Overcoming Transaction Costs: Experiences from Oil and Gas Leasing

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18 April 2012
Providing Environmental Services from Agriculture in a Budget-Constrained Environment
Washington, DC

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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

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Legal institutions: allow mineral leasehold latitude to operate

- "mineral dominance"

How Does Leasing Work?

Leasing Process

1. Landman approaches landowner
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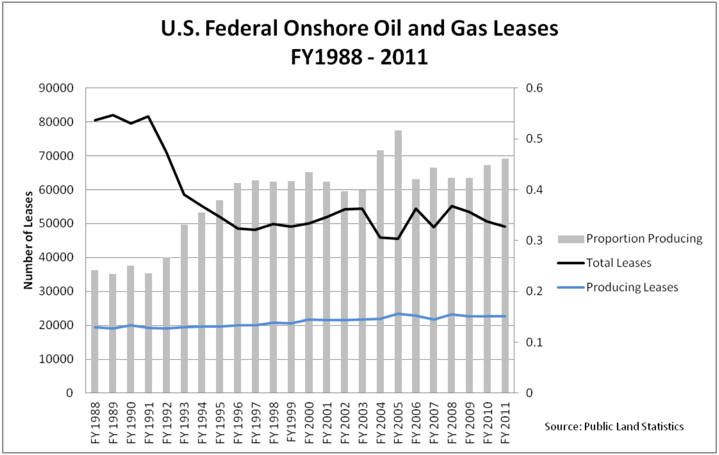
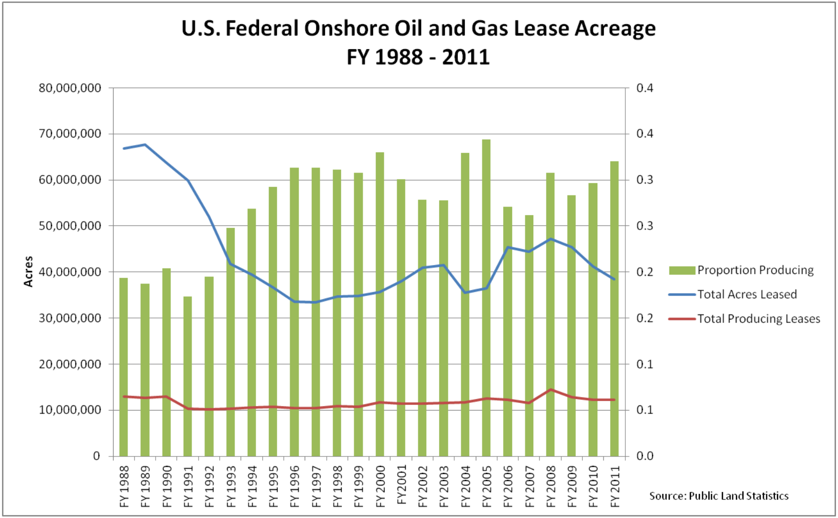
- Do we get the "right" amount of leasing?
- How do we get optimal lease allocation?
- What do aggregators cost?



Development is risky, so there are unproductive leases.


U.S. Federal Onshore Oil and Gas Lease Acreage
FY 1988 - 2011
Acres
80,000,000
70,000,000
60,000,000
50,000,000
40,000,000
30,000,000
20,000,000
10,000,000
0
0.4
0.4
0.3
0.3
0.2
0.2
0.1
0.1
0.0
FY 1988
FY 1989
FY 1990
FY 1991
FY 1992
FY 1993
FY 1994
FY 1995
FY 1996
FY 1997
FY 1998
FY 1999
FY 2000
FY2001
FY 2002
FY 2003
FY 2004
FY 2005
FY 2006
FY 2007
FY 2008
FY 2009
FY 2010
FY 2011
Proportion Producing
Total Acres Leased
Total Producing Leases
Source: Public Land Statistics

Assignment and “Lease Hounds”

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58 operators, 99 lessors

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

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2007 Landman Survey from Amer. Assoc. Prof. Landmen

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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