Risk and Russia's Takeover of Yukos

Why Russian and World Oil Production May Peak Even if There Is No Scarcity of Oil

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Presentation of the paper by Douglas Reynolds and Marek Kolodziej Risk aversion vs. Hubbert's Peak

- Lots of recent press coverage about peak oil scenarios
- Colin Campbell vs. Michael Lynch
- Risk aversion does not make any assumptions about URR
- This presentation is about institutional constraints that may lead to similar problems as scarce reserves

Risk aversion and OPEC

- Reynolds 1999 risk aversion model
- Pindyck 1978 cartel model
- Johany 1980 low discount theory
- Cremer and Isfahani 1991, Teece 1982 target revenue models
- Adelman 1993 political models



- Friedman and Savage 1948 convex-concave-convex utility function
- Markowitz 1952 individual behavior as a function of current income
- Kochenberger 1979 losses of a given size lead to larger declines in utility than the increases in utility resulting from analogous gains



- When applied to firms small firms exhibit less risk aversion than larger firms
- Even a small oil discovery would result in a large increase in a small firm's market value
- This can even lead to exploration if NPV is negative (C.M. "Dad" Joiner and East Texas)



- Large firms only explore for large fields, because marginal projects have little influence over their reserves
- Large firms may find it profitable to acquire smaller firms after they have borne the risk of exploration
- Mergers & acquisitions played an important role in the oil majors' reserve growth in the 1990s

Government-owned oil companies

- Usually large (Saudi Aramco, Pemex, PdVSA, etc.)
- Higher risk aversion due to size
- Additional risk aversion because of state control

Government-owned oil companies

- Ramsey 1980 asymmetry between public perception of state-owned firms' profits and losses
- Profit is part of the budget, so gets diluted
- Loss gets media attention and public thinks money is wasted
- This results in more risk aversion less investment in exploration

Russia's 1992 Subsoil Law

- Not market-oriented
- Bad property rights
- 1995 amendments introduced to allow the reorganization of Russian oil industry
- 1996 oil production growth began after the post-1987 collapse

- 2003 first attempts to replace the 1992 Subsoil Law (MNR draft)
- Did not introduce any important changes
- MNR draft rejected authority transferred to the MEDT
- MEDT draft clearly defined property rights, based on international legal tradition; law harmonized with newly introduced Civil Code, Tax Code, etc.

- Government deemed MEDT draft too economically liberal - MNR ordered to produce the final draft
- March 2005 MNR draft approved by gov't. and submitted to State Duma
- Expected to pass in December 2005 and take effect by approx. June 2006

- Current license holders (controlling 92 % of Russian oil and 83 % of the natural gas) will be allowed to operate under the license system until their licenses expire, but will be required to register these permits as property rights (uncertainty as to how this will take place)
- Any disputes between the government and the contract holders wil have to be settled in court instead of being adjudicated by government regulators (courts not independent, Russia has not signed the 1965 Washington Convention)
- Civil Code "lease" contracts have been substituted by "subsoil" contracts, which are completely new and the courts have no experience with such cases

- The MNR draft does not discontinue the issuance of licenses "parallel universe" (even more uncertainty)
- While the MNR draft does not prohibit foreign investment, it substantially discourages it. The government may simply ban the involvement of foreign companies in future bidding in an ad hoc manner. (Article 60, part 5 says that the "auction coordinator may introduce restrictions (ban) on the participation of legal entities which form a group with foreign individuals, individuals without citizenship, or foreign legal entities.")

- The Russian government may exclude foreign companies from participating in the development of Russia's oil and gas reserves *even if* foreign ownership of a joint venture company is less than 50 %
- The Russian Institute for Energy Policy report puts it bluntly: "Literally, such a situation means that any Russian investor, participating in jointly owned or operated legal entities with any foreign companies elsewhere, may be prohibited from participation in the auction, even if he is more than 50 % owned by Russian residents, and the participant of the auction is a Russian-registered company 100 % owned by this investor. And companies with even 1 % foreign participation most definitely will not have access to the auction."

Iron Hand Politics

- The seizure of Yuganskneftegaz and its sale to state-owned Rosneft (nationalization of 11 % of Russia's oil output)
- Yugansk supplied 1 mb/d before seizure
- April 2005 Russian gov't. appealed to the Constitutional Court to remove all protections of tax-evading companies
- Commendable, but nearly ALL major Russian companies (not only oil companies) are liable, not necessarily because of tax evasion but because of CONTRADICTORY tax laws in the 1990s

Iron Hand Politics

- The gov't. can effectively close down any major company and sell its assets (recent attempts to seize the Sheremetevo Int'l. Airport in Moscow)
- Two objectives: nationalization and tax revenue?

Conclusion

- The MNR draft will probably pass in the State Duma in December 2005 and become effective in approx. June 2006
- The legislation substantially limits foreign investment in Russia's oil industry
- More uncertainty; less foreign AND domestic investment
- Russian government intervention: more risk aversion

Ray Leonard, former Yukos vice president for exploration

Russian Oil Production and Exports



