Asymmetric Information and Distributional Impacts in New ITQ Markets

BRETT CLOSE

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Motivation

Transition from Common Property to Property Rights

- Despite large gains in resource rents, often resistance from incumbents.
- Study consolidation and price discovery

Concerns about consolidation, fairness

 Policies include embargo on sales, community-based quota, owner-operator restrictions, etc.

Two main questions:

- 1. How are prices "discovered" in a newly-created environmental market?
- 2. What are the distributional impacts of the transition?

Stylized Facts

Concerns about distributional effects (small vs. large)

Limited empirical studies; some experimental work

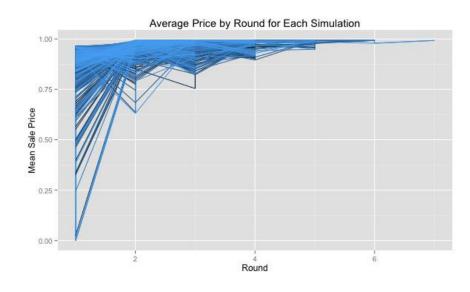
Where there are data (and "thick" enough markets), volatility in new

markets drops quickly over time.

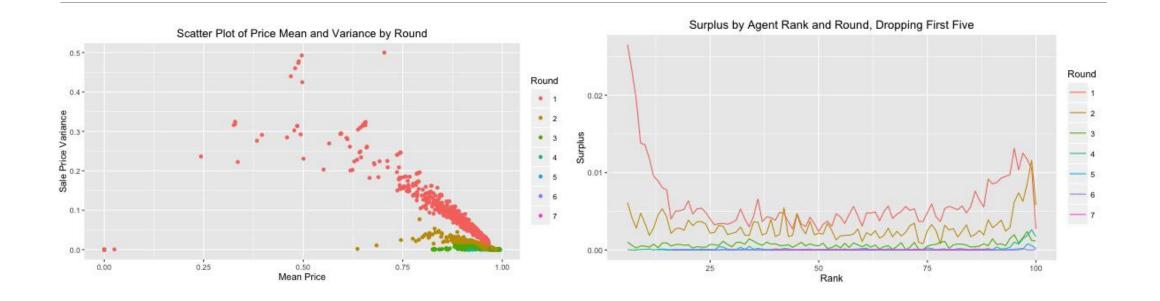


Simulations

We follow the model in Grainger and Costello (2016) and simulate the consolidation process.



Simulation Results Cont.



Data

We now have individual transactions from NZ for several fisheries

- Buyer and seller size
- Track individuals over time
- Quantities and Prices (excluding protest values, non-arms-length transactions)
- Species Groups Covered:
 - Swordfish
 - Paua
 - Rock Lobster
 - Flatfish
 - Redbait

Complications

Our simulations assume away the lease market

- Individual fishermen face the choice to fish, buy, sell, or enter the lease market (lessee or lessor)
- We are modeling the choices jointly for each season.
- Other relevant variables: TAC, ex-vessel prices, and stock estimates

Preliminary Results

Distributional Effects?

- Concerns about equity?
- Tracking consolidation/concentration
 - When do "small" firms exit?
 - How do new "small" firms enter?
- Weak evidence (so far) that the transaction price is determined by firm size of buyer and/or seller
 - (or "distance" between the two)

(Very) Preliminary Work—Suggestions Welcome!

Thank you!

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