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## **RUSSIA'S ROLE IN THE SHIFTING WORLD OIL MARKET**

**By Lynne Kiesling and Joseph Becker**

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**PREFACE**

In the immediate aftermath of the events of September 11, OPEC members — led by Saudi Arabia — launched a campaign to promote a major cutback in oil production. These OPEC producers believed that a reduction in supply was necessary in order to maintain high oil prices in the face of the decrease in world demand that followed the terrorist attacks on the United States. OPEC's campaign, if it had been successful, could have further crippled a world economy that was already in recession in the fall of 2001.

However, OPEC's campaign to reduce oil production was not successful, largely due to the refusal of the main non-OPEC producer — Russia — to cooperate with the cartel's efforts. Moscow's behavior and its subsequent impact on the world oil market illustrated that the key to energy security is not just obtaining large volumes of oil, but more importantly ensuring supply from a variety of producers that do not act as a monopoly. Russia and other non-OPEC sources cannot replace the volume of oil production from Saudi Arabia and other cartel members, but the existence of independent actors outside the organization can change the dynamics of the world oil market and diminish the power OPEC has over market trends.

The emergence of a diverse array of oil suppliers not only contributes to world energy security, but also lessens the ability of major oil producers to use pricing as a tool to further their political agenda. The lukewarm support of Saudi Arabia and other Persian Gulf states for the U.S. anti-terror operation underscores how divergent their political program may be from that of the United States.

As this brief indicates, Russia has emerged as the number two oil producer in the world market and its production share is estimated to continue to grow, especially due to the privatization of Russian oil companies. Russia's independent behavior in the oil market has caused a significant erosion in OPEC's monopoly power. Further investment in Russia's oil sector — as well as in the oil sectors of the other major Caspian producers, Azerbaijan and Kazakhstan — should help the United States to promote greater world energy security.

Brenda Shaffer, Ph.D.  
Research Director  
Caspian Studies Program  
Harvard University

# Russia's Role in the Shifting World Oil Market

Lynne Kiesling and Joseph Becker

*Lynne Kiesling (lynne.kiesling@reason.org) is director of economic policy at Reason Public Policy Institute and senior lecturer of economics at Northwestern University. Joseph Becker (becker\_joe74@msn.com) is an intern with Reason Public Policy Institute.*

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## EXECUTIVE SUMMARY

Recent changes in Russia's domestic oil industry have had dramatic effects on world oil markets, including Russia's emergence as the number two exporter of oil after Saudi Arabia.<sup>1</sup> These effects are occurring even though Russia is not close to fully exploiting its reserves. Russia's oil industry has large growth prospects, and this potential will allow Moscow to take a greater market share away from OPEC in the future. A number of factors will facilitate this trend. Russia's target oil price is lower than OPEC's, which gives it an incentive to continue exporting beyond OPEC's wishes. Also, Russia's oil industry is more privatized than the oil industries in Persian Gulf states, which allows it to be more entrepreneurial in attracting investment and joint ventures.

Three major developments will lead to Russia assuming a stronger position on the international oil market, and will bring customer benefits and increased efficiency in the international oil industry as a whole:

<sup>1</sup> Top five world exporters of oil (U.S. Energy Information Administration 2001 estimates):

	Exports Million bbl/day	Reserves Billion bbl
Saudi Arabia	7.5	264.2
Russia *	4.7	49-55
Norway	3.1	9.4
Iran	2.7	89.7
Venezuela	2.6	76.8

bbl=barrels

\* Russia also has an estimated 1,700 trillion sq. ft. in natural gas reserves

- (1) The Caspian states of Azerbaijan and Kazakhstan will be bringing more oil to market over the next decade;
- (2) The investment climate in Russia and in the Caspian region in general is improving; and
- (3) Economic growth in Russia and its neighboring countries (including China) will further shift the dynamics of world oil away from OPEC.

This policy brief explores the interplay of these economic factors and the effect they will have on the international oil market.

## THE UNDERLYING DYNAMICS OF THE WORLD OIL MARKET

Saudi Arabia is the world's largest oil exporter and possesses one-quarter of the world's proven oil reserves. The Saudi kingdom and other OPEC members (including Venezuela, whose exports to the U.S. decreased after it began adhering to OPEC output restrictions in 1998) have leveraged oil-importing countries' reliance on OPEC into wealth for the rulers and royalty in their countries.

Since September 11, with the regime in Riyadh's need to save face politically and with the collapsing demand for oil driving global prices to ten-year lows last fall, Saudi Arabia has found itself in an extremely difficult position. Forty percent of its GDP and 70 percent of its state revenue comes from oil, making Saudi Arabia's economy

and society highly dependent on oil prices. Consequently, the decline in world oil prices in the 1990s reduced the incomes of many Saudis.

Over the past six months Saudi Arabia has pressured non-OPEC producers (particularly Norway, Russia, and Mexico) to restrict their output in order to raise world oil prices. Russia and Norway are the second and third largest oil exporters in the world, respectively. All three countries have coordinated with OPEC to varying degrees in the past to influence world oil prices (particularly in the late 1990s when world oil prices had collapsed), but they still have many economic incentives to increase their oil sales.

Of all the oil-exporting countries outside of OPEC, Russia has the greatest potential to increase its share of the market supply. In 2000, Russia exported 87 percent of its production outside of the former Soviet Union. Its production in 2001 increased 6.1 percent over levels in 2000.<sup>2</sup> Furthermore, although Russia has coordinated export decreases with OPEC in the past, Russian producers raised their exports in 2001 while OPEC cut production three times.

Russia's oil industry has been able to maintain independence from OPEC's production restrictions over the past year for three reasons:

- Russia and OPEC have different target prices for oil;
- The global recession last fall reduced the potential monopoly profit Russia would have received from going along with the cartel, so OPEC was unable to persuade Russia to substantially reduce its exports;

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<sup>2</sup> U.S. Energy Information Administration, "Russia Country Briefing," March 2002, [www.eia.doe.gov](http://www.eia.doe.gov)

- Russia could create the appearance of cooperating with OPEC cuts in January because its exports typically decrease when its domestic home heating oil demand goes up in the winter.

Some OPEC states, particularly Saudi Arabia and Kuwait, have extremely low marginal extraction costs that give them a pricing advantage relative to other producers;

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**The target price differential between Russia and some OPEC states makes it easier for Russia to tolerate lower world oil prices and thus to withstand OPEC pressure to reduce its exports.**

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their low marginal costs seemingly enable them to tolerate price decreases better than higher-cost oil producing countries such as Russia. However, these same countries rely more heavily on oil revenues for both personal income and state revenue than does Russia, and thus have a large incentive to maintain high per-barrel oil prices. For that reason, OPEC's target price range is typically \$22 to \$28, while Russia's is roughly \$18 to \$22. This target price differential makes it easier for Russia to tolerate lower world oil prices and thus to withstand OPEC pressure to reduce its exports, as long as the world price stays within Russia's target range. These targets may change in the future as a result of factors like technological or institutional innovations.

The timing of the September 11 terrorist attacks and the world economic recession also hampered OPEC's attempts to raise prices. Soon after the attacks, market observers thought that the future demand for oil and gasoline would increase because of possible military action. As it became more apparent that any military response would not be traditional or petroleum-intensive, these expectations changed. Traders also

faced probable decreases in the demand for jet fuel because of reduced travel, as well as increased expectations of actual recession, perhaps even global recession. Expectations of lower demand for many petroleum products drove down current and future oil prices, and made it more difficult for OPEC to maintain prices by reducing output.

Oil industry ownership structure is another crucial difference between Russia and OPEC countries. Unlike most other oil producing countries, Russia's oil industry is largely privatized due to industry restructuring in the mid-1990s. In 1993 and 1994, Russia's state-owned oil companies reorganized into joint-stock companies in order to prepare for subsequent privatization. Since 1995 the state has been auctioning shares of these joint-stock companies to private investors and operators (although the Russian government retains full ownership of Transneft, the company that manages the country's pipeline network). The first week of April 2002 produced further evidence that this trend toward privatization is likely to continue, as

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the Russian government approved plans to sell off portions of Lukoil and Slavneft. Except for the effects of the financial crisis of 1998, these privatization efforts have led to demonstrable improvements in the productivity of the Russian oil industry and can be reasonably expected to continue to have a positive effect.

Yet even at the peak of its production, the Russian oil industry reached only 75 percent of U.S. production levels — a statistic that is particularly interesting because Russia has more than twice the proven reserves of the

United States.<sup>3</sup> Since Russia has so much potential to increase its share of the world oil market, it is important to understand the factors that are preventing Russia from reaching its full potential. Even more importantly, economic and energy policymakers should take into consideration the likely changes in world oil prices as Russia's oil companies begin to produce at a capacity that increasingly exploits their country's reserves. Recent developments suggest that the historically underachieving Russian oil giant may have decided to pursue the economic and institutional change necessary to take greater advantage of its rich petroleum resources.

#### CASPIAN OIL DEPOSITS

The addition of Caspian oil from Russia, Azerbaijan, and Kazakhstan to the world market will also help to increase the overall power of non-OPEC states. Caspian oil production is progressively increasing and should become significant around 2005. According to the U.S. Department of Energy, Kazakhstan could be producing as much as 3 million barrels a day by 2010, and Azerbaijan could be producing up to 1 million barrels a day by the end of this decade.<sup>4</sup> In addition, Russia's Caspian sector has yet to be explored fully.

#### RUSSIA'S OIL INFRASTRUCTURE AND INVESTMENT CLIMATE

A large obstacle preventing Russia from producing at higher levels has been the deterioration of its oil infrastructure. If investments in infrastructure are made, Russia's production and export capacity can increase. The confusing tax and legal environment in Russia stifled foreign

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<sup>3</sup> U.S. Energy Information Administration, "Russia Country Briefing," March 2002, [www.eia.doe.gov](http://www.eia.doe.gov)

<sup>4</sup> U.S. Energy Information Administration, "Kazakhstan Country Briefing," January 2002; U.S. Energy Information Administration, "Azerbaijan Country Briefing," May 2001; both available at [www.eia.doe.gov](http://www.eia.doe.gov)

investment throughout the 1990s. This left producers in the newly-privatized Russian oil industry with little opportunity to invest in exploration and new transport infrastructure, forcing them to continue to make use of the equipment and fields they already had. Run-down equipment and poorly developed oil fields have combined to make production in Russia difficult and inefficient over the past decade.

The ability of Russia's oil companies to attract foreign investment — and to then develop new deposits and build new infrastructure — will help determine just how efficient and productive the Russian energy sector will be in the future. Recent

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**If Russia succeeds in attracting foreign investment and joint ventures, its oil industry will have some competitive advantages over state-owned companies in countries that do not allow foreign investment, such as Saudi Arabia and Kuwait.**

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efforts by the Russian government to bolster and enforce the rule of law will improve the country's investment climate, to the extent that they enforce property rights and reduce the likelihood of property expropriation. However, this change will take some time.

If Russia succeeds in attracting foreign investment and joint ventures, its oil industry will have some competitive advantages over state-owned companies in countries that do not allow foreign investment, such as Saudi Arabia and Kuwait.<sup>5</sup>

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<sup>5</sup> Edward Morse and James Richard, "The Battle for Energy Dominance," *Foreign Affairs*, March/April 2002, available online at [www.foreignaffairs.org/articles/Morse0302.html](http://www.foreignaffairs.org/articles/Morse0302.html)

Another factor that prevents Russia from reaching its full production potential is the heavy tax burden it places on oil exporters, a burden that has served as a disincentive to foreign investors. In addition, growth is slowed by the fact that export pipelines in Russia are owned and operated as a monopoly by Transneft, a state-owned joint stock company. As of July 2001, exporters of Russian crude were paying a tariff, set by the Russian Federal Energy Commission, of \$26.30 per ton, or \$3.59 for every barrel of crude exported. Approximately 67 percent of all Russian oil production is exported and thus subject to this tariff. The tax revenue from oil companies (over \$6.2 billion) and from Gazprom (Russia's natural gas producer) makes up more than half of all federal tax receipts. Russia's economy is not diversified enough that this amount of revenue could easily be made up by another sector, and this dependency on oil revenue taxes makes lowering these tariffs politically difficult.

#### DEMAND FORECASTS, OPEC, AND RUSSIA

In the midst of a period of slower than average economic growth, the U.S. Energy Information Administration has projected that global oil demand for 2002 will increase by 650,000 barrels per day — significantly lower than the average 1.016 million barrel per day increase seen from 1990 through 1999. In spite of these projections, OPEC implemented cuts in oil production of 1.5 million barrels per day in January 2002 in an effort to maintain oil prices. This cut depended on OPEC negotiating a cut of 462,500 barrels per day with oil-exporting states that are not part of the cartel. Part of this decrease was expected to come from a Russian cut of 150,000 barrels per day, which amounts to a 2.1 percent decrease in Russia's production if its domestic consumption remains at a steady level.

Instead of actually cutting production in January, however, Russia merely shifted some of its production into refined products

and maintained its previous levels of output.<sup>6</sup> Russia was also able to take advantage of the seasonality of its domestic demand to comply with OPEC's request without actually changing its own production levels — increased domestic winter demand for heating oil in Russia typically suppresses Russian oil exports, but not production.

In addition, three of Russia's largest oil-producing companies — Lukoil, Yukos, and Surgutneftegaz — each recently announced that they intend to increase their respective levels of production (in spite of the heavy export tariffs).<sup>7</sup> The successful implementation of their plans will result in a total increase in production of no less than 22 million tons (160 million barrels) per day in 2002. The total output of these three companies alone will combine to produce 68

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**Andrei Illarionov, an economic adviser to President Putin, says OPEC is “historically doomed” and that markets will overcome price-fixing agreements.**

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percent more oil than Russia consumes in a year, and will be 227 percent greater than the forecasted increase in global demand. Perhaps these forecasts were why Andrei Illarionov, an economic advisor for President Putin, predicted on January 10 that oil prices would fall to \$10 per barrel. He also said that OPEC is “historically doomed” and that markets will overcome price-fixing agreements. The course Russia appears to be charting will likely make it a major contributor to this process.

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<sup>6</sup> Michael Lelyveld suggests the shift into refined products reduces the pledge to a “cosmetic cut.” See Michael Lelyveld, “Russia: Moscow Breaks Pledge to Curb Oil Production,” Radio Free Europe/Radio Liberty, January 23, 2002, <http://www.rferl.org/nca/features/2002/01/10012002090411.asp>

<sup>7</sup> U.S. Energy Information Agency, “Russia Country Brief,” March 2002, [www.eia.doe.gov](http://www.eia.doe.gov)

Illarionov may be correct in maintaining that the markets will always overpower price-fixing agreements. Of course, price rates will largely depend on the rebounding of the world's economy and the creation of new demand.

**FUTURE OUTLOOK FOR RUSSIA AND WORLD OIL MARKETS**

By refusing to yield in any meaningful way to OPEC pressures to limit production and by instead working to increase their market share, Russian producers are realistically positioning themselves to be major players in the future of the global oil market. Political and economic liberalization in Russia and Caspian countries, as well as the discovery of oil in countries outside of the Persian Gulf in the last twenty years, have facilitated higher rates of petroleum production, a greater degree of efficiency, and have effectively broken OPEC's monopoly. With its market-controlling leverage significantly diminished, OPEC has had little success convincing non-member oil producers with very different political and economic agendas to curtail their output significantly.

If the rest of the world's oil-exporting states follow Russia's lead and refuse to cooperate with OPEC's efforts to prop up prices, then prices are likely to fall and the competition for market share will grow fiercer than ever. This could have the effect of pushing the industry into another round of mergers and acquisitions with the result of leaving even fewer players in the game. If Russia continues to implement a pro-market approach, it can increase its share of the market and its influence on market trends.

The **Caspian Studies Program** seeks to locate the Caspian region on the maps of the American policy-making community as an area in which the U.S. has important national interests and where U.S. policy can make major differences. Through its research and teaching, the Caspian Studies Program raises the profile of the region's opportunities and problems, and utilizes Harvard resources to train new leaders who will shape the future of the region. The Caspian Studies Program is made possible by a generous gift from the United States-Azerbaijan Chamber of Commerce and a consortium of companies led by ExxonMobil, Chevron, CSO Aker Maritime Offshore LTD, CCC, and ETPM.

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**The Caspian Studies Program**  
**The Strengthening Democratic Institutions Project**  
Belfer Center for Science and International Affairs  
Kennedy School of Government, Harvard University  
79 JFK Street  
Cambridge, MA 02138  
**Phone:** (617) 496-1565 **Fax:** (617) 496-8779  
**Email:** SDIJFK@harvard.edu  
**Web site:** [www.ksg.harvard.edu/bcsia/sdi](http://www.ksg.harvard.edu/bcsia/sdi)

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