17.906 The Geopolitics and Geoeconomics of Global Energy, Spring 2007
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Lecture 9: Resource mercantilism — China, India, and Japan

Resource mercantilism is not
- Not demand side management- for example curtailing demand etc
- Not strategic petroleum reserve management- used as insurance in the event of serious supply disruptions, not simply spikes in prices, these reserves are supposed to be able to supplement supply for 90 days however few countries including the United States actually meet this standard
    - Some of these reserves in Europe were utilized to supplement lost refining capacity during hurricane Katrina

What is resource mercantilism?
- Important question is reserves and who owns them
    - Much of the worlds reserves are owned by independent countries and it is not necessarily easy for oil companies etc to get easy access to these reserves, there is competitor for access in the modern world energy market
    - Now we seem more and more national energy companies going out and trying to cut their own deals via joint ventures or production sharing agreements that would give them ownership/equity stake in other countries oil reserves. These firms are competing with royal Dutch shell and Exxon Mobil etc for the first time. The new comers are Asian NOC's from Malaysia Korea India Indonesia etc.
        - These companies initially were responsible for developing oil reserves within their own countries however these are no longer large enough to meet demand.
        - These national oil companies are competing for access with direct support and assistance from national governments within their own countries and they are endorsing these companies as part of their national energy security strategies.
            - US vaguely says that its good for companies to do this as long as they don't encroach upon foreign corrupt practice acts etc or cause international security problems- they are allowed to make business decisions either way in their own interests.
            - Chinese or Indian governments are not taking such a relaxed view. Chinese has stated policy for companies to go out and do this- the "Going out" policy. Tells companies to go out and secure reserves abroad and Chinese provide them financing through state banks at low costs of capital and other forms of support such as infrastructure developments etc.
                - Chevron has no control over infrastructure developments in other countries etc but Chinese oil companies can solve this problem because they can get the Chinese government to arrange

intergovernmental loans or can get Chinese construction companies to help etc. Can package in improvements that other companies simply can't do.
        - Chinese companies can bid up to higher levels than other companies can justify as a fair rate of return to share holders.

- Not first time a country has done this. France tried to do it by not cooperating with international organizations and not allowing its energy situation to be dominated by the market. Japanese also tried to influence but they also realized the government could not run an upstream oil process and do it in a way that can meet energy security need.
- The People's Republic of China set up a ministry of petroleum industry and a ministry of chemical industry responsible for down stream and China developed oil industry as a state owned enterprise.
    - When China began to undergo serious economic reform the question about how to organize the energy sector arose.
        - In the 1980s these ministries were abolished in an effort to reform economy and the country spun off state own companies out of these former ministries
            - 1982 realized they had significant off shore oil and gas reserves in addition to those onshore and they established CNOOC out of the ministry of the petroleum industry
            - 1983 abolished ministry of chemical industry and created the China national petrochemical corporation – Sinopec
            - 1988 abolished ministry of petroleum industry and set up CNPC- China National Petroleum Corporation.
            - CNOOC was to focus on off shore exploration and production
            - Sinopec was set up as a downstream company-refining and marketing
            - CNPC was set up as an on shore exploration and production company
            - Chinese eventually realized it was more efficient and more productive to have vertically integrated oil companies which function in both the upstream and the downstream. This model was used by the United States oil industry decades before.
                - One counter example of this is Occidental which decided to be an upstream production company and still functions efficiently
                - Exxon Mobil and other major players are all vertically integrated though

        - In response to this decision China did not know what to do with CNOOC but thy made Sinopec and CNPC vertically integrated companies
            - They divided China in half by Yangtze river and gave Sinopec south of this point and took all of its refining capacity and gave it to CNPC. CNPC gave all of its oil and gas fields north of river to Sinopec. And there were now 2 vertically integrated oil companies operating in China and these companies now compete intensely with each other.
            - CNOOC remained in its own special niche.
            - In the 90s the Chinese authorized each of these companies to create a subsidiary or an affiliate and create an IPO to be listed on international stock exchanges.
                - Sinopec traded in New York, London, Hong Kong, and Shanghai
                - CNPC traded in NY and Shanghai
                - CNOOOC traded in Hong Kong and Shanghai
                - Now these companies had resources through vertical integration to create autonomy through the state and their autonomy was reinforced by allowing them to publicly lists because it would be an embarrassment if the Chinese interfered with these companies in way which prevented them from being profitable. And finally, the Chinese told these companies that their contribution to buiiliding socialism in china was to be profitable and make money- that would serve Chinese interests.

- States levers to control these companies are getting weaker over time
    - The Chinese government currently has government officials in the leadership roles of these companies. And the Chinese government appoints and dismisses the leadership. This is weakening though because there are essentially cadres which have people who have been trained to think like oil executives, so unless they are willing to take people from outside industry at a substantial risk- the pool

from which Chinese draw these people share the same agenda and the same outlook. They all understand markets and the oil industry and they understand the bottom line and they want their companies to make money.

- Another lever of control is the control over finances- this comes with being the majority share holder. These companies have been set up so they can maintain a significant percentage of their earnings with not so much going of the government. Unless the government wants to go back on 15 years of economic reform they really cannot change formula in significant way. Companies understand this and are pushing more and more to do what they want to do even if its not inline with beijing's ideas.
- China also provides favorable financing terms through Chinese state banks but these companies are now realizing they can self finance with their own retained earnings and they can go to international capital markets if they want to even if they need to take a higher cost of capital but it allows them to do thigns china doesn't like that much
    - Ex CNOOC under chairman Fu attempt to buy American energy company UNOCAL against the government's wishes
        - Created a public relations problem
        - But also they were going to use Goldman Sachs to finance operation which would be a first question not using Chinese banks
        - Sinopec became the first to actually do this with BNP Pariba (French) later because they wanted a major offshore block in Angola that china wanted to go to CNOOC
    - Chinese government is also supposed to approve all deals by these companies outside of china. Some companies have not done this, and instead told China after the deal was already made. Companies have also increasingly not done deals recommended by the government if it didn't make economic sense to them
        - One example of this was China's effort to make a Chinese strategic petroleum reserve. Companies were asked to do this for the government and Sinopec refused openly because not profitable. Other companies also refused and eventually Chine paid for costs and management fees to build facilities
        - Then companies refused to freely give oil to the Chinese government to fill reserves. Eventually they made a deal to fill reserves but China had to compensate them with a 40% increase in domestic fuel prices in China (domestic energy market in China is still price regulated by governments).

- Chinese demand for oil is 6.5 million barrels of oil per day and it is importing around 3 million of these barrels. China is a large demand center and it is growning and it will soon also grow substantial in the gas demand. Became net importer in 1992.
    - Projected out China will soon be importing 6-11 mbpd of a total of 10-13.5 mbpd. (mbpd = million barrels per day)
    - Although gas production in china has a lot of room for expansion there it will still become a large importer of gas, and it is already importing some LNG.
    - 2 large sources of demand- power generation and transportation
        - Power generation right now is dominated by coal (2/3 of electricity generation)
            - China may shift over time to shift away form industry and move towards high tech and service industries, but the reduction in demand due to that will be offset by the increases in demand from the residential sector because now people will be able to buy appliances etc that they do not have access to currently.
            - Coal will still be dominant but hydro, nuclear, and natural gas power shares will increase and this will increase dependence on imported hydrocarbons
        - China is 2nd largest automobile market in the world, and a lot of people are getting their own cars, by 2010 IEA says over 50 million vehicles will be in China, double today's level. Sinopec says 2030 will see 130 million vehicles in china.
        - Growing middle class which will want goods and services and more leisure trips etc will lead to growth of demand
        - GDP growth +5% equals growth in energy demand= 15% growth per year. China's incremental GDP growth is associated with larger increment of energy demand growth which is not seen in the OECD countries. But the add on of 5% is smaller than in most developing economies, and they are getting some efficiency gains out of public transportation etc.
        - Energy intensity will probably continue to decline but he overall rate of economic growth is so huge and on a large scale that even if the add on figure was nonexistent, it would still see a huge annual growth of energy demand for years to come.
        - These facts indicate china will become increasingly dependent on outside world's oil and gas, and the Chinese sees energy security as a key factor in improving international standard, modernizing military, and improving

the economy. So it is likely the government will put this issue at the forefront of policy

- What will the authoritative regime do? Some say they support international oil companies going out and locking up oil reserves around the world. Publicly proclaimed strategy.
- This stereotype is not complete however. China is concerned with three types of risk
    - Volume risk, declining supply and increasing demand, worried that at some point even if have money, there won't be enough oil available to meet energy needs
    - Price risk, domestic energy market is price controlled by government because don't want prices to be so low that nobody has incentive to produce but don't want prices so high that they become a threat to social stability, the more they are dependent on imported sources, the less control the government will have on prices.
    - Concerned about safe delivery of energy reserves to china. Currently a large percentage comes from Middle East, the Strait of Hormuz is very important but the Straits of Malacca are also very important. The Chinese are concerned that although the US currently insures safe delivery of this oil, they could also cut off this route if there were a Sino American conflict.
    - So as a matter of policy the government does encourage booking of reserves and they are encouraging greater diversification of energy sources for china due to straits of milacca problem etc. But the companies were the first to ask for rights to go outside of china and produce and today the largest upstream position they have is CNPC's position in Sudan. Also those in Kazakstan are important and those in Venezuela. These were not directly supported by the Chinese Government and there is clearly no master plan being used by the government to encourage the purchase of specific assets around the world. The companies are left on their own to make these decisions. Companies can still ask for support etc but every overseas deal has been the companies idea originally not the governments. The going out strategy was not publicly proclaimed until 2003.
- Also all but about 7% of the oil produced overseas is shipped back to China, most is sold in local markets. And

they claim that it is more economically efficient to use Chinese oil and just plain old imported oil to meet their demand.

China's oil companies are acting more and more like oil companies and less and less like government agents.