Are Jet Fuel and Diesel Prices Vulnerable to Crude Oil Markets? Implications for Emerging Energy Sources Wenbei Zhang¹, Marty Luckert¹, Feng Qiu¹

BACKGROUND

- Crude oil is currently a key input for making jet fuel and diesel.
- New technologies are trying to substitute biomass for crude oil to make biojet and biodiesel.
- Potentials for future emerging biojet and biodiesel industries will be influenced by current price relationships between crude oil and jet fuel / diesel.
- How do jet fuel and diesel firms respond to crude oil price increases vs. decreases?
- We investigate this question using nonlinear time series models.
 RESULTS



- All three price series show substantial fluctuations over time.
- Oil and jet fuel/diesel prices move together in the long run.
- Short-run adjustments are asymmetric depending on whether oil prices increase or decrease.



IMPLICATIONS	PARTNERS
 Risk management within the jet fuel and diesel industries might 	UNIVERSITY OF ALBERTA DEPARTMENT OF RESOURCE ECONOMICS SUSTEMS

improve with diversification of input supply (oil + biomass vs. just oil).

 Biojet (with biomass inputs) may be especially attractive to jet fuel producers because they are unable to pass increased oil costs through to consumers.





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