

# Russia-Ukraine Crisis and Its Implications for Global Energy Markets

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A Product Of



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## SUMMARY

- The situation in Ukraine remains unresolved and uneasy, with potentially profound implications for geopolitics and energy markets.
- Securing America's Future Energy (SAFE) and Roubini Global Economics (RGE) see three possible scenarios developing: further Russian incursion into Eastern Ukraine (50 percent); continued destabilization of Eastern and Southern Ukraine (40 percent); and de-escalation (10 percent).
- Oil and natural gas prices are likely to increase at least moderately, with stronger increases likely in the case of an invasion or open conflict. Implications for gas are more serious than those for oil.
- We believe that high oil prices have emboldened the Russian government in its foreign policy (for greater detail, please see "[Oil Security 2025](#)" by SAFE's Commission on Energy and Geopolitics). This suggests there may be more to come from Russia in a world where \$100 oil is the "new normal."
- Russia is highly vulnerable to changes in the price of oil and gas, as these commodities account for 70 percent of the country's export revenue and 50 percent of total government revenue.

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## INTRODUCTION

The Ukrainian government's sudden shift from the EU integration path toward Russia triggered prolonged public unrest that culminated with the death of more than 100 protesters on February 18-20, 2014. The government fell two days later and the pro-Western, opposition-led temporary government took office.

Seeing these developments as a huge blow to its geopolitical interests, Russia reacted in a matter of days. Russia threatened to deploy troops in mainland Ukraine on March 3 and formally annexed Crimea on March 21. Since then, Russia has laid out its demands for de-escalating the conflict: federalization of Ukraine, broad powers given to the regions (including self-determination), NATO-neutrality, and making Russian an official language in Ukraine—

most of which are unpalatable to the Ukrainian government. The temporary government has initially agreed to NATO-neutrality, but so far it categorically rejects the idea of federalization, which could undermine Ukraine's sovereignty. It has instead launched a decentralization reform that stops short of federalization.

Russia's interests with regard to Ukraine extend far beyond Crimea. They are economic, geopolitical, and cultural, and reflect Moscow's broader geopolitical ambition of dominance in the post-Soviet space and a fear of "revolutionary zeal" reaching Russia itself. Russia has raised the stakes even further with its recent actions and must be expected to pursue its goal of maintaining and expanding its influence over Ukraine. It may pursue a number of non-military options to achieve this, including: federalization of Ukraine, destabilization of South-Eastern Ukraine in order to either press the case for federalization or undermine the May 25 presidential elections, and securing a commitment from Ukraine to not join NATO.

**Russia's latest actions suggest it is prepared to move more forcefully**

The latest events in Eastern Ukraine, however, suggest that Russia is prepared to move more forcefully, escalating tensions with Ukraine. In what looks more and more like the events in Crimea (stealth incursion), well-equipped militants (many of whom reported to be Russian special forces, but also local activists), have taken over government and police buildings in numerous towns in Ukraine's Donetsk region, demanding independence. The Ukrainian government's attempts to regain control of the government buildings and the region have so far failed.

The Ukrainian government has thus found itself in a "check" situation: use of force and the resulting bloodshed may give Russia an excuse to bring in "peacekeeping" troops; inaction may result in the de facto secession of several regions and an inability to conduct an inclusive and legitimate presidential election on May 25. At the same time, the secessionist momentum in the Donetsk region is unlikely to be sustainable without external support, as popular backing for separatism is marginal. Therefore Russia will need to escalate the situation further to achieve its priorities.

### SCENARIO ANALYSIS

This report explores the short- and long-term energy and geopolitical implications of the Ukraine crisis across three likely scenarios: further military conflict or an invasion of mainland Ukraine (50 percent); no formal military confrontation but continued destabilization of Eastern Ukraine (40 percent); and an upside scenario of de-escalation (10 percent).

**Biting energy sanctions are unlikely given Russia's importance to global oil supply**

**Russian military incursion into Eastern Ukraine (50 percent):** The current situation, in which pro-Russian separatists continue to maintain control of Eastern Ukrainian regions, is very unstable. Any meaningful casualties during the anti-terrorist operation that the government launched on April 15 would give Russia an excuse to bring in "peacekeeping" troops. Thus, despite the significant political and economic costs associated with an invasion of Ukraine, Russia may still pursue its geopolitical priorities over its economic priorities. This scenario would trigger tough "phase three" sanctions on Russia, although financial sanctions are more likely than energy sanctions.

**Continued destabilization of Eastern and potentially Southern Ukraine (40 percent):** Russia may continue its destabilization of Ukraine without formally invading, broadening the scope of separatist operations and building up inter-ethnic tensions. This could result in the Ukrainian government losing control of several eastern (and potentially southern) regions. Should the government be forced to introduce a state of emergency, the May 25 election might not take place.

The key uncertainty in this scenario is its sustainability, since by definition it is unstable. The separatists lack broad popular support or any meaningful institutional capacity to set up a government, and their ability to maintain control over the affected regions for a prolonged period of time is limited. From this point, the situation would either need to de-escalate urgently, potentially through the Ukrainian government realizing that peaceful federalization is better than a full-blown war, or it would have to escalate further.

Western sanctions will be escalated in this scenario, but would likely stop short of covering broad sectors of the Russian economy. Tensions between Russia and the West will persist, however, and will catalyze further diversification of energy trade both in Europe and globally, including through increased transactions costs for shipping insurance and greater trade obstacles.

**De-escalation (10 percent):** Since all sides, including Russia, are interested in the eventual de-escalation of tensions, it is possible that they will reach a compromise over Ukraine's constitutional reform/federalization sooner rather than later. Multilateral talks, the first of which will take place on April 17 in Geneva, could be a vehicle for facilitating such a compromise. Ukraine, however, has thus far categorically rejected the idea of federalization, and Russia appears prepared for a moderate cooling of relations with the West if its priorities can be achieved. The Ukrainian government's idea to conduct a referendum on federalization (betting on overwhelming support for a unitary state) could be another possible trigger for de-escalation, but Russia is unlikely to accept any option that would legitimize the current Ukrainian government, which explains the low probability of this outcome.

#### ENERGY IMPLICATIONS BY SCENARIO

**Russian military incursion into Eastern Ukraine:** Energy prices strengthen under this scenario, particularly in Europe, given the possibility of supply shocks. This will widen the gap between U.S. and European oil and natural gas benchmarks. Even if no energy sanctions are put in place, Brent crude oil would rise 10 percent and the Brent-WTI spread would widen on fear of disruption to Russian oil flows through Ukraine (300,000–400,000 b/d) or other more meaningful supply disruptions. If energy sanctions are put in place, the supply outages and price increases would be much greater.

**Excessive oil price spikes could be halted by assurances from Saudi Arabia—to a point** The global oil market as a whole is reasonably well balanced, with IEA estimates placing Saudi spare capacity at 2.6 million barrels per day (mbd), and the call on OPEC expected to average 29.2 mbd in the first half of 2014—a full 1 mbd less than the same period in 2013. Still, regional imbalances persist, particularly in Europe, where inventory held by industry remains 100 million barrels below the five year average. Moreover, markets are expected to tighten in the second half of 2014. Thus, excessive oil price spikes could be halted by assurances from Saudi Arabia that it would balance the oil market and replace any missing crude—but only to a point, particularly if oil remains offline in Libya and Iran.

Any serious loss of Russian oil supplies due to truly biting sanctions would present a much more difficult challenge, hence our skepticism that such sanctions are likely. A coordinated release of strategic stocks from IEA members, including the United States and Western Europe, could also show markets that the West is committed to maintaining crude supplies.

Table 1. Scenario Overview

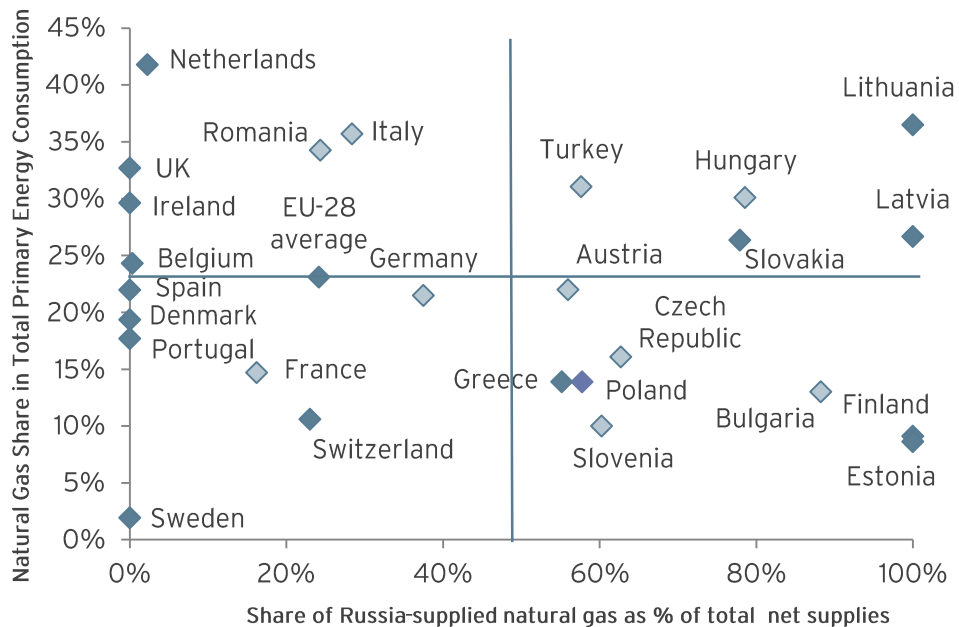
1A. De-escalation (10%)	1B. No war, but continued destabilization (40%)	2. Incursion (50%)
<b>De-escalation and government continuity</b>	<b>No government continuity and/or no elections</b>	<b>Further military incursion into mainland Ukraine</b>
<i>Political Assumptions</i>	<i>Political Assumptions</i>	<i>Political Assumptions</i>
<ul style="list-style-type: none"> <li>Ukraine holds referendum on unitary vs federalized status</li> <li>Referendum affirms Ukraine's unitary status</li> <li>May 25 presidential elections take place and result in government continuity</li> <li>Russia has no case for further escalation</li> </ul>	<ul style="list-style-type: none"> <li>Russia continues to destabilize Eastern Ukraine from within, threatening May 25 elections and policy path</li> <li>Ukraine continues to struggle to maintain its sovereign integrity</li> </ul>	<ul style="list-style-type: none"> <li>Russia continues to escalate to create a quasi-civil war environment, giving it excuse to deploy peace-keeping troops</li> </ul>
<i>Sanctions</i>	<i>Sanctions</i>	<i>Sanctions</i>
<ul style="list-style-type: none"> <li>Further limited escalation of sanctions to prevent further military aggression</li> <li>Likely to remain targeted, focused on individuals and entities. Financial sector prioritized over energy</li> </ul>	<ul style="list-style-type: none"> <li>West: Tougher targeted or broad-based sanctions from the U.S. targeting primarily the financial sector, potentially services to the energy sector</li> </ul>	<ul style="list-style-type: none"> <li>West: Broad-based sanctions targeting financial and/or energy sectors</li> <li>Russia: risk of prolonged gas supply disruptions and/or higher price, selected asset freezes of Western companies or banks or defaults on U.S./EU debt</li> </ul>
<i>Sovereign Risk Assumptions</i>	<i>Sovereign Risk Assumptions</i>	<i>Sovereign Risk Assumptions</i>
<ul style="list-style-type: none"> <li>Government / Policy continuity (market-friendly govt) past May 25 elections</li> <li>IMF program and Western aid package</li> </ul>	<ul style="list-style-type: none"> <li>No government / policy continuity after elections, or elections do not take place</li> <li>Difficulty maintaining IMF financing. Risk of disorderly debt restructuring</li> </ul>	<ul style="list-style-type: none"> <li>Ukraine struggles to attract financing, risking default</li> </ul>
<i>Market Implications</i>	<i>Market Implications</i>	<i>Market Implications</i>
<ul style="list-style-type: none"> <li>Commodities</li> <li>UK Gas: \$8-11 MMBtu (0-10% increase)</li> <li>Brent crude oil \$105-110/ barrel (within current band)</li> </ul>	<ul style="list-style-type: none"> <li>Commodities:</li> <li>UK Gas: \$9-12/ MMBtu (5-15% increase)</li> <li>Brent crude oil \$110+/ barrel (within current band)</li> </ul>	<ul style="list-style-type: none"> <li>Commodities:</li> <li>Gas: \$14-17 MMBtu (40-60% increase)</li> <li>Brent crude oil: \$120+/ barrel (\$10+ increase)</li> </ul>

Natural gas is more likely than oil to experience immediate prices changes

Natural gas would be much more vulnerable to immediate price changes than oil due to the fewer options available for transportation and supply replacement. With 30 percent of European gas supplied by Russia—half of which transits through Ukraine—EU natural gas prices would rise sharply upon any disruption that lasted more than a few days. We believe UK prices (which we take as a proxy for spot prices) could rise to \$14-17/MMBtu, or 30-40 percent, with only moderate impact on U.S. Henry Hub prices.

European gas inventories are relatively well stocked, however, and seasonal demand trends favor the consumer. Spring and summer gas demand tends to be focused on rebuilding inventories rather than final consumption. On average, European natural gas inventories were 49 percent full in early March according to Gas Infrastructure Europe, supplying an average of 1.5 months of Ukraine-linked imports with most countries having 2-3 months of storage. Any supply disruption would bring price rises that would particularly affect countries reliant on the European spot market for fuel, including those in Northern Europe.

Figure 1: Europe's Exposure to Russian Gas, 2012



Source: Eurogas. Light blue = dependence on trans-Ukraine supply channel)

**Continued destabilization of Eastern and potentially Southern Ukraine short of military incursion:** Energy prices rise very moderately and are volatile in this scenario as a modest risk premium is built in. While oil prices are effectively flat, natural gas prices are more affected: EU gas prices are cushioned by high inventory, but the risk of disruption maintains a built-in moderate risk premium. We assume a UK National Balancing Point (NBP) price of \$9-10/MMBtu, similar to current levels. Should short-lived gas supply disruptions occur, the price would rise to \$10-12, as ample inventories and reverse gas flows cushion the outages. The price of Brent crude oil would remain near the upper end of its recent \$105-110 band, and Brent's premium to West Texas Intermediate (WTI) would be extended, particularly if oil supply shocks in the Middle East and North Africa region also persist. We see little chance of a meaningful oil supply shock stemming from the Ukraine crisis (setting aside sanctions) given the small amount of crude that transits through the country, as well as Russia's desire to retain its oil revenue.

**Gazprom could suspend gas deliveries if Ukraine is unable to pay its bills**

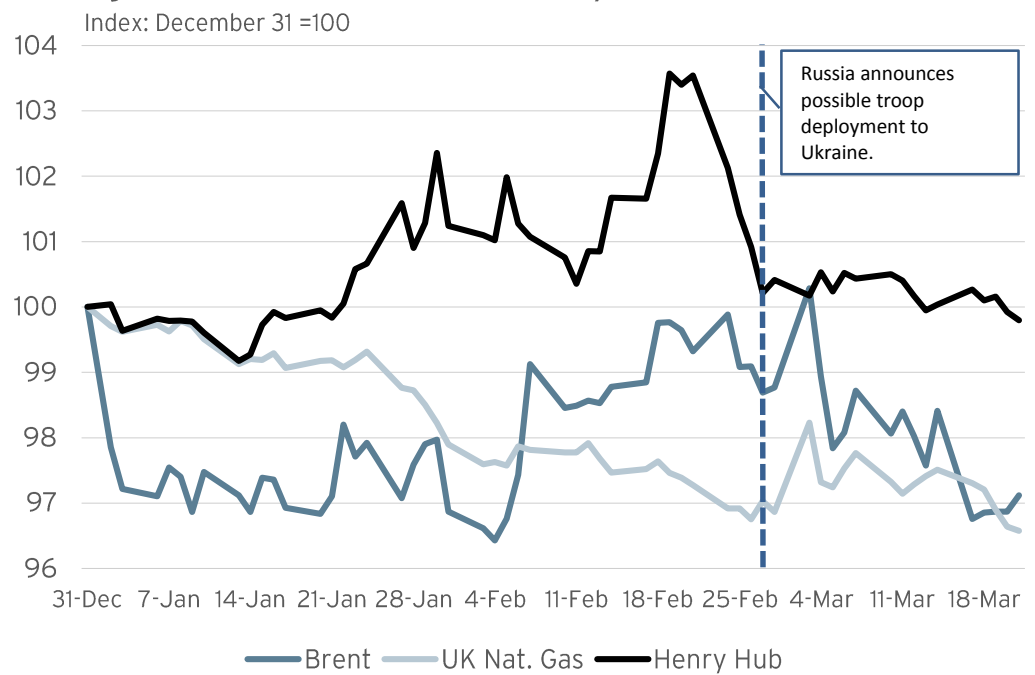
As noted in the first scenario, oil prices would be less affected than those of natural gas given relatively ample oil supplies and the possibility to re-route them. Even though we do not expect an oil supply disruption or a strategic gas cut-off by Russia in this scenario, there remains a risk of Gazprom suspending gas deliveries due to Ukraine not paying its bills, or at least not paying them on time. This scenario, which would increase the risk premium attached to natural gas, is more likely if the Ukrainian government is unable to attract or maintain financing from the IMF/EU/U.S. and thus defaults or delays payment on its sovereign liabilities.



We believe that commitment to avoid Ukraine’s economic collapse is high, which suggests low risk of default.

**De-escalation:** We don’t see any meaningful energy impact under this scenario, which means prices will be driven by typical supply and demand fundamentals. We see European natural gas prices settling around \$8-11/MMBtu, similar to current levels, oil prices easing toward \$105/barrel (no change) and the Brent and WTI spread remaining relatively narrow (\$5-10).

**Figure 2: Oil and Natural Gas Price Dynamics in 2014**



Source: Bloomberg

**LONGER-TERM IMPLICATIONS—ENERGY**

Russia appears to have chosen to prioritize geopolitical goals over economic goals. Its strategy of increasing anti-Western rhetoric (combined with growing expression of admiration for the Chinese model) has peaked with the Ukrainian crisis and has caused Russia to become more economically isolated. This also comes at a time when Russia’s budget needs are rising and its revenues are stagnating due to weaker growth.

In the short term, the scenarios assume that no meaningful direct sanctions will be implemented on Russian energy exports, as has been the case with Iranian exports. Iranian crude oil exports were sanctioned only after a meaningful period of sanctions escalation. Most

critically, the global oil market was in a position to provide ample alternatives to Iranian oil—this would not be the case if large amounts of Russian oil were taken off the market.

Instead, if sanctions are applied to Russia's energy sector, they are likely to be limited and targeted. We assume that direct or indirect sanctions will increase costs of doing business in Russia's energy sector, which puts at risk its goal of increasing unconventional oil and gas production or cultivating output in high-cost areas (eastern Siberia). Tapping its shale reserves, for example, is higher cost output and requires international oil company (IOC) expertise and that of oil service companies who might be wary of being closed off from U.S. markets. Even short of sanctions, these companies could decide to avoid Russia lest they face sanctions pressure, deferring investment (though we note that this is only realistic in the Incursion scenario). While we do not expect financial sanctions to cause any immediate change to current production levels, they could inhibit production growth by forestalling necessary investments in the unconventional and complex resources that Russia will need to replace declining production from existing conventional fields. This could lead to a modest decline in exports in the future.

Even short of sanctions, Russian energy exports could face increased transaction costs due to financial sanctions and greater counterparty risk (e.g. higher financing costs, difficulty in accessing international financial markets, and possible difficulties accessing international insurance markets). This could limit the Russian government's ability to profit from its oil exports by reducing the portion of the sales price that actually reaches Russian government coffers. While the high prices associated with our downside scenario would bring increased revenues per barrel, Russia lacks the spare capacity necessary to expand production from the current 10 mbd of production and take full advantage of high prices.

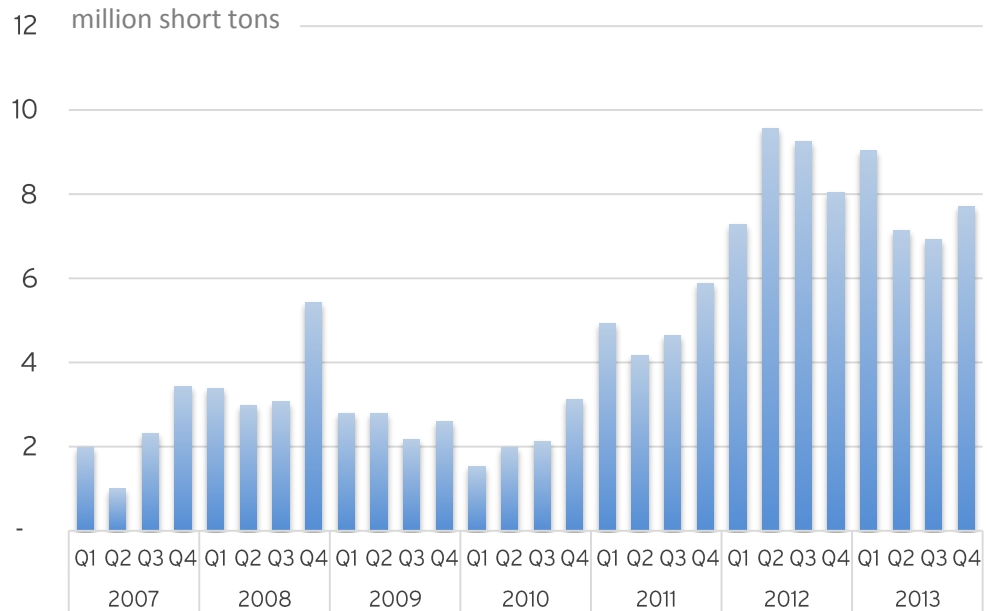
**Russia's bargaining power may be eroded as this crisis accelerates broader market shifts toward diversification**

Similarly, in the longer term, while we see no reason why Russia would seek to renegotiate the terms of joint ventures with Western oil companies, rising political risk and a wide range of oil and gas investment opportunities globally may make foreign investors wary of expanding existing ventures in Russia or initiating new ones. Meanwhile, Russia may well see its bargaining power eroded. In Europe, geopolitical imperatives and continued structural changes in the energy market that are pushing down global gas prices (e.g. U.S. domestic production) will drive slow but steady diversification away from Russian gas. Increasing domestic use of gas in the U.S. has already driven U.S. (and Canadian) coal to Europe, where it has displaced Russian gas in the power sector. Continued political risk associated with Russian gas could also accelerate efforts to stimulate European domestic gas production—especially in Poland—and further investment in efficiency to reduce the continent's overall gas demand.

**Russia will face challenges as it seeks new export markets**

As Europe looks to diversify its imports, Russia will be unable to find alternative buyers over whom it has the same price leverage. Consider China, to which Russia is seeking to send more exports. China has many other possible sources of supply, including LNG imports, domestic production, and pipeline oil and gas from Kazakhstan and Turkmenistan. As such, China will never rely on Russia for natural gas imports in the same way that Eastern Europe does. Moreover, Russia is able to maintain its leverage over Europe because it is a single supplier dealing with many buyers—multiple European states and utilities—and is not transparent regarding prices. This arrangement provides Russia with tremendous negotiating leverage, leaving individual markets far more dependent on Russian gas than Russia is dependent on demand from each market fragment. When dealing with a single Chinese buyer, Russia would cede substantial leverage. At the same time, we believe that Russia will struggle to build the infrastructure needed to export more oil to Asia in the short-term, meaning that its threat to reduce exports to Europe is probably hollow.

Figure 3: U.S. Steam Coal Exports to Europe



Source: SAFE analysis based on data from: DOE, EIA. Data excludes Russia.

LONGER-TERM IMPLICATIONS—GEOPOLITICAL

Russia is extremely vulnerable to changes in oil and gas prices

Despite being a global leader in production, Russia is extremely vulnerable to changes in global oil and gas prices. These commodities account for 70 percent of the country’s total exports and more than 50 percent of government revenues. Additionally, the Russian economy is highly oil intensive and spends heavily on oil as a percentage of GDP. Finally, its regulatory environment and expropriation risk also impair its oil security. These factors are primary reasons why Russia ranked dead last in the Q4 2013 iteration of the SAFE-RGE “Oil Security Index,” below even Saudi Arabia.

SAFE/RGE Oil Security Index

Q4 2013

Russia Overall Ranking: 13 of 13



Structural Dependency

12th Oil Intensity

5th Fuel Consumption per Capita

Economic Exposure

12th Spending on Oil Percent of GDP

2nd Spending on Net Oil Imports Percent of GDP

12th Oil Exports Percent of Total Exports

Supply Security

13th Oil Supply Security

13th Oil Stockholdings Percent of Consumption

High oil prices have emboldened the Russian government in its foreign policy, as highlighted in the “Oil Security 2025” report. In fact, Russian revenues tend to rise when there is instability in other oil producing countries, notably those in the Middle East, which results in an increase in



global oil prices. Until 2010, high oil prices increased government revenues and allowed Russia to stimulate domestic demand by increasing wages. However, since 2013, the government has been maintaining a tight fiscal rule that caps spending. Russia's reliance on ever higher oil prices to maintain its economic status quo has left Moscow unable to take advantage of the current high oil price environment; instead, the increased revenue is largely used to simply tread water. Unlike some other oil exporters, including Saudi Arabia, Russia has continued to underinvest both in energy and non-energy infrastructure and has missed the opportunity to improve its business environment and attract long-term capital.

Russia's weak economic performance, which culminated in very weak growth in 2013—and, in RGE's view, likely recession in 2014—has not hindered Putin's perception of the costs of military entanglements elsewhere in the Commonwealth of Independent States (CIS). If anything, weak economic performance has probably driven Putin to bolster his popularity and legitimacy through nationalism.

The risks of military incursion are now at even odds, and a policy shift appears unlikely

Economic sanctions and a withdrawal of capital do pose economic risks for Russia. The question is whether the effect will be severe enough to prompt a policy shift. In our view, the risks of military incursion are now at even odds with non-military incursion, and full de-escalation in the near- to medium-term is exceedingly unlikely. In other words, a serious policy shift appears unlikely, all things being equal.

It is also important to bear in mind that if a major oil price spike were to occur, the resultant revenue boost could increase Russia's perception of its own economic strength. This could fuel further Russian aggression in Ukraine and increase Moscow's geopolitical assertiveness more generally. (See our analysis of Russia in "[Oil Security 2025](#)" for more detail on this.)

Russia will become more assertive in the Middle East and less helpful with Iran and Syria

In particular, Russia could become more assertive in the Middle East, where it has numerous interests. A tit-for-tat sanctions war would complicate U.S. interests in the Middle East, including both Syria and the P5+1 talks with Iran, in which Russia has been a reluctant partner. Russia, which does not want Iran to have nuclear capability, is reportedly moving forward with a spoiler side deal with Iran in which Russia would absorb up to 1 mbd in Iranian oil output in exchange for Russian goods. U.S. administration officials have reportedly convinced Russia to hold off on such a deal until later in 2014 when the six month joint plan of action on Iran expires. Should U.S.-Russia tensions rise, Russia would be less likely to comply.

#### POLICY OPTIONS

Russia's short-term fiscal problems, combined with its extreme reliance on oil and gas revenues, risk creating a vicious cycle in which economic problems drive political problems that Russia responds to through nationalism, repression, and military adventures in the former Soviet Union. Today, direct sanctions on Russian energy exports appear unlikely as they risk both serious global economic consequences—particularly in Europe—and further emboldening Russian aggression in Ukraine.

As such, the most viable and likely options are medium-term and include:

- **More effective use of U.S. and global strategic petroleum reserves:** This should include clear signals to the market that oil-consuming countries stand ready to use reserves to prevent price spikes, including but not limited to those potentially arising from the conflict in Ukraine.

- **Investments in energy efficiency aimed at reducing the impact of oil and gas price volatility on economic growth:** U.S. export guarantees to support private sector imports in Europe could help to improve Eastern Europe's energy efficiency and reduce its economic exposure to Russian gas.
- **U.S. LNG exports:** Exports will help diversify market supplies—particularly in Asia—and result in modest price pressure on Russia as other supplies are freed up for Europe. However, while market liberalization ultimately weakens Russia, the impact in terms of market share should not be overstated. Gazprom has the ability to reduce prices to keep market share.
- **Export the fracking boom:** Ultimately, the best antidote to Europe's reliance on Russian energy is greater domestic production in Europe. While Europe has made a major push to expand electricity generation from renewable sources, oil and gas production is lacking. The United States could stimulate European domestic oil and gas production by sharing expertise on unconventional production techniques (particularly shale), including by creating financing facilities (e.g. through the EXIM Bank) to facilitate exports of U.S. production technology to Europe.