
A Regime Switching Approach**

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***Selected Poster prepared for presentation at the 2021 Agricultural & Applied Economics Association
Annual Meeting, Austin, TX, August 1 – August 3***

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AN ANALYSIS OF THE RELATIONSHIP BETWEEN AGRICULTURAL COMMODITY MARKETS AND FINANCIAL MARKETS: A REGIME SWITCHING APPROACH

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DATA & METHODS & CONCLUSION

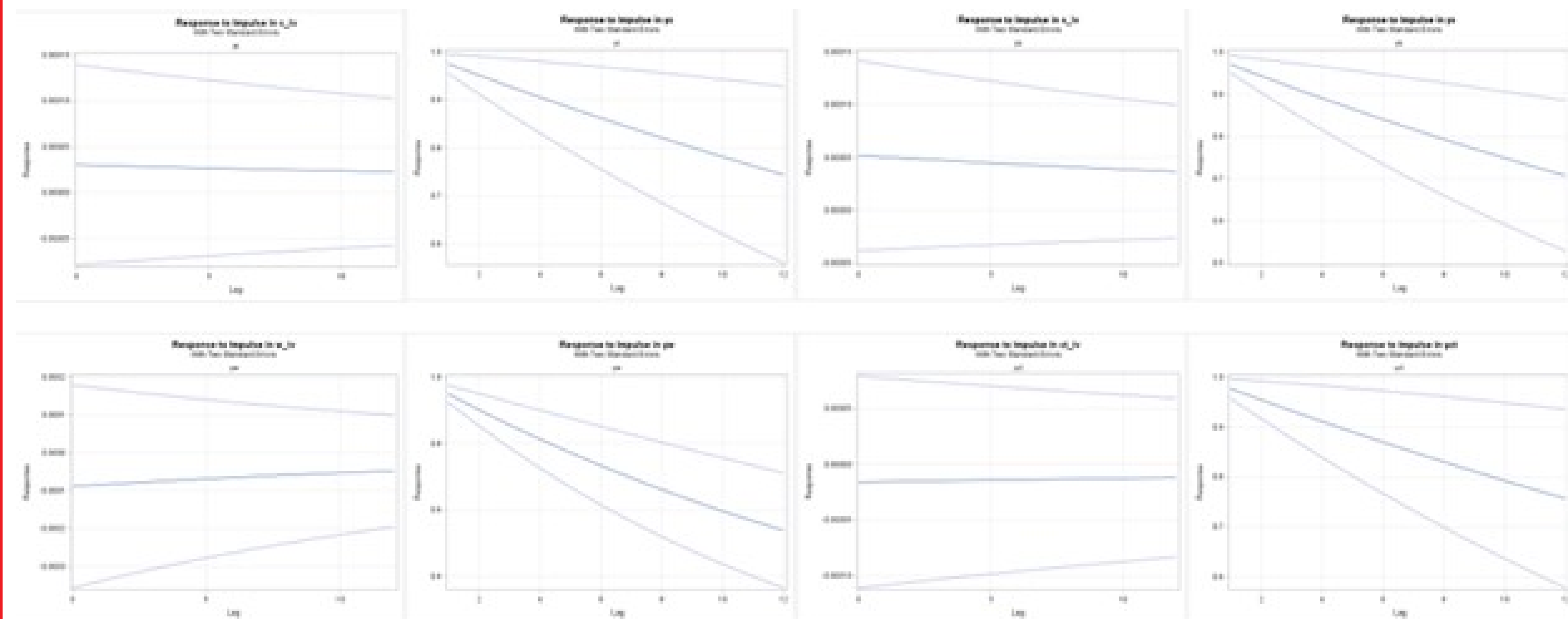
Methods

- In this paper, we use a regime-switching model to examine the relationship between spot and futures prices and use price differences and implied volatilities, which is derived from option pricing formulas, as forcing variables. We then use a VAR (vector autoregressive) model to analyze the problem of volatility spillovers.

Data

- For the empirical analysis, we consider corn, soybean, wheat and cotton markets. These four markets are selected because of their important roles in U.S. agricultural commodity markets.
- The daily spot and futures prices data, the implied volatility data and the historical data were obtained from the Commodity Research Bureau (CRB Infotech CD).

RESULTS 1: PRICES IMPULSE RESPONSE



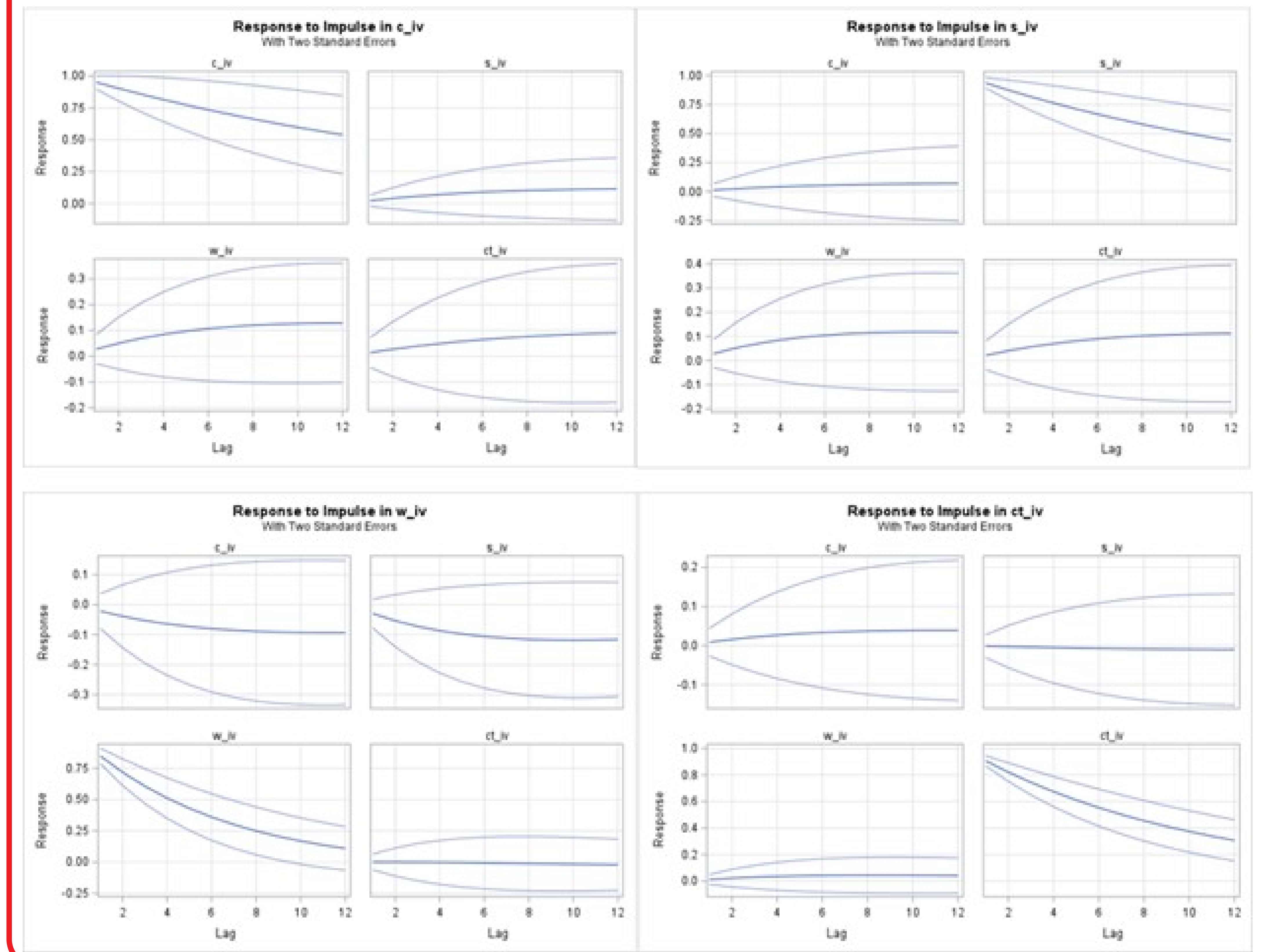
Conclusion

- Results suggest that relatively significant price transmission and volatility spillover exist from the corn market and wheat market to the soybean market. Price transmission and volatility spillover also exist from the corn market and the soybean market to the wheat market.
- Adjustments to shocks take longer in the cotton market and take shorter in the wheat market.

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RESULTS 2: IV IMPULSE RESPONSE



INTRODUCTION

- Market linkages have significant implications for the operation of an economy. Many researchers suggest that analyzing a market independently may induce misleading conclusions because different markets are often tightly connected.
- Therefore, an understanding of overall market behavior requires an understanding of these relationships and the mechanisms for transmission of shocks among different markets.
- Several studies have investigated the relationship between spot and futures prices of crude oil and have found that the relationship between spot and futures oil prices is nonlinear and time-varying (Silvapulle and Imad (1999), Bekiros and Diks (2008)).