The Governance of Oil and Gas in the United States

Peter Mieszkowski
Ronald Soligo
Rice University

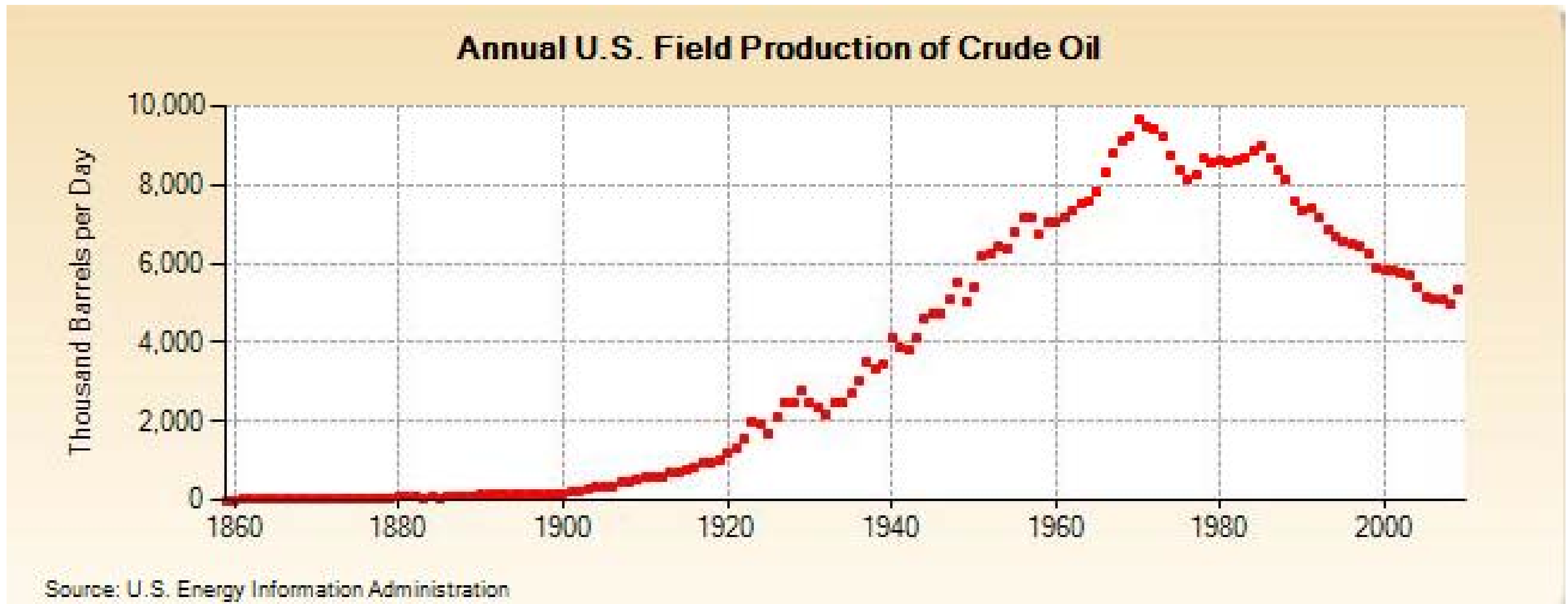
Oil and Gas and Public Policy in Mexico

Mexico City, November 23, 2010

Overview

- Historically (1860-1940) most development and production took place on privately owned land with privately held mineral rights, with relatively little regulation by state or federal governments.
- Ownership of public lands, and associated mineral rights, is divided between federal and state governments.
- The federal government has exclusive control over offshore resources
- At times the federal government has intervened to regulate prices and support states' efforts to limit production.
- The federal role has grown as offshore production has increased and energy security, environment and conservation of public lands have become more salient issues.

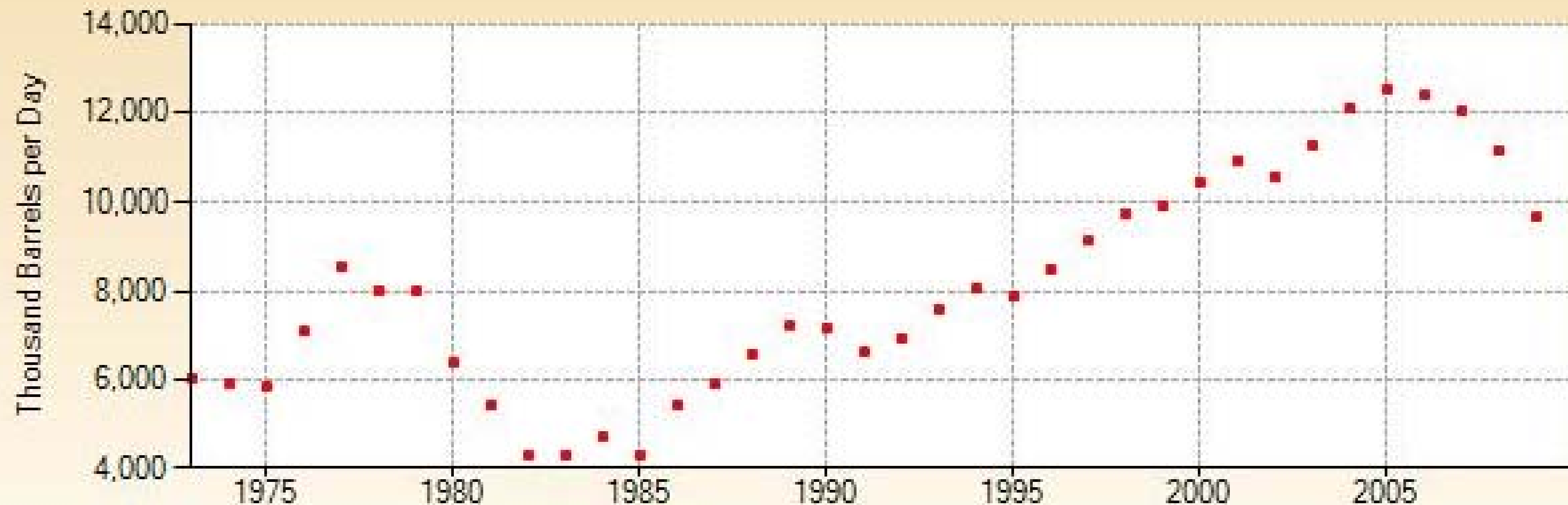
Overview



As late as 1940 the US produced 63% of the world's oil and was a net exporter of oil until 1947.

The US is still the third largest producer after Saudi Arabia and Russia – producing 5.4 million b/d in 2009.

Overview (cont’d)



The US consumes 25% of the world’s output. In **1970** the US imported 3.2 million b/d of crude and oil products accounting for 26% of total supply. In 2008 imports amounted to 11.1 million b/d or 57% of total supply. In **2009** imports fell to 9,776 million b/d.

US Oil Production(2009)

Three states plus Federal offshore account for 73% of output

US Gas Production (2009)

US is a major gas producer – roughly equal to Russia. Five states + Federal Offshore account for 75% of output.

Government Intervention Before World War II

- Oil was overwhelmingly produced on private land.
- Regulation was weak and done at the State level.
- In Texas, the Texas Railroad Commission (TRC) regulated the industry.
- No compulsory unitization. TRC issued regulations specifying the minimum distance between wells.
- States set production quotas (prorationing).
- The result of loose regulation was over investment and inefficient exploitation.
- The Federal role was limited to supporting state quotas by policing interstate movements of oil.

Post War Developments & The Federal Role

- Federal government supported prorationing by states by imposing quotas on oil imports (abolished in 1973).
- 1973-80: major and intrusive federal intervention:
  - price controls on domestically produced oil and gas
  - mandatory efficiency standards for automobiles and household appliances
  - subsidies for alternative fuels and the opening up of more federal lands for exploration.
- These control were motivated by concerns over inflation, balance of payments deficits and energy security.
- After 1980, price controls and subsidies for alternative fuels were dismantled and policies were introduced to encourage domestic production.

Federal Ownership and Jurisdiction

- The federal government owns 650 millions of acres of surface land, about 30% of total U.S. areaonshore.
- The Federal Oil and Gas Reform Act, (1987) established a common system of competitive bidding for all federal properties, onshore and offshore.
- Federal leases promulgated under the Mineral Leasing Act include various directions and regulations on how the properties are to be developed and specify environmental safeguards.

Federal Ownership andJurisdiction

- Historically the federal government has accepted state actions pertaining to the spacing of wells and the rate of development and production.
- States and local governments have right to impose taxes.
- Unitization on Federal lands remains voluntary but there are incentives for leaseholders to join units.

Federal Offshore

- Offshore development began with the passage of Congressional Acts in 1953.
- Coastal states were granted jurisdiction over the first three miles of submerged lands. (Approximately 10 miles for Texas and Florida)
- In 1982 Congress prohibited new leases offshore California (after a major oil well blow out near Santa Barbara in 1969). Similar moratoria were expanded to all offshore areas except for most of the Gulf of Mexico and certain coastal areas of Alaska.
- Since 1978, the Secretary of the Interior is required to formulate and implement a five-year leasing plan for the OCS. (In consultation with Governors of the affected states.)

Since BP oil spill

- The Mineral Management Service (MMS) has been replaced by two agencies :
  - Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)
    - Safety and environmental compliance
  - Office of Natural Resource Revenue (ONRR)
    - Royalty management

Petroleum Revenues Arrangements on Federal Lands

Onshore

- Currently, fifty percent of the mineral revenues collected on federal onshore lands are distributed to the states of origin.
- Another forty percent of the proceeds are paid into a reclamation fund, from which Congress appropriates monies to finance water and power projects in 17 western states.

Federal offshore taxation

- Federal offshore tracts be leased under competitive bidding using sealed bid auctions. The parameters are typically a cash bonus bid with a fixed royalty rate of 1/8.
- Coastal states received relatively little from offshore mineral revenue.
- The grants that are paid to state and local governments are made to all 50 states so only a small proportion are paid coastal states which are potentially impacted by offshore development.
- In 2006 Congress passed legislation which authorized new leases in the Gulf. This law allocates 37.5% of all federal revenue from new leases authorized by this Act to the four affected coastal states.
- Legislation has been introduced to give individual states the option of allowing their coastal waters to be developed.

Federal tax preferences

- The U.S. has seen numerous provisions in the corporate and personal income tax, which lower the effective taxes paid by the producers of oil and gas.
- Estimates of total tax preferences given to the oil and gas industry in 2009 were $2,740 million of which $1,100 million is for alternative fuels (unconventional oil and gas), $790 million in net cost of percentage depletion, and $840 million for expensing exploration and development costs.
- There is no form of general revenue sharing in the United States.

State and local governments impose income, severance and property taxes on oil production. They also collect royalties on state lands.

Alaska was and continues to be in a class of its own with respect to both total and per capita resource revenue collected. Virtually all of this income comes from a highly progressive production tax on petroleum tied to the price of oil.

Mineral Potential of Withdrawn Lands

- Large parts of the OCS are off-limits to exploration and development. Drilling on some onshore federal lands are also prohibited.
- The estimated mean undiscovered, recoverable minerals on the OCS are 86 billion bbl of oil and 420 trillion cubic feet of gas. A very large proportion of undiscovered oil, about 85%, is in Alaska in the National Petroleum Reserve and the Arctic Wildlife Refuge.
- An academic study with an assumed price of $59 per barrel calculates that the net social benefits of developing Alaska's ANWR is $251 billion equal to $90 billion of industry rents and $161 billion of federal and state taxes

Conclusions

- In order to open up more OCS to development, coastal states will have to be given a larger share of revenues.
- Legislation should be enacted that would limit the per-capita amount a state could collect in taxes on federal lands within its borders and also impose of a cap on the amount a state could receive as its share of federal mineral revenues collected on onshore and offshore production.
- More fundamental changes in federal revenue sharing are unlikely to occur. The right of states to tax the production on public domain lands and the sharing of federal mineral revenues are too deeply woven into the fabric of US federal arrangements to be significantly modified.