Overcoming Transaction Costs: Experiences from Oil and Gas Leasing

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Providing Environmental Services from Agriculture in a Budget-Constrained Environment
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U.S. Oil and Gas

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- 825,000 oil and gas wells in the U.S. (2009)
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- 825,000 oil and gas wells in the U.S. (2009)
- Widespread ownership of mineral resources gives unique structure in U.S.
Dramatis Personae

- Resources dispersed around the countryside—owned by various owners
- Technically-proficient operators may be paired with financial capital
- “Landmen” are the contracting specialists who bring the two together
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Oil and gas leasing is the solution to the natural resource acquisition problem. What can we learn from the experience?
Why Leasing?

**Risk:** exploration & production remains risky

- Geologic uncertainty
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**Legal institutions:** allow mineral leasehold latitude to operate
- “mineral dominance”
How Does Leasing Work?

Leasing Process

1. Landman approaches landowner
2. Negotiation/counter-negotiation
3. Lease signed and bonus payment made
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1. Plan
2. Permit
3. Construct
4. Produce
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- Do we get the “right” amount of leasing?
- How do we get optimal lease allocation?
- What do aggregators cost?
Development is risky, so there are unproductive leases.
U.S. Federal Onshore Oil and Gas Lease Acreage
FY 1988 - 2011

Source: Public Land Statistics
Assignment and “Lease Hounds”

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Developed leases acquired by firms that never develop (aggregators): 10.4%
Landmen

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- Others procure leases on their own account and repackage them to operators—“independents”
  - Often in exchange for an overriding interest in the property
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2007 Landman Survey from Amer. Assoc. Prof. Landmen
Paying Aggregators

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Offshore: +$26,192
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- Independent landmen are most likely aggregators, and they are handsomely rewarded.
- Company landmen are a cost of doing business.
Takeaways

- Oil & gas leasing solves natural resource acquisition problem
- Range of contracts to control resources for E & P activity
- Legal dominance and definition reduces costs
- More leases are written than needed
- Aggregators (independent brokers and landmen) play an important role in the oil and gas leasing process