Shale Oil Producer Hedging Policies and Firm Value
A Study of Small to Medium Sized Independent Producers

MOTIVATION
- Shale and tight oil production increased from 0.8 to 4.9 million BPD from 2010 to 2015 representing 52% of domestic production
- Result: reduced imports and expected oil independence by 2017
- Small to Medium sized Independent companies are key contributors to shale oil production growth (approximately 1 million BPD)

RESEARCH QUESTION
- What is the effect of a hedging program, by small to medium sized North American independent tight oil producers, on firm value?

Why is this question relevant?
- Understanding the resilience of SME independent producers, during adverse price innovations, will improve our understanding of domestic oil production capacity and response to cyclical crude oil price patterns.

ECONOMETRIC MODEL
- Unbalanced GMM fixed panel model used to study homogenous sample of domestic oil producers

DATA
- Five years, frequency quarterly, 45 publicly traded independent tight oil producers
- Market Capitalization between 100 millions and 11 billion USD and > 50% revenue from oil production
- Domestic oil and gas production only
- US registered, listed public companies
- Representation: all key USA shale plays

Hand collected quarterly data from the following:
- SEC EDGAR database and Company websites
- Thomson Reuters EIKON database

MAIN RESULTS AND CONTRIBUTION
- All firms hedge oil price risk, many due to lender requirements, others due to management strategy. Participation rates were higher than expected in study sample
- Hedging programs are not statistically significant to firm value or firm resiliency. Previous literature for commodity producers found no positive relationship.
- Corporate financing strategies have a stronger influence on firm resiliency as compared to hedging programs. Firms will D/E < 0.50 showed less financial stress.

ROBUSTNESS AND FUTURE RESEARCH
- A study of similar sized private companies would complement this research
- Presence of Resource Based Lending products on firm value and resiliency should be analyzed as it limits managerial control on debt capacity
- Firm management appears driven by top line revenue (short term) rather than strategic profits (long term). Is this due to shale extraction characteristics?

MAIN REFERENCES

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