



THE JAMES A. BAKER III
INSTITUTE FOR PUBLIC POLICY
OF
RICE UNIVERSITY

THE STRATEGIC AND GEOPOLITICAL IMPLICATIONS OF
RUSSIAN ENERGY SUPPLY

AMY MYERS JAFFE

WALLACE WILSON FELLOW FOR ENERGY STUDIES
JAMES A. BAKER III INSTITUTE FOR PUBLIC POLICY
RICE UNIVERSITY

FOR THE ASPEN INSTITUTE CONGRESSIONAL PROGRAM, AUGUST 2003

Introduction

The development of Russian/American joint strategies for cooperation in the energy sector has been highlighted as an important aspect of the U.S.-Russian relationship. While United States and Russian strategic interests do not overlap in every area of international discourse, common interest does exist in the energy sector and on other matters of international economy and security.

Both the U.S. and Russia will benefit from rising Russian exports of oil and natural gas to global markets. Higher Russian oil exports help create a more diversified, and therefore more stable, international oil market, aiding the U.S. economy and American energy security. In fact, as Russia expands its export infrastructure, an increasing volume of Russian oil will probably make its way to U.S. shores, reducing the amount of oil the U.S. needs to buy from the Middle East.

The U.S. market could be an important one for oil prolific Russia. The consistent growth in U.S. oil imports is an overwhelming factor in global oil markets. U.S. net imports rose from 6.79 million barrels a day in 1991 to 10.2 million barrels a day in 2000. Global oil trade, that is the amount of oil that is exported from one country to another, rose from 33.3 million barrels a day to 42.6 million b/d over that same period. This means that America's rising oil imports alone have represented over *one third* of the increase in oil traded worldwide over the past ten years. In terms of the Organization of Petroleum Exporting Countries (OPEC), the U.S. import market was even more significant –over 50% of OPEC's output gains between the years 1991 to 2000 wound up in the United States. Current U.S. oil demand is about 20 million barrels day, of which close to 40% is produced domestically.

Russia will also be supplying more oil and gas to key U.S. allies like Japan, South Korea and the European Union. Higher Russian oil and gas exports also strengthen the Russian economy, reducing dependence on U.S. financial aid and helping make its democracy more sustainable. It can even lower the costs to Russia of cooperating on nuclear proliferation issues by shrinking the importance of military exports.

The gains for Russia to higher exports are even more obvious. Russia is the world's second largest crude oil producer and petroleum exporter. Oil and gas account for 40-50% of total Russian exports; 30% of fiscal revenues; and 13% of GDP. Rising oil exports helped Russia

**The Strategic Geopolitical Implications
of Russian Energy Supply**

register a \$5 billion budget surplus in 2002 and strong GDP growth, between 4-10% in recent years. Oil diplomacy has helped Russia enhance its international stature and improve its relationships with key consumer countries such as the U.S., Japan, China and the EU.

However, while a joint U.S.-Russian approach to energy policy can bring benefits to each side, fundamental differences on how to achieve expansion in the Russian energy sector has created some tensions in even this solid area of common interest. And, over the long term, U.S. and Russian interests may diverge in the oil area since the U.S. economy benefits from low oil prices but Russia's clearly does not. According to the Alfa Bank, a \$1 dollar a barrel drop in the price of oil costs Russia \$2 billion in export revenues and \$1 billion dollars in budget revenues. A \$1 a barrel drop in oil prices translates into a loss of about 0.4% decline in Russian GDP per year. Thus, Russia's short-term economic health is highly dependent on the energy sector. High oil prices helped Russia register a \$5 billion budget surplus in 2002. But conversely, a drop in oil prices to \$14 dollars a barrel would create budget deficits for the Russian government. A fall below \$10 a barrel would likely eliminate Russian GDP growth altogether.

There is no question that Russia possesses the potential for major increases in both hydrocarbon production and exports. Russian firms have already had great success at raising capital to revive the previous-stagnant Russian oil industry, with Russian production making huge gains in recent years. The ruble devaluation in 1998 brought a sharp drop in oil production costs that provided a much-needed shot in the arm for newly privatized Russian firms.

Russian oil production has recovered to about 8 million barrels a day, up from a low of 6 million barrels a day in the late 1990s. Analysts expect production could rise to 10 million barrels a day or more by the end of the decade, if pipeline infrastructure investments can be put in place in a timely fashion. Prior to the collapse of the Soviet Union, Russian production was as high as 12 million barrels a day. Russian natural gas production was 595 billion cubic meters (BCM) in 2001 and is expected to rise to 650-700 BCM/year by 2020. Russia exports over 136 BCM to Europe annually, representing 20% of Europe's total natural gas consumption. In October 2000, President Putin signed a strategic energy partnership with the European Union that will allow natural gas exports to Europe to rise to 200 BCM by 2008.

The Strategic Geopolitical Implications of Russian Energy Supply

The divisions in U.S. and Russian attitudes regarding Moscow's energy expansion revolve around how to achieve it. The U.S. would like to see Russia's oil and gas sector expand through expanded privatization, open access for foreign direct investment (read, American companies), competitive markets, and stable investment regulation, rule of law and tax reform. Moscow has made progress in these areas but still clings to some traditional statist policies that both protect the government bureaucracy's role and favor Russian entities. Certain Russian oil companies have objected to giving "favorable" treatment to Western energy companies such as the production sharing agreements (PSAs) that U.S. firms seek, claiming if the current tax system is good enough for Russia firms to be profitable, then it is sufficient for American firms as well. Western interests argue that PSAs create an "enclave of fiscal stability" for large, long-term, billion dollar "greenfield" projects because they essentially lock in tax regimes, guarantee exportable assets/pay-offs and clarify resource ownership in a manner that cannot be undone by changing political winds.

Without PSA's, U.S. officials warn, foreign direct investment will bypass Russia, preventing Moscow from attaining the huge infusions of capital needed for large infrastructure and development projects in oil rich areas like the Arctic, Russian Far East and Eastern Siberia. Legislation to fix the legal environment for PSAs has, however, been consistently blocked in the Russian parliament (DUMA) for years and is expected to continue to be so, despite U.S. diplomatic pounding for the contrary.

Beyond protectionist calls from Russian entities, the Russian government has many other levers through which it can influence the fate of its oil industry in ways that discourage free market forces. State pipelines monopoly Transneft still wields considerable power in the debate concerning new export routes both from Russia and from the Caspian Basin. Critics worry that Transneft's organizational structure and politics will not accommodate the rapid pace and financial strength needed to allow sustained export growth. The Russian government has also shown a willingness to use more temporary props, such as export tariffs, abrupt tax changes and even export quota restrictions to influence outcomes or pressure private firms. Gazprom, the Russian state natural gas monopoly, also remains a power to be reckoned with, controlling over 90% of the country's gas resources, production and sales. There is talk of reform for both Gazprom and Transneft, but the subject is a divisive one inside Russia.

The Strategic Geopolitical Implications of Russian Energy Supply

Russia's oil sector now involves over 200 companies, but the sector is overwhelmingly dominated by 9 vertically integrated joint-stock Russian companies. These firms now represent --in terms of reserves, production and return on capital-- some of the largest, most successful oil companies in the world. Several companies continue to have government stakes, including Lukoil, Tatneft and Rosneft. But others, such as TNK, YukosSibneft, and Surgut, are fully privatized.

The core of Russia's oil production comes from giant oil fields in Western Siberia. But future resource development will include new, more remote areas such as the Timon-Pichora, East Siberia, the north Caspian Sea and the Russia Far East. Development of these distant resources is very important to Russia's future but as discussed above, faces technical, economic and bureaucratic barriers. Not only are the geographic terrains extremely challenging, but Russia's uncertain tax and legal regimes have created disincentives to foreign and even domestic investment in these ambitious new "greenfield" investments. Uncertainty about whether and under what incentives private companies will be able to invest in the future pipeline infrastructure needed to service these remote, but prolific oil fields has created apprehension as well. The U.S. has been pressing Russia to reform Transneft and its pipeline sector, not only in Russia but also in its links to the Caspian, but reform is slow in coming.

There has been much discussion of Russia's emerging global role in international oil markets and its potential rivalry with important Middle East producers such as Saudi Arabia. Ironically, despite this speculation, Russia is currently a regional energy supplier, with virtually all of its exports consumed in Europe. However, European demand for Russian oil is not expected to grow much in the next decade or two, and therefore if Russia is to continue to expand its energy sector, it needs to look for new markets.

Russia's ascension to a global role requires massive investment in new export infrastructure. One project, a \$2.5 to \$4 billion pipeline and deepwater port project to the ice-free, northern coast at Murmansk, would be critical for Russian oil shipments to the US. This has raised speculation that the US government may be willing to help finance the project, possibly through a U.S. ExIm Bank loan. The project is still awaiting clarification whether it will be a fully Russian government venture or whether it might involve private shareholders and financing. Russia is also debating between a pipeline project to China, possibly connecting to China's Daqing refining industry or a longer pipeline to the Pacific Port of Nakhodka that

**The Strategic Geopolitical Implications
of Russian Energy Supply**

would allow shipments to Japan and beyond. In addition, U.S., Russian, and Japanese firms are investing in excess of \$15 billion to develop the resources of the Sakhalin Islands. Within the next four to five years, Russian oil supplies to East Asia from the Sakhalin fields could be as high as 500,000 b/d in addition to significant natural gas exports.

Thus, hopes for Russia to rival the Middle East in general, or Saudi Arabia in particular, as a key player in international oil markets and possibly a supplier of pivotal geopolitical importance during times of market instability still face high hurdles.

Saudi Arabia's place in the oil world is unrivaled despite the existence of other countries, notably Russia and the United States, whose total hydrocarbons liquids production is of similar magnitude. That is because Saudi Arabia serves as a vital marginal supplier to the market and maintains a significant amount of spare, unused capacity that can be brought to bear on oil markets during times of market crisis or physical disruption. The kingdom is the only oil producer in the world that can replace single-handedly, within a short period of time, the total loss of exports of any other oil producer on the globe. No other nation currently has enough spare capacity to claim this role.

Saudi Arabia's cushion of spare capacity has provided security and stability to world oil markets for two decades. The kingdom has intervened to calm markets on numerous occasions in recent years, most notably during the 1990 Gulf crisis and more recently during the U.S. campaign in Iraq, preventing oil prices from soaring above \$40 for any length of time during major supply interruptions from the Gulf. The kingdom derives its international clout from this custodial role and is unlikely under the current regime to relinquish it. The oil market regulator role played by Saudi Arabia is also an important element to its strategic relationship and alliance with the United States. Oil revenues are critical to the health and well being of the Saudi economy. Therefore, at least under the current day politics, Saudi Arabia can ill-afford to jeopardize its coveted position as a stable and reliable supplier from which its geopolitical influence and long-term economic interests derive.

It is unclear whether Russia would ever be in a financial position to take on "swing" producer responsibilities to compete with those of Saudi Arabia. Nor is it obvious that the emerging structure of the Russian industry, diversified and largely privatized, favors the kind of investment in idle capacity as is practiced in the Persian Gulf. Privatization and competition in Russia's oil sector will likely make it increasingly difficult for Moscow to identify a single

national interest or to behave (or be forced to behave) as a coherent national unit. And, private companies tend to produce every barrel they can, when they can, to optimize profitability. Authoritarian governments have more luxury to pay for idle capacity and leave it lay for a rainy day event.

Still, at the U.S.-Russia Energy Summit in Houston in 2002, Russian government and industry officials broached the possibility of establishing an international strategic stockpile of Russian oil that could be used to serve nations that cannot currently amass strategic stocks. A venture such as that would mean that Moscow could play a constructive role, similar to that of Saudi Arabia, during times of great market instability. But Saudi Arabia has also made clear in public statements that it will not look on passively if Russia continues to grab market share away from the Organization of Petroleum Exporting Countries (OPEC), and any Russian government will have to move cautiously to avoid stimulating a price war among major oil producers.

Conclusion

Despite genuine progress in reforming the Russian energy sector and encouraging foreign participation, Russia's investment climate and reliable access to needed export infrastructure remains uncertain –not just for foreign firms but even for domestic players as well. Low hanging fruit has borne strong returns to the Russian industry in recent years but a stable investment environment that incentivizes major long term investment in brand new, sizable “greenfield” projects is sorely needed if Russia is to rise to the global energy power it has the natural endowment to be. This is true not just for American investment in Russia. It will be true even to continue to attract the capital of Russian private firms who will equally be tempted to invest elsewhere if Russia's investment climate does not offer stable returns.

Russia's reserves are so great and its potential so large that thinking of foreign firms as rivals will not necessarily lead to optimum policies. And, the new generation of Russian oil majors, in providing the most profitable opportunities and highest rates of return to shareholders, will --in time-- be internationalizing their businesses, perhaps making international strategic alliances outside Russia an important part of becoming a global player.