A Discussion Series

THE GEOPOLITICS OF OIL
INTRODUCTION

A few years ago, my wife was on a business trip to Curacao, an island that lies about one hundred and forty miles to the north of Venezuela. Walking to the office, she had a beautiful view of the deep-south Caribbean, but the traffic reminded her of Highway 401 – a continuous stream of oil supertankers, north- and southbound. The scale was stunning.

Oil is pervasive in our daily lives. It powers most modes of transport; it is in the plastics we use and the composites with which we build even the most modern planes; it connects every country on earth through trade. It is claimed by national governments and multinational corporations as a resource, a traded good, as tax revenue and as profit.

The geopolitics of oil is about the control of the reserves, the refining and production chain, pricing, and distribution. Historically, there have been two countervailing forces: the producers – very few oil rich nations which hold the vast majority of known reserves, and consumers – large, developed (or developing) economies. But now there is a third major force transforming the geopolitics of oil. And it’s a force that favours the U.S. – technology.

"Oil holds nearly twice as much energy by weight as coal and about 50% more than natural gas by volume."

The core property of oil is that it packs a huge energy “wallop”. It holds nearly twice as much energy as coal by weight and about 50% more than natural gas by volume. Oil’s high energy density and liquid properties create a high “energy surplus” – the difference between the energy expended in gathering a barrel of oil and the energy the same barrel releases. It enables countries and industries to achieve huge gains in productivity and economies of scale, making it the vital commodity for a growing manufacturing economy.

However, oil is increasingly difficult to reach – miles from markets, buried in ancient sediments or in tiny cracks in hard rock. Over the course of the twentieth century, there has been a gradual decline in energy surplus from about 100:1 to 30:1, with many unconventional sources approximately 5:1. Simply put, it requires increasing amounts of energy – and technology – to produce a barrel of oil today.

Creating wealth and power from oil requires advanced engineering and is very costly. The process of finding, extracting, refining, moving, and using oil brings together people who often have vastly different agendas and interests. It’s unavoidable: oil is political.

This discussion paper covers four topics central to current oil geopolitics:

1. The Geo and the Politics of Oil
2. Is “The Deal” at The Heart of Global Oil Geopolitics Over?
3. China: Urbanization, Growth and Military Might
4. Russia: A Quest For Renewed Strength
1. THE GEO AND THE POLITICS OF OIL

Who holds the oil?

Approximately 80% of the world’s proven reserves are in just eight countries, seven of which are described by The U.S. Energy Information Administration as either ‘failed’, ‘high-risk’, or ‘potentially high-risk’ states. Only Canada, at 173 billion barrels or 10% of reserves, is neither a failed nor a high risk (or potentially high risk) state.

GLOBAL OIL RESERVES

Interestingly, two countries of particular geopolitical importance – and the two largest economies in the world – hold just a combined 3%: the U.S. and China.

Who produces the oil?

The major oil producing states, on the other hand, do not represent the same risk profile as the reserve-holding states. Russia and Saudi Arabia are virtually tied as the largest producers at about 10 mbd (million barrels per day), representing 25% of world production. The U.S. is also a major producer at 7.5 mbd/9%. China produces 4.1 mbd/5%, not nearly enough to meet their growing needs.
If production of oil followed pure economic logic and the largest reserves were preferentially exploited, then production would be centred in the Middle East where breakeven costs are estimated at lower than $10 U.S./barrel. Production did follow this trend from 1955-1975 due to perceived greater regional stability and the introduction of super-tankers to ease transport. However, the pattern changed as large resource-holding states nationalized production during the 1960s and 1970s. Nationalization, along with big price increases driven by OPEC, spurred new field development in the U.K., Norway, Alaska, Nigeria, the Gulf of Mexico, Angola, Russia, and Canada, and geographical diversification of production away from the Middle East. In 2011, the CEO of Saudi Aramco recognized that “the more balanced geographical distribution of unconventionals” was reducing demand for growth in conventional output from the Middle East.

“Oil seems to defy the law of gravity, flowing from the lesser developed states to some of the most developed.”

Who consumes the oil?

Oil, in a sense, seems to defy the law of gravity. It flows from the lesser – in some cases least – developed states to some of the most developed and fastest-developing states. The enduring fundamental advantages of the hydrocarbon chain have been responsible for huge productivity gains, making it particularly attractive to growing industrial countries. Oil is especially attractive in developing economies and states where citizens and governments are primarily concerned about economic growth and social stability and are less concerned about the environmental impact of burning hydrocarbons.

The U.S. is by far the largest oil consumer at an estimated 30% of world production in 2013. China followed at 16.5%, and is growing rapidly. India’s consumption was only 5.5% but, along with China, represents the future growth of global demand. The collective importance of these two growing economies on global demand for oil cannot be overstated and has far-reaching national security and economic implications.

Developed South Asia (Japan, South Korea and Taiwan) consumed 11.5% of world production, exceeding core western Europe (Germany, France, U.K.), which collectively used 9.1% and where use is actually declining as energy alternatives and conservation take hold.

The politics of oil

The politics of oil is the struggle to negotiate who gets how much and how it is used. Since most oil resources are owned by governments, such political negotiations are typically between the host state and a company that wants those resources. There is always mutual dependence: for the holder, the value of the resource depends on its being extracted and sold; for the firms, without (enough of) their own resources like the ‘Supermajor’ international oil companies (IOCs), success depends on securing access to oil supply owned by the state. The object of the politics of oil, therefore, is determining the terms of access and the arrangements for sharing revenues.
Currently, transnational state-owned national oil companies (NOCs), such as PetroChina and Petrobras, are competing with IOCs that produce much of the world’s oil. However, IOCs control a relatively small proportion of the world’s reserves. For IOCs and some NOCs, access to the sovereign resources of another country is imperative, and both types of companies are relying increasingly heavily on their “home states” for political and diplomatic support in these relationships. Vulnerabilities and opportunities created by the flow of oil, and therefore money, are at the core of international oil geopolitics and heavily influence domestic and foreign policies of both exporting and importing states.

Oil “rents” (defined as the difference between the selling price/barrel at world market price and the cost/barrel of production) are particularly high in the major producing Gulf countries, as well as in failed and high risk states posing threats to global security.

**2013 Oil Rents to GDP**

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<tr>
<th>Gulf States</th>
<th>High Risk States</th>
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<td>Saudi Arabia</td>
<td>Iran</td>
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<tr>
<td>Qatar</td>
<td>Iraq</td>
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<tr>
<td>Kuwait</td>
<td>Libya</td>
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<tr>
<td>U.A.E.</td>
<td>Russia</td>
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<tr>
<th></th>
<th>46%</th>
<th>22%</th>
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<tbody>
<tr>
<td>Qatar</td>
<td>51%</td>
<td>45%</td>
</tr>
<tr>
<td>Kuwait</td>
<td>54%</td>
<td>52%</td>
</tr>
<tr>
<td>U.A.E.</td>
<td>22%</td>
<td>14%</td>
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For high-risk states especially, oil is the currency of state interests. The range of the government “take” of oil revenue is extremely high: Iran 93-96%, Russia 69-72%, Libya 73-89%, and Iraq 92-95%. While lower oil prices (and in the case of Iran, sanctions) weaken the ability of high-risk and failed states to pose a security threat, they simultaneously weaken the hand of the democratic world’s vital allies in the Gulf.

*While lower oil prices weaken the ability of high-risk and failed states to pose security threats, they simultaneously weaken the hand of the vital allies of the democratic world located in the Gulf.*
The U.S Navy 5th Fleet and the Four Key Straits

The majority (63%) of the world's daily oil production is transported by sea to consuming nations and 70% of that must go through four potentially insecure chokepoints: the Straits of Malacca and Bosphorus in Asia, and Bab el Mandeb and Hormuz in the Middle East. Securing these routes is a crucial national security priority for the U.S., China and the Gulf States, and requires diplomatic collaboration between consuming and producing nations.

To get to China and South Asia by sea, oil must pass through one of the most strategically important and contentious bodies of water in the world: the Strait of Malacca. This strait is a 500 mile-long narrow passage between Malaysia and the Indonesian island of Sumatra, and is also home to many modern pirates. The strait funnels ¼ of the world's seaborne oil and ¾ of internationally traded Liquefied Natural Gas (LNG). Geopolitically, this body of water is expected to become ever more contentious as tensions between China and Taiwan rise and China claims more of the South China Sea as its sovereign water. The U.S. will certainly have a role to play here in guaranteeing security for its allies and to protect its interests. Also strategically important is The Strait of Bosphorus. Istanbul is considered one of the CIA’s most critical “stations” in part because it is split by the Bosphorus – the only way to the Mediterranean and to Western European markets for Russian and Central Asian oil and LNG from the Black Sea and Crimea. Turkey retains the sovereign right to restrict passage through the Bosphorus – one reason this is such a vital CIA station.

In the Middle East, the Bab el-Mandeb Strait at the bottom of the Red Sea, between politically unstable Yemen and Somalia, provides entrance to the Suez Canal and the Sumed pipeline. Each day 3 million barrels of oil and major LNG shipments pass through this strait for transshipment to supply Western Europe.

An attempt to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America.

– Carter Doctrine, 1980

Finally, the most geopolitically significant strait of all is Hormuz. Located between Oman and Iran, it connects the Persian Gulf with the Gulf Of Oman and The Arabian Sea. In 2013, 30% of global oil flow went through Hormuz, with 85% destined for China, Japan and South Asia. Most of the balance was destined for the U.S. gulf coast, making up nearly 15% of daily U.S consumption. Some 30% of the world's LNG supplies also pass through Hormuz.

The Carter Doctrine of 1980 stated, “An attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force.” Thus the most powerful blue water and underwater fleet in the world – The U.S. Navy’s 5th – is headquartered in Bahrain to protect these interests. From there, the U.S. 5th Fleet not only ensures shipping channels, it acts as a defense buffer for Saudi Arabia, Qatar and the U.A.E.
These key straits are all of critical geopolitical significance, but their importance clearly extends beyond oil into military and security considerations since ensuring smooth passage of goods and oil also ensures some degree of political equilibrium. Together, these straits form part of the backbone of an integrated geopolitical “deal” between the U.S., Persian Gulf states, South Asia, and Middle Eastern and European allies.

2. IS “THE DEAL” AT THE HEART OF GLOBAL OIL GEOPOLITICS OVER?

“The Deal”, a long-standing agreement to exchange American security assistance for access to Saudi oil, has been central to global oil geopolitics for 70 years. There is high probability that it will last a good while longer, perhaps another 70 years or more, despite the political complications associated with the rise of global terrorism and anti-American sentiment in the Middle East.

How did “The Deal” come about? On February 14, 1945, Abdulaziz Ibn Saud, the founder of Saudi Arabia, and President Franklin D. Roosevelt met on board the USS Quincy for the first and only time. While much of their discussion was about Palestine, they forged a lasting, if distant, relationship; Abdulaziz liked Roosevelt. Roosevelt knew that oil would be critical to rebuilding post-WWII economies and that there was growing globalization of the oil supply, so The Deal with Saudi Arabia was crucial, and was struck.

After WWII, oil production shifted to the Middle East, where exploration grew. Ghawar, still by far the world’s most important oil field, was discovered in 1948. Exploration grew, and in 1960 the Organisation of Petroleum Exporting Countries (OPEC) was founded by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. Peak OPEC oil production was reached in 1970 and its dominance in the ’70s was determined in part by the 1973 embargo and an oil price-induced recession in the West. No longer could the U.S. and the so-called “Seven Sisters” (seven major oil companies) establish the rules for global oil markets without considering OPEC.

“The energy crisis awakened us to a new challenge that would require both creative thinking and international cooperation.”

— Henry Kissinger

Then Secretary of State Henry Kissinger recognized that “[T]he energy crisis awakened us to a new challenge that would require both creative thinking and international cooperation in order to preserve and further our collective well-being.” In 1974, the IEA (International Energy Agency) was established, which remains the primary body representing international energy cooperation among the industrialized countries.

What are the threats to “The Deal”?

There is some concern in Riyadh that The Deal may be breaking down. First, bilateral U.S.-Iran negotiations are seen by the Saudis as potentially threatening their regional leadership (though only the U.S. has the clout to achieve a disarmament deal with Tehran, such as the nuclear deal currently awaiting ratification by Congress.) Second, there is some speculation that as the U.S. overtakes Saudi
Arabia and Russia as the world’s largest oil producer, which, when combined with new developments in domestic natural gas production (i.e. fracking), there is an opportunity for the U.S. to disengage from the Middle East. This would leave Beijing and Delhi to redefine power and security in the region. However, neither China nor India is capable – diplomatically, economically or militarily – of taking over from the U.S. in offering security and balancing interests in the Middle East.

What is becoming increasingly clear, is that the U.S. energy revolution is strengthening America’s hand as it becomes less dependent on Saudi oil. The dramatic shift of Gulf State exports to China is intensifying the risk the Saudis feel. China surpassed the U.S. as the Saudis’ largest export market in 2013, and their position as the largest importer will certainly only grow over time.

In addition to the potential decline of ‘The Deal’ with respect to oil, there are significant political risks to Saudi Arabia due to instability in the Middle East. Large parts of both Iraq and Syria are under the control of ISIS, perhaps the most dangerous terror group ever known. Yemen is highly unstable and home to a branch of Al Qaida (AQAP). In Oman, oil reserves are decreasing while the population is increasing, and they are about to face a succession crisis. In addition, Iran, a perpetual thorn in the side of Israel and the Saudis, is a possible developer of non-peaceful nuclear capabilities and a major backer of anti-west and anti-Israel terrorism. Further west is Libya, home to ISIS cells, separated from the Gulf by Egypt and lying only 288 miles due south of Malta [Europe] across the Mediterranean.

In such a complex and unstable region, it seems only the U.S., an outsider, has everything necessary to lead through the intricacies of maintaining a balance of power and needs. They still need a strong Gulf ally, though their increasingly self-reliant energy position is strengthening their negotiating power. “The Deal” must carry-on, centred now on balancing regional security issues rather than purely on access to oil.

“Iran, a perpetual thorn in the side of Israel and the Saudis is a possible developer of non-peaceful nuclear capabilities and a major backer of anti-west and anti-Israel terrorism.”
In addition to instability in the Middle East, changes in the global economy have created new dynamics and new forces in the geopolitics of oil. How the economic development of China and the role of Russia will complicate the geopolitics of oil in the long term is still emerging. Here are some of the issues to watch.

3. CHINA: URBANISATION, GROWTH AND MILITARY MIGHT

With twenty million people a year moving from the Chinese countryside into the cities, there exists not only desire and potential to continue the exponential economic growth of the past few decades, but also great pressure to do so. A stable and economically developing China is necessary in order to increase living standards and prevent the civil unrest that could arise with such rapid urbanization – and is in everyone’s best interests.

To achieve and sustain development, China must have oil securely supplied, and lots of it. Chinese domestic oil production no longer meets the growing demands of their economy and China has become increasingly reliant on global markets for oil imports, which has raised concerns over shipping lane security. More than 75% of China’s oil imports, affecting half of their GDP, pass through the Strait of Malacca, and U.S. naval presence in the South China Sea makes China uneasy. Hu Jintao, General Secretary of the Communist Party of China from 2002 to 2012 declared, “Certain powers have long encroached on and tried to control navigation through the strait.” ‘Certain powers,’ it may be safe to assume, refers to the United States, as there is some fear that the U.S. has too much influence. Both energy dependence and the imperative of continued growth have thus made energy security a big concern.

In addition to the challenges of energy security and increasing domestic demand for oil, China’s growing military power is causing concern within the region and internationally. For many years China has had double-digit increases in military spending and a rapid naval build-up, capable of projecting power far beyond their territorial waters. They have also built strategic naval ports, military posts and surveillance posts along the Indian Ocean which could easily be used as bases to ensure access or even take control of the shipping lanes currently controlled by the United States. Recent Chinese airstrip construction in parts of the South China Sea does nothing to allay these concerns.

Finally, China’s “going out” strategy, which encourages Chinese companies to think globally and invest overseas, has become central to China’s energy and geopolitical strategy, but is raising eyebrows internationally. The goal of this policy is to diminish excess liquidity and to increase the international competitiveness of Chinese companies. By investing in energy and natural resources, Chinese firms gain access to the raw materials which their rapidly expanding economy requires, and it creates a market for their manufactured goods. It also means that the partly state-owned, partly private oil companies can begin to own, develop, control, or invest in foreign sources of oil and natural gas. In practice, the international reach of Chinese investment has not always been well received, as demonstrated by the debates in Canada over the takeover of Calgary’s Nexen Inc. by CNOOC in 2012, and by the U.S. rejection of the takeover of Unocal by CNOOC in 2005.

“China and the U.S. are bound together in the global markets, and the politics of trade, finance and energy that drive economic growth.”
Ultimately, despite concerns surrounding the stability of China’s growth, their energy supply, their growing military power and their increased international competitiveness, China and the U.S. are bound together. They have shared interests as the world’s two largest oil consumers (together they account for some 35% of global oil consumption), and they are bound together in the global markets and in the politics of trade, finance and energy that drive economic growth. Both countries benefit from stable markets and improved energy security, and both countries must make these issues a geopolitical imperative.

4. RUSSIA: A QUEST FOR RENEWED STRENGTH

Twenty-five years after the dissolution of the USSR, oil and gas are more than ever at the centre of the Russian economy, and a major geopolitical tool for the government. In the 1990s, oil and gas revenue accounted for roughly two-thirds of government revenue, and the oil and gas sector, like the rest of the economy, was in shambles and subject to commercial anarchy. During this period, certain factors contributed significantly to the definition of the oil and gas industries’ place in the Russian state: the technological antiquity of the industry causing oil production to fall by some 50%; then-President Boris Yeltsin’s decree to privatize the oil and gas industry, creating three ‘super-major’ companies that remained under state control for three years; and the Russian government’s serious financial trouble leading to the borrowing of money in exchange for shares in state-controlled companies.

“To achieve Russia’s geopolitical and economic goals, oil resources had to be under the aegis, or even direct control, of the state.”

These events set the stage for the entry of Vladimir Putin into global politics. In 1999, Putin published a prescient article in the St. Petersburg Mining Institute’s journal arguing that Russia’s oil and gas resources were key to economic recovery, as well as to “the entry of Russia into the world economy” and to making Russia “a great economic power”. To achieve Russia’s geopolitical and economic goals, oil and gas had to be under the aegis, or even direct control, of the state. The newly created oligarchs could keep the shares they’d received for loaning the state money, but were warned not to try to influence political outcomes. Two oligarchs who did not listen were soon exiled, with more serious outcomes for others later.

This article was a clear indication of Putin’s philosophy and of his willingness to back it up with a strong arm. It was irrelevant who owned the shares in these companies, oil and gas belonged to the state, and he would use them to further his ambitions for Russia.

Russia today is a true energy superpower. It controls over a quarter of the world’s proven gas reserves and currently ranks 8th in the world in terms of proven oil reserves, at 60 billion barrels. It is second only to Saudi Arabia in terms of oil production, at 9.4 billion barrels per day. In addition, Russia is the world’s second largest exporter of oil.
Furthermore, Russia has strengths that provide it with significant geopolitical leverage: United Nations Security Council (UNSC) veto power, large oil production, a near stranglehold on European natural gas supply, and control over one of the two largest nuclear arsenals in the world.

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<th>% of domestic natural gas requirements imported from Russia</th>
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<tr>
<td>Finland</td>
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<tr>
<td>Romania</td>
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<td>Greece</td>
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<td>Ukraine</td>
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<td>Austria</td>
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<td>Germany</td>
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Because Europe imports 23% of its gas from Russia, Russian gas supplies can influence the economic vitality of Germany, Greece, Austria and Finland. While Russia needs these European consumers, the only leverage these countries have is the threat of boycott, which would only worsen their own economic plight should there be a trade dispute over gas. In short, there is no comparable reciprocal leverage. The North Europe Gas Pipeline (NEGP) connecting Vyborg, Russia to Greifswald, Germany is projected to meet nearly 25% of Europe's additional gas import needs by late 2015, further entrenching Germany's dependence on Russian gas.

Significantly, Russia has refused to ratify the Energy Charter Treaty, which would guarantee transit rights for energy through Russia, regardless of the owner, and prohibit cutting off energy supplies as a political weapon. Its energy market power has allowed Russia to consolidate political power internally and has made Russia immune to the normal external checks on the exercise of power.

Within Russia, Putin has been able to control the appointments of governors and the upper houses of parliament, change rules for parties to get into the lower house of parliament, and therefore tighten the ties between political parties and the Kremlin. He has appointed individuals linked to the Kremlin to corporate leadership positions in the gas, oil, rail, airline, shipping, diamond, nuclear fuel and telecommunications industries. The Kremlin has also consolidated control over most broadcast media, and has been able to influence the courts in cases against power rivals, such as Mikhail Khodorkovsky.

Putin seemed fairly benign at first, but by the time the United States and Europe began focusing on Putin's consolidation of Russian politics in late 2004, the new Russian political reality had been created – backed by oil and gas wealth that would only continue to grow. Today, the result is that Putin ignores international entreaties over the Kremlin's control of domestic politics, presents himself as the protector of international law and order against American aggression, uses energy as leverage in its negotiations with what it sees as upstart neighbors (e.g. Ukraine, Georgia), and continues to resist Europe's demands for investor rights in Russia. Significantly, Russia has resisted the imposition of tough sanctions against Iran, seeking exceptions for Russia's sale of civilian nuclear technology.
Although lower oil prices will hurt the Saudis, they will not be hit nearly as hard as Russia (or Iran) in the short to medium term. Oil revenues account for 45% of Russia’s income and their 2015 budget was based on oil $100/barrel. Combined with U.S. sanctions, their economy is reeling and Russia may be forced to turn to the East in order to find new energy markets and strengthen their economy – potentially compromising Saudi oil exports and reducing the leverage of the West. Putin has already signed a $400 billion, 30-year gas deal with China.

But how long can the Saudis keep prices low, remain a strong regional ally and ward off popular discontent? Will Riyadh eventually have to make huge production cuts to raise prices, and proceed without a consistent strategy across OPEC countries? Where would this leave Russia?

Conclusion

The geopolitical landscape of oil is fascinating and ever-changing. Oil is the dominant revenue source for many states and is inextricably linked to their civil and geopolitical objectives, but those objectives are often not aligned with the objectives of the West. Indeed the international oil market is laced with challenges and controversy, from politics to conservation efforts to matters of national and international security. As it stands, only the United States has both the international gravitas and the increasing energy independence to shepherd international energy matters and maintain a sort of balance between the competing interests. Ultimately, since it seems oil will remain the global energy choice for a long time to come given its unique properties and growing demand, equilibrium and stability in the international oil market is in every nation's best interest.

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Tim Hague and the Toron AMI Team