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Analysis

Russian Companies Expand Foreign Investments

By Alexei Kuznetsov, Moscow

Abstract

While all agree that Russia has become a significant source of foreign direct investment (FDI), there is no consensus on the size of these investments. According to the author's calculations, Russian outward FDI stock exceeds \$70 billion. This estimate is based on a tabulation of foreign fixed assets (property, plant and equipment, and investments in associated undertakings and jointly controlled entities) held by Russian companies outside the financial sphere and the trans-border acquisition prices of banks. The largest investors are typically Russian integrated business groups with subsidiaries mainly in oil and gas, ferrous and non-ferrous metals, telecommunications, and machinery. Nevertheless, big businesses are not the only Russian companies expanding their presence abroad. Many other companies, both in and outside the resource sector, are establishing themselves in foreign markets. The main destinations for Russian investment expansion are the CIS (30 percent of Russian FDI stock) and the European Union (almost 40 percent of FDI stock). While the role of North America is growing gradually, most Russian TNCs prefer to work in their immediate neighborhood.

The Real Scale of Russian Investment Expansion Abroad

Russia became a significant source of foreign direct investment during the last several years. Almost every month brings announcements of new large cross-border mergers and acquisitions (M&A) involving Russian participation in various regions of the world. Few Russian companies had any foreign investments as recently as the beginning of the 2000s. Official statistics have had a difficult time keeping up with this rapid growth in Russian investments abroad and now there are considerable disagreements among them (see Table 1).

The Central Bank of Russia claimed the largest figure for Russian FDI outward stock at the end of 2006. According to its calculations of the balance of payments, the volume of these investments was \$209.6 billion. Unfortunately, the Central Bank could only estimate the reinvested earnings of Russian transnational corporations abroad and sometimes it was forced to apply rough econometric approximations when it lacked hard data. UNCTAD took into account these figures but compared them with the FDI statistics of other countries. As a result, this respected institution estimated Russian FDI outward stock as \$156.8 billion. The sum of current UNCTAD figures (from its World Investment Reports) of annual Russian FDI outflows was "only" \$72.2 billion.

Nevertheless, even according to UNCTAD estimates of FDI stocks, Russia leapt from 29th place in the world to 15th in a period of six years. I think this data was too "optimistic" because it makes more sense to exclude pseudo-Russian FDI (mainly round-tripping

FDI via Cyprus and other off-shore havens), the investments of emigrants with Russian passports in real estate abroad, and de facto portfolio investments, which made up a significant share of the "capital flight" from Russia. I argue that it is more useful to calculate only the FDI stocks of large Russian companies.

We can usually find foreign asset statistics in the annual reports of large Russian companies. That is why this data is useful for ranking the transnational corporation (TNCs). However it is incorrect to compare total foreign assets with FDI volumes (as some experts did) because FDI means long-term investments, while assets consist of current and fixed components. For example, in 2006 the total foreign assets of *Severstal* were \$4.5 billion, although its foreign fixed assets were only \$2.1 billion. According to the first indicator, *Severstal* ranked 3rd among Russian companies, while, according to the second, it was only in 8th place. This situation is typical for many Russian raw material exporters. For instance, the total foreign assets of *Gazprom* exceeded \$10 billion, however the share of current assets was significant. Among them were inventories (first of all gas in European pipelines and reservoirs), accounts receivable and prepayments, cash and cash equivalents, recoverable value-added taxes and so on. As for the foreign fixed assets of *Gazprom* (property, plant and equipment, investments in associated undertakings and jointly controlled entities, etc.), they were less than \$8 billion at the end of 2006.

At the same time, the difference between total and fixed foreign assets for telecommunications companies was not so significant. For example, at the end of 2006 *MTS* had \$2.3 billion in total foreign assets and \$2.1

billion in fixed foreign assets. Sometimes the volumes of current foreign assets demonstrated significant fluctuations. For instance, the FDI of steel pipe maker *TMK* did not exceed \$100 million in its two pipe plants in Romania. However its current assets rose rapidly to \$490 million at the end of 2006. The main reason was the increase of inventories (semi-finished pipes) before the expansion of its Romanian production capacity at the beginning of 2007.

The main problem in making these calculations is the lack of information about foreign fixed assets owned by Russian companies. In many cases, they can be estimated only by press releases about M&A deals or expert evaluations. I estimate that the entire volume of foreign fixed assets held by Russia's 50 leading non-financial TNCs was approximately \$45 billion at the end of 2006 and rose to \$67 billion at the end of 2007 (see Table 1). The FDI stock of any other Russian non-financial firm was less than \$75 million. Russian FDI in banks and insurance companies was less than \$2 billion (*Vneshtorgbank* is the only significant investor, while fewer than a dozen companies have foreign subsidiaries in at least three countries). Thus, according to my estimates, the total FDI outward stock of Russian companies was \$70-72 billion at the end of 2007.

Changes at the Top of the List among Russian TNCs

In 2007 Russian TNCs beat their record for foreign assets growth. According to my estimates, the sum of their fixed assets increased by almost 50 percent, or \$22 billion. Russian integrated business groups play the leading role in this process. Some of them even try to branch out into new industries for their foreign expansion. For example, Oleg Deripaska's *Basic Element* works in seven sectors (see Figure 1) and made significant foreign investments in five of them. Its largest foreign expansion was in the aluminum industry. However, it has also invested heavily in automobiles and the construction industry. *Basic Element's* subsidiary car-maker GAZ bought 35 percent of *Magna* from Canada and a plant in the UK for more than \$1.5 billion, while *Basic Element's* investments in the construction industry included 30 percent of *Strabag*, whose assets in Austria and Germany are worth \$1.7 billion, and *Sastobe-Cement* from Kazakhstan. Other Russian integrated business groups are breaking FDI records. For instance, *Norilsk Nickel* (the base of Vladimir Potanin's *Interros* group) bought nickel and gold company *LionOre Mining* for more than \$5 billion. The assets of this firm are located in Canada, Australia, Botswana and South Africa.

In fact, almost all of Russia's foreign investments are made in the traditional industries where its business

groups work: oil and gas, ferrous and non-ferrous metals, and telecommunications (see Table 2). Additionally, machinery has become an important industry for the foreign investment expansion of such groups. For example, *OMZ*, a subsidiary of the state-owned *Gazprom*, has assets in the Czech Republic, while *Sitronics* (a part of Vladimir Evtushenkov's *Sistema*) has foreign holdings in Greece, the Czech Republic and Ukraine. Although its main stakes are in *RUSAL* (after the merger with *Renova's SUAL*) and *TNK-BP*, Viktor Vekselberg's *Renova* recently bought foreign assets in the machinery sector, including the Swiss company *Sulzer*.

At the same time, the internationalization of Russian companies continues outside the big business sector in both the resource and non-resource areas. Among the most prominent of these firms are four FDI "beginners." They did not have any foreign industrial subsidiaries before 2005, but now their FDI assets exceed \$100 million. They are 1) the *ChTPZ-Group* of Andrei Komarov and Alexander Fedorov, with zinc mines in Kazakhstan and a steel plant in the Czech Republic, 2) Boris Zubitski's *Koks* with steel plants in Slovenia, 3) Alisher Usmanov's *Metalloinvest* with iron, copper and gold mines in Papua New Guinea and Australia, and 4) the legendary *Magnitogorsk Iron & Steel Works* of Viktor Rashnikov, which has set up a joint venture in Turkey.

Another interesting example is Michael Bolotin's *Tractor Plants*. Its FDI stock now exceeds \$150 million. Today it owns the consolidated foreign assets of the former *KTZ* and *Agromashholding*. They consist of agriculture machinery plants in Ukraine, Kazakhstan, Belarus, and Moldova, and (since 2006) a forestry machinery factory in Denmark. In addition, *Tractor Plants's* engineering subsidiary *Iprocom* has just acquired *Dunham-Bush* with plants in Malaysia, the USA, Great Britain and China.

The well known and long-established *Rostselmash* is one of the latest Russian companies to venture abroad because in October 2007 it acquired *Buhler Industries* with tractor plants in Canada and the USA for \$130 million. Another notable Russian machinery TNC is *Transmashholding*. It works in railway machinery and has only two years FDI experience. It owns plants or participates in joint ventures in Kazakhstan, Germany, Latvia and Ukraine. As a result, its FDI stock now surpasses \$100 million.

A good example of FDI in the forestry and paper industry is *Investlesprom* (the former *Segezha Pulp & Paper Mill*). Its foreign investment experience is also relatively short, but the FDI of its subsidiary *Segezha Packaging* has exceeded \$100 million. Due to its foreign expansion, it has become the second largest European paper sack producer. Its main assets are situated in Sweden

but there are also subsidiaries in Italy, the Netherlands and some other European countries. Moreover *Segezha Packaging* recently acquired *Isiklar Ambalaj* in Turkey.

Many Russian companies are starting to make foreign investments in the food industry. At the beginning of 2008, the largest TNCs are *Russian Solod* (brewing), *SPI Group* (vodka and other alcoholic beverages), *Wimm-Bill-Dann* (dairy and juice), *Russian Vine Trust* (cognac and brandy production), *Mezhrespublikanskij Vinzavod* (wine) and *Nastjusha* (grain and flour). The FDI stock of each of these companies is between \$30 million and \$80 million.

The leading perfume company *Kalina* is also a noteworthy Russian investor. Although *Kalina* has sold its subsidiaries in the CIS (except for *Pallada-Ukraine*), its FDI stock in the chemical industry exceeds \$30 million due to its German firm *Dr. Scheller*. Only tire producer *Amtel-Vredestein* with its Dutch part *Vredestein Banden*, *Akron* with its Chinese fertilizers plants and *Eurochem* with its Lithuanian and new Ukrainian fertilizers subsidiaries show more significant investment expansion among Russian chemical companies.

The Geography of Russian FDI

It is impossible to determine the geographical distribution of Russia's entire FDI stock because the routes of illegal capital flight in the form of FDI are very complicated. Nevertheless, it is possible to identify the locations of Russian companies' fixed assets and to determine the target countries for M&A deals with Russian participation. Thus, I have been able to define the geography of approximately \$70-72 billion in Russian FDI.

The CIS and EU are the main recipients of Russian FDI (see Figure 2). The share of the CIS is about 30 percent, but more than 80 percent of these investments are concentrated in three neighboring countries (Ukraine, Kazakhstan and Belarus). The share of the EU is almost 40 percent. Due to the Russian fleet of ships registered under the "cheap flags" of Cyprus and Malta, these countries have as much Russian investment as Germany and Italy.

The role of North America is increasing gradually. For example, the largest foreign subsidiary of *Evrax* is situated there (the company acquired *Oregon Steel Mills* for \$2.3 billion), however *Evrax* has just invested more than \$2.5 billion in Ukraine. Additionally, *NLMK* has acquired plants in the EU for more than \$1 billion while *Lukoil*, *Gazprom*, *MTS* and several other Russian companies are constantly making significant new investments in the CIS.

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Proximity plays a significant role for Russian TNCs because they like to invest in their nearby neighborhood. They prefer to invest in the countries where they have business contacts and can easily form effective value-added chains. Moreover, in these locations, there are no information barriers for Russian firms and sometimes even the language is the same. As a result, in spite of the negative attitude toward Russian expansion in some countries, the Russian share of recipient FDI is the largest in neighboring countries (see Map 1). It exceeds 5 percent in Belarus, Ukraine, Kazakhstan, Armenia, Uzbekistan, Serbia, Montenegro, Bulgaria, and Cyprus, as well as Moldova and Lithuania, and even Georgia and Latvia, which often do not have friendly relations with Russia. Of course, the Russian share is less than 2 percent in such countries as Finland, Austria or the Czech Republic only due to their good investment climate. In these places, significant Russian investments are overshadowed by the large mass of European and American investments.

The prospects for Russian investment expansion depend on the future balance of various Russian FDI drivers. On the one hand, many Russian companies have traditional motivations to make foreign investments, namely seeking new markets (both in the CIS and developed countries), greater efficiency (especially in the CIS, but sometimes even in China), resources (in such countries as Kazakhstan, Mongolia, Vietnam, Angola, Guinea and so on) and assets (in various developed countries). On the other hand, Russia's transition economy still provides a variety of non-business motivations. For example, new laws in Russia are often contradictory and thus stimulate growing corruption. As a result, Russian companies try to insure their business against attack by making foreign acquisitions which give them the image of global players and increase their negotiating power at home. Also Russian companies seek cheap financial resources in foreign countries in response to the weakness of the Russian national bank system. In these situations, large trans-border mergers and acquisitions increase the ability Russian companies to raise money on Western markets. Insofar as the different motives determine the geography of Russian investments, it is difficult to predict the exact shares for various countries. Nevertheless, it is obvious that the EU and CIS will be main recipients of Russian FDI for a long time.

Tables and Graphs

Russian FDI

Table 1: Various Estimates of Russian FDI Outward Stocks

Indices	\$ billion, end of year					
	2000	2003	2004	2005	2006	2007
FDI outward stock (Central Bank of Russia)	20.1	90.9	107.3	146.7	209.6	n/a
FDI outward stock (UNCTAD)	20.1	51.8	81.9	120.4	156.8	n/a
Sum of FDI outflows (UNCTAD)	11.8	27.6	41.4	54.2	72.2	n/a
Foreign fixed assets of 50 Russian leading non-financial TNCs (author's estimates)	n/a	≈ 19	≈ 25	≈ 35	≈ 45	≈ 67

Sources: World Investment Reports (various issues) – <http://www.unctad.org>, International Investment Position of Russia for 2000–2006: external assets and liabilities at end of period – <http://www.cbr.ru>; monthly information database “Sliyaniya i pogloshcheniya” – <http://www.majournal.ru>; Internet-sites of Russian large companies, author's calculations.

Figure 1: Structure of Basic Element, a Good Example of Russian Integrated Business Groups with Several TNCs

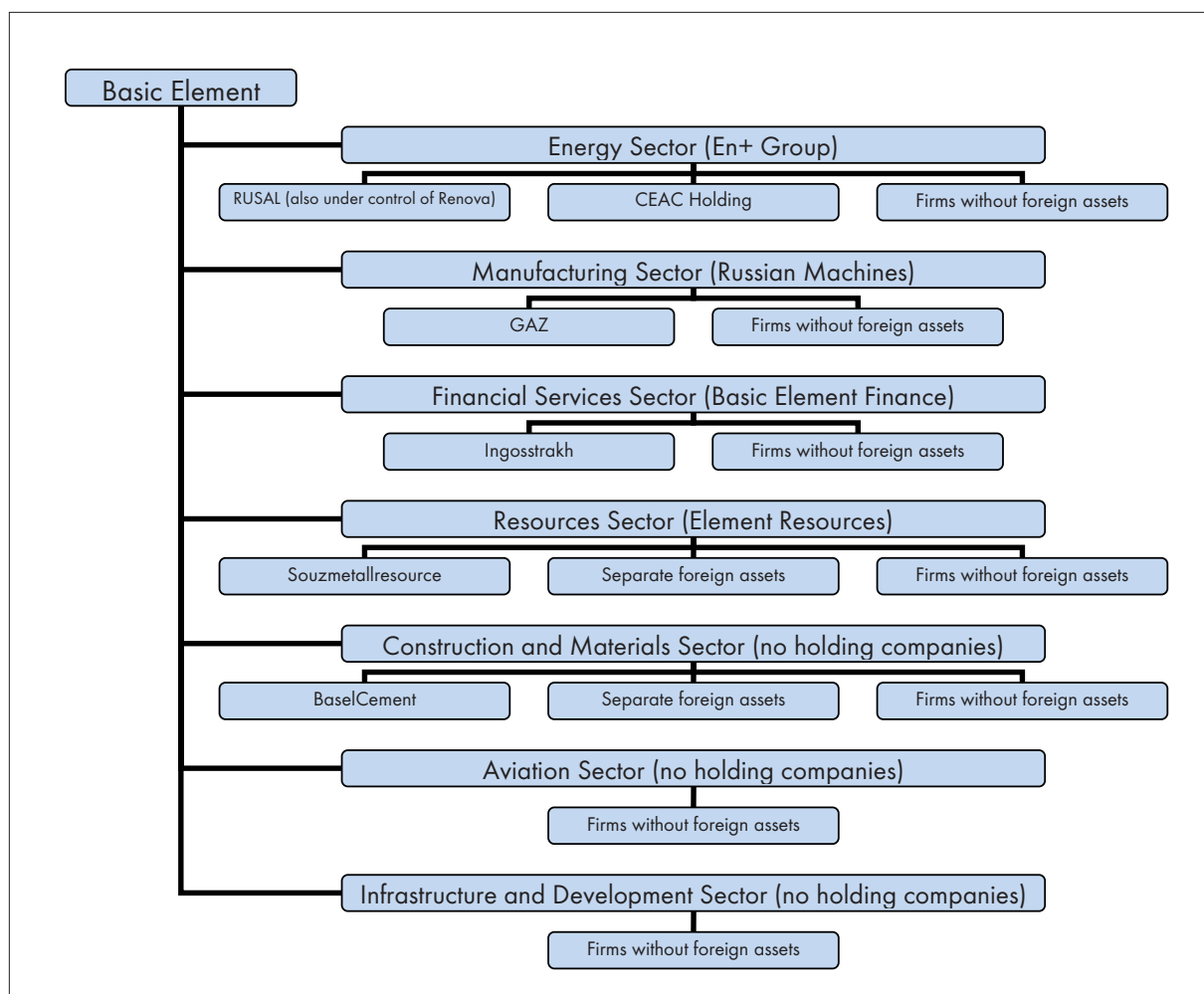


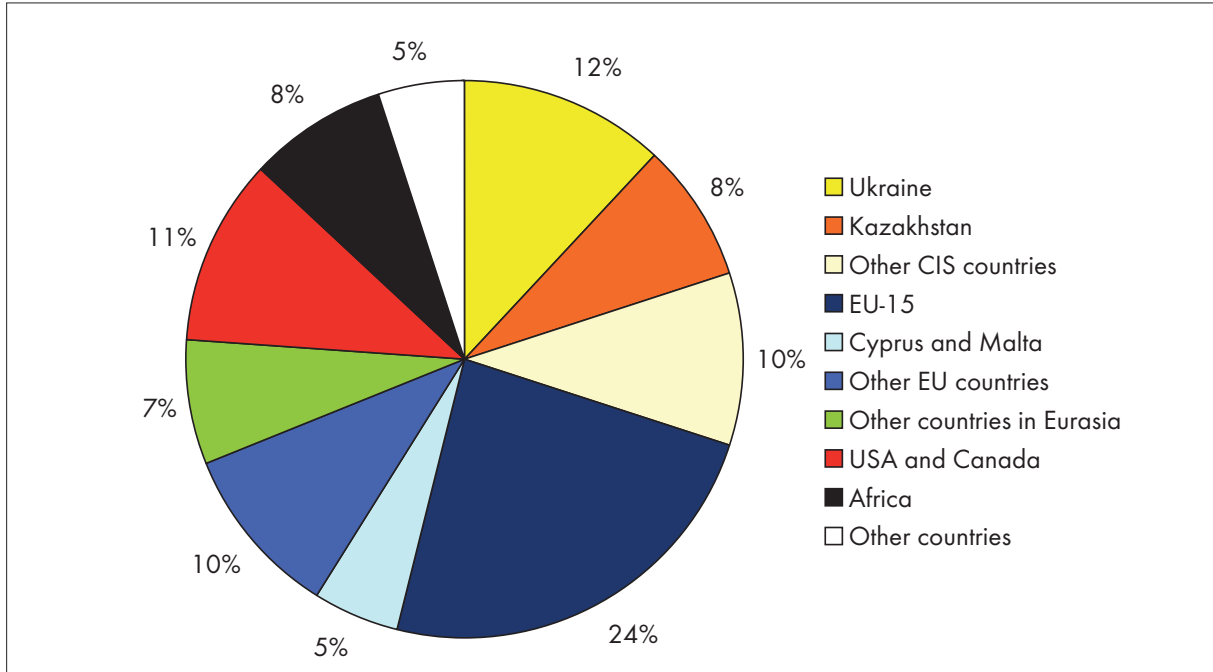
Table 2: Russian Top 30 Non-Financial TNCs, Ranked by Foreign Fixed Assets

Foreign fixed assets, \$ billion, end of 2007	Company	Main industrial specialization
More than 13.0	Lukoil	Oil extraction, refinery and distribution, chemicals
6.0 – 9.0	Gazprom	Gas extraction and distribution, oil extraction
	Norilsk Nickel	Non-ferrous metals
	Evrast	Ferrous metals
3.0 – 4.5	Sovkomflot (incl. Novoship)	Transportation
	RUSAL	Non-ferrous metals
	MTS	Telecommunications
2.0 – 3.0	Severstal	Ferrous metals
	Altimo (without VimpelCom)	Telecommunications
1.5 – 2.0	Renova (machinery and modern technologies firms)*	Machinery, electrical energy
	Basic Element (construction and materials sector)*	Construction, construction materials
	Russian Machines (GAZ)*	Machinery
1.0 – 1.5	Zarubezhneft	Oil extraction, refinery and distribution
	VimpelCom	Telecommunications
	NLMK*	Ferrous metals
0.5 – 0.8	Rosneft	Oil extraction
	UES of Russia	Electricity
0.3 – 0.5	Alrosa	Diamonds
	TNK-BP	Oil extraction, refinery and distribution
	Amtel-Vredestein	Chemicals
	Prisco	Transportation
	Severstaltrans (since 2008 – N-Trans)	Transportation
0.2 – 0.3	OMZ	Machinery
	Itera	Oil and gas extraction, electricity
	Slavneft	Oil extraction and refinery
	Soyuzneftegaz	Oil extraction
	MAIR	Ferrous metals
	RussNeft (Russian part has been confiscated)*	Oil extraction
	Sitronics	Machinery
	Mechel*	Ferrous metals, electrical energy

* - newcomers to the list (during 2007)

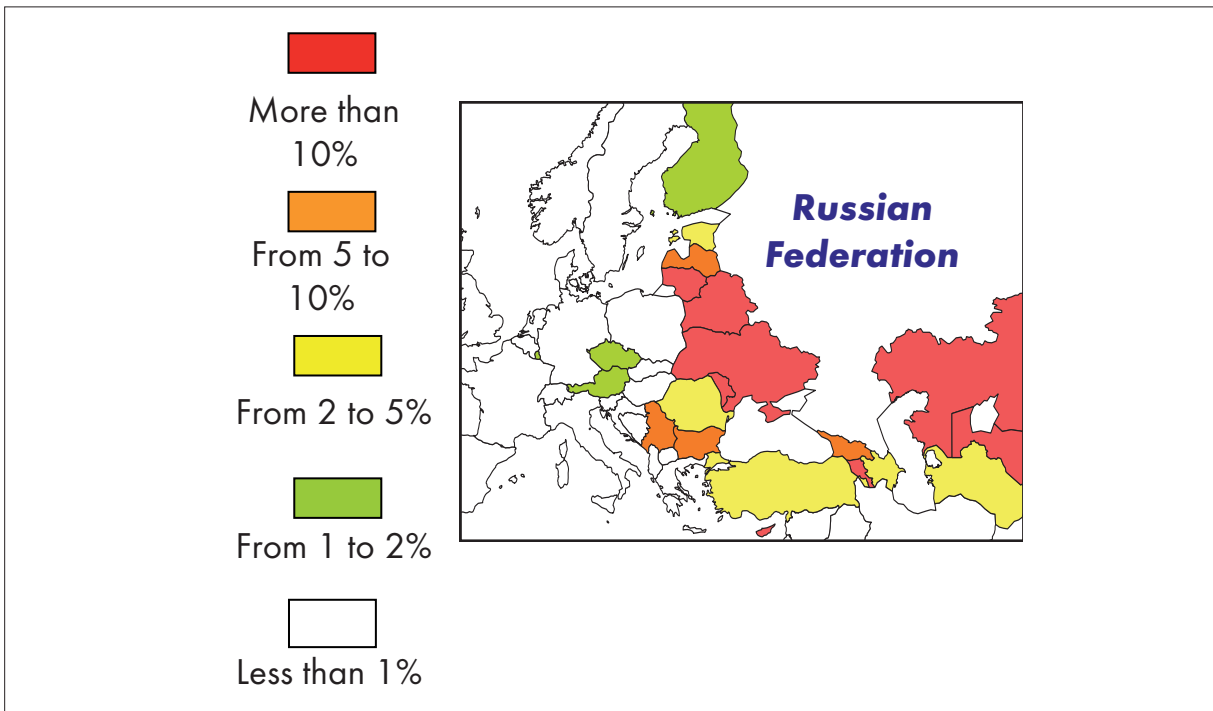
Sources: monthly information database "Sliyaniya i pogloshcheniya" – <http://www.ma-journal.ru>; Internet-sites of Russian large companies, author's calculations.

Figure 2: Geographical Structure of Russian FDI (End of 2007)
 (Fixed Assets of Non-Financial TNCs and M&A Volumes of Banks in % of Non-Current Assets)



Sources: monthly information database "Sliyaniya i pogloshcheniya" – <http://www.ma-journal.ru>; Internet-sites of Russian large companies, author's calculations.

Map 1: Share of Russian Companies in the Total FDI Inward Stock (End of 2006)



Sources: World Investment Report 2007. p. 255, 258; author's estimates of fixed assets of Russian non-financial TNCs and M&A volumes of Russian banks.

Analysis

Gazprom's Expansion Strategy in Europe and the Liberalization of EU Energy Markets

By Andreas Heinrich, Koszalin

Abstract

Gazprom has focused its expansion strategy on Europe, its main consumer market. Driven by a desire to open up and secure markets as well as to acquire strategic assets in these markets, the company has intensified its internationalization efforts in the last couple of years. The European Union (EU) gas market liberalization has also propelled Gazprom's expansion; the company has striven to increase its share in the European downstream market. However, Gazprom's expansion in Europe is running into increasing opposition fuelled by fears of over-reliance on Russian gas and growing Russian influence on distribution networks in Europe.

Gazprom's Expansion Strategy

Russia's quasi-gas-monopoly Gazprom is trying to re-establish its networking and extraction-supply chain on the territory of the former Soviet Union and expand its traditional consumer markets in Western and Central Europe. To this end, it is venturing into new markets and market segments, such as power generation. Additionally, the company is expanding into new global markets in the Middle, Near, and Far East, South America, and Africa.

Gazprom has developed plans to expand natural gas exports in all possible directions. Since 2005, its export share has sharply increased, from a formerly fairly stable level of around one-third of its production to nearly half of its overall production in 2006 (see Table 1). In Western and Central Europe especially, Gazprom is trying to diversify the structure of its consumer base and to increase its participation in deliveries to end-users. Gazprom has established overseas sale subsidiaries in nearly all countries to which its natural gas is exported. Moreover, the company has made overtures to gain direct access to large industrial and gas-fired power generation markets in Western and Central Europe.

These actions represent attempts at market-seeking (participation in the EU downstream market) as well as strategic asset- or capability-seeking – mainly in Central Europe and the former Soviet Union – in order to maintain influence and secure control over transit routes. To prevent its partners from engaging in opportunistic behavior, Gazprom is endeavoring to maintain control through majority ownership rather than acting as a mere profit-seeking investor (see Table 2). The company certainly wanted to take the opportunity to enter the liberalized EU gas market.

EU Gas Market Liberalization as a Pull Factor

The first formal step in the liberalization process of the European gas market was the first EU Gas Directive (98/30/EC). Adopted in June 1998, the Directive laid down the common rules for an EU internal gas market in which eventually all users were to have a choice of supplier. It came into force in August 2000.

In June 2003, the European Commission (EC) issued the second Gas Directive (2003/55/EC), which stipulated a new set of common rules for the internal gas market and thus replaced the first Directive. In so doing, the EC wanted to reduce the power of energy companies by obligating them to split up or “unbundle” the ownership of generation and distribution networks. The Directive granted all non-household gas customers the right to choose their supplier freely as of 1 July 2004 at the latest, with all customers to have this right by 1 July 2007.

Gazprom has profited from the EU's gas market liberalization initiatives by gaining access to the downstream business in Europe. To participate in the profitable downstream market, it has established joint venture marketing companies in nearly all of its consumer countries (see Table 2). Gazprom has also invested in non-core business equity outside the Russian Federation, like gas equipment manufacturing, petrochemicals, media and financial services.

Gazprom's Joint Ventures in Europe

It is difficult to establish a full picture of Gazprom's activities abroad. The company puts enormous effort into covering its tracks by using subsidiaries such as Gazprom Germania (Germany), Gazprombank (Russia), Gazprom Media (Russia), or shell companies to invest overseas. One can only guess at the reasons:

to avoid resistance to its investment in the host countries and/or to avoid taxation and/or for asset stripping purposes. As of 2005, the company's strategy for the upcoming decade was not only to become a gas giant (which it already was), but "to become the largest energy company in the world" (Alexander Medvedev). Therefore, the company's joint ventures listed in Table 2 only represent the tip of the iceberg.

Gazprom's investment activities frequently encounter opposition. The problems and political protests Gazprom met in its attempts to acquire the Hungarian Borsodchem in 2000 and the British Centrica in 2006 highlight the fact that the Russian gas company is not always welcome in Europe. Gazprom used an Ireland-based sham firm for a hostile take-over of Hungary's Borsodchem chemical manufacturer in 2000, a move that was opposed by the Hungarian government and led to numerous political protests. Nevertheless, Gazprom was able to acquire a 25 percent stake in the company.

In 2006, Gazprom planned to acquire Centrica, which owns the largest distribution network in Great Britain. However, the British government signaled discontent and undertook measures to make the acquisition more complicated. As a result, Gazprom backed down from the deal but issued a sharp warning to Europe not to interfere in its efforts to expand on the continent, calling the practice discriminatory.

However, despite these backlashes, Gazprom has not abandoned its desire to diversify into Europe's gas transportation, distribution and power generation industries to gain added value and build upon its traditional business of supplying wholesale gas supplies to regional monopolies. In its latest move, Gazprom is negotiating to acquire storage facilities and distribution hubs across the EU; the company is eager to have direct access to the distribution networks as well as venture into power generation. The new strategy involves establishing joint ventures to build large natural gas storage depots in Hungary, Germany, Belgium, Serbia, and Romania. The storage facilities are designed to cope with unusually high demand during cold snaps and would help to ensure continued supplies to Western markets in case of new disputes involving the pipeline transit countries.

Additionally, Soteg SA, a Luxemburg company, and Gazprom struck a deal in April 2007 to build an 800 megawatt electricity-generating facility in Eisenhüttenstadt, Germany. The facility plans to sell most of its electricity across several EU states via long-term industry contracts.

More Liberalization, but with Safeguards

In September 2007, the EC published its "third liberalization package" of EU energy legislation focus-

ing on anti-competitiveness within European energy markets. It presented EU governments with the option of full ownership unbundling or introducing an Independent System Operator (ISO) for the gas sectors. Originally, the EC wanted only to propose full ownership unbundling, but after significant pressure from Germany and France, the EC ended up offering both options. (Germany and France argue that unbundling would weaken their bargaining position against energy suppliers like Russia.) Ownership unbundling would involve selling the transmission business or dividing the network operations from production and supply. Alternatively, the network could be run by an ISO approved by the EC. This would allow integrated energy companies to continue to own networks, but at the price of relinquishing day-to-day control of these networks to independent operators.

The EC legislation also bans any non-EU company from controlling European gas networks. The unbundling proposals would also extend to gas storage providers, which also supply gas. In EU states choosing ownership unbundling, networks would be off limits to any energy supplier regardless of nationality; in states opting for ISOs, any energy supplier could invest in, but not control or operate, an EU network.

If enacted, the EC legislative proposals would both seriously jeopardize Gazprom's expansion plans and also undermine the position the company has already achieved in EU markets. The proposals would not only prevent Gazprom from buying parts of the EU's transmission network, but would also force the company to sell its assets in EU transport, distribution, and storage infrastructures or spin them off into separate companies managed by independent operators. This would undo the strategy that the company has been pursuing for the last few years, which is to dominate all segments of the EU gas market (production, transport, storage, and distribution). However, Gazprom could still acquire generation, production, and retail assets.

Russian politicians have criticized the EC's liberalization proposals. Russian officials consider many of these to be unfair business practices and demand non-discriminatory access to downstream assets in Europe. In October 2007, Gazprom hinted that it was prepared to take retaliatory measures if the EU decided to limit its expansion.

Most experts believe that the EC's draft is unlikely to come into force in its present form. The legislative initiative must be approved by the European Parliament and the Council, and may have to undergo major adjustments. There is already opposition to the legislation inside the EU; the proposal has already been criticized by German and French government officials and

EU companies that are monopolies in their respective markets.

European Concerns about Over-Dependence on Russian Gas

EU countries are concerned about over-reliance on Russian gas. The EU is therefore aiming to open up energy markets to competition and secure energy supplies through the diversification of sources by geographical regions, goals which may adversely affect Russian gas exports to the EU in the medium and long runs. This position has been explicitly formulated by the European Commission. Even though there are officially no restrictions on amounts, it is recommended that not more than 30 percent of EU members' energy needs come from any one source.

The Eastern European EU members are highly dependent on Russian gas (see Table 3). The Western European states' reliance on Russia is fairly low by comparison, especially when European domestic energy extraction is taken into account. Even Germany, by far the largest consumer of Russian gas in the EU, has managed to keep the Russian share in its overall gas consumption fairly stable at approximately one-third since the 1970s.

The EU is also striving to further geographically diversify its energy supplies as an instrument of energy security (for the current EU-27 supply structure, see Table 4). This is the purpose of a number of current projects, such as pipelines from North Africa, the Nabucco pipeline running from the eastern border of Turkey to Southern Europe, and the construction of further terminals for liquefied natural gas (LNG). The Nabucco project, which has been delayed by internal problems, is countered by Russia's South Stream pipeline project, which it announced in June 2007 and which would transport Russian gas to Italy and Austria. The 900km South Stream pipeline is to cross the Black Sea directly into Bulgaria. From there, two onshore branches, one going to Austria and the other to Greece and then to Italy will be considered. The pipeline will have a capacity of 30bcm per year and will take three years to build. Gazprom expects the work to start in 2008 or 2009.

Algeria is being eyed by EU officials as a primary source for the diversification of gas supplies in order to decrease dependence on Russian gas. Meanwhile, Gazprom is pursuing closer cooperation with the Algerian government and local gas operators, reportedly in an attempt to establish an international cartel to control the majority of the European market's gas supplies. The two sides plan to work together on production, extraction, and transportation of local gas to the world market. However, due to divergent interests between the potential partners (that would supposed-

ly also include Iran, Qatar etc.) of this "gas OPEC," its creation seems rather unlikely.

Taking into account the events of the Russian-Ukrainian gas crisis in January 2006, the question arises whether Gazprom is a reliable energy supplier. Although the natural gas affair damaged the Kremlin's image, Gazprom's actions – when regarded dispassionately – gave no reason to question the company's reliability as a gas supplier. The very fact that the authorities were obliged to reverse their decision to cut off gas supplies to Ukraine clearly shows that fiddling with the gas tap is not a real policy option for Russia. The Russian side cannot seriously blackmail either the transit states or the end customers in Europe, because it is fundamentally dependent on both. In 2006, around 54 percent of Gazprom's natural gas exports were delivered to the EU-27, while a further 9.3 percent went to other European countries (including Turkey).

However, as the crisis over oil supplies with Belarus in January 2007 showed, Russia is a slow learner.

Nevertheless, Gazprom has proven to be a reliable supplier of natural gas to the EU. But even if Gazprom does not *per se* constitute a risk factor for the energy security of the EU and its members, they would nevertheless be well advised to continue their current diversification efforts, since technical difficulties, for instance, can never be excluded. An intensification of energy ties with Russia, such as Germany is pursuing with the Nord Stream gas pipeline project, is not advisable. Germany should not be tempted by this deal to significantly increase the share of Russian gas in its overall energy supply.

However, EU concerns have so far failed to translate into a united energy policy towards Russia. Many EU members still favor national champions in the energy sector, whose strong position domestically and internationally is valued more than a common EU energy policy. These companies seek to develop privileged relations with Gazprom. Each EU country has its own bilateral relationship and special deals with Russia over energy. Countries that enjoy close energy cooperation with Russia (like Germany and Italy) have a stronger inclination to engage with Gazprom than other EU members. Additionally, the range of Russian gas on EU members' energy balances differs strongly (see Table 3).

Conclusion

Gazprom has focused its expansion strategy on Europe, its main consumer market. It has intensified its internationalization efforts since the EU introduced its gas market liberalization policy. The EU has put pressure on energy companies to dismantle the links between production, transportation, and distribution to open the sector to greater competition and price transparen-

cy; meanwhile, Gazprom's strategy in Europe entails establishing a large distribution and trading network throughout the EU.

However, Gazprom's expansion in Europe has not been smooth sailing. Fuelled by concerns of overdependence on Russian gas and of Russian control over distribution networks in Europe, member states are searching for alternative supplies.

Even though Gazprom has had a reliable track record as a supplier, its western clients should continue their current diversification efforts. However, Gazprom is doing everything in its power to undermine these efforts: for example, the company is blocking the Nabucco pipeline project by supplying the markets with Russian gas via the South Stream pipeline. Gas hubs and storage facilities within the EU will be filled with Russian gas and thus blunt demand for gas from other sources.

A common energy policy is needed to make diversification work. One way to increase the EU's energy security would be to liberalize its own market and unbundle its national utilities. This would cut profit margins in gas distribution, and thereby reduce Gazprom's appetite for these assets. It would also weaken "special relationships" between Russia and single member states and thus strengthen a common EU energy policy. The weakened bargaining position of individual EU energy companies against energy suppliers would be offset by a common EU position presented by the EU energy commissioner.

Europe is also talking of building more LNG terminals that can be supplied by other suppliers; unlike the pipeline projects, these facilities would be beyond the reach of the Russian gas behemoth.

About the author

Andreas Heinrich is a senior researcher at the Koszalin Institute of Comparative European Studies (KICES) in Poland.

Recommended reading

- Andreas Heinrich, "Internationalisation of Russia's Gazprom," *Journal for East European Management Studies* 8, No. 1 (2003): 46-66.
- Andreas Heinrich, "Between a Rock and a Hard Place: The Energy Sector in Central and Eastern Europe," in Kari Liuhto and Zsuzsanna Vincze, eds., *Wider Europe*, (Tampere: Esa Print, 2005), pp. 457-490.
- UNCTAD, *World Investment Report 2007: Transnational Corporations, Extractive Industries and Development* (New York: United Nations, 2007), <http://www.unctad.org/>.
- Peeter Vahtra and Kari Liuhto, *Expansion or Exodus? Foreign Operations of Russia's Largest Corporations* (Turku: Pan-European Institute, 2004).

Tables

Gazprom Joint Ventures, EU Gas Imports

Table 1: Share of Exports in Gazprom's Total Natural Gas Production (in bn cm)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Production	533.8	553.7	545.6	523.2	511.9	521.9	540.2	545.1	555.0	556.0
Exports	188.9	173.0	174.0	173.7	166.5	168.9	175.5	192.0	232.7	262.5
Export ratio	35.4	31.2	31.8	33.2	32.5	32.4	32.5	35.2	41.9	47.2

Sources: Company information; own calculations.

Table 2: Gazprom's Joint Ventures in Europe in 2006 (including off-shore locations)

Country	Joint venture	Share	Activities
Austria	ARosgas Holding AG	100	Gas marketing
	Gas- und Warenhandelsgesellschaft (GHW)	50	Gas trading
	Sibneft Oil Trade GmbH	100	Oil trading
	ZGG-Zarubezhgazneftechim Trading GmbH	100	Gas trading
	ZMB Gasspeicher Holding GmbH	66.7	Gas storage
Bulgaria	Topenergo	100	Gas trading and transport
	Overgas	50	Gas trading
	Overgas Inc.	50	N/A
Cayman Islands	ZGG Cayman Holding Ltd.	100	Investment company
	ZGG Cayman Ltd	100	Investment company
Cyprus	Ecofran Marketing Consulting & Communication Services Company Ltd.	N/A	N/A
	GASEXCO Gas Exploration Company Ltd.	N/A	Gas exploration
	Greatham Overseas Limited	N/A	N/A
	Leadville Investments Ltd.	100	Investment company
	MF Media Finance (Overseas) Ltd.	N/A	Investment company
	NTV World Ltd.	N/A	Media
	Odex Exploration Ltd.	20	Oil exploration
	Private Company Limited by Shares GPBI (Cyprus) Ltd.	N/A	N/A
Siritia Ventures Ltd.	N/A	Investment company	
Czech Republic	Gas Invest	37.5	Investment company
	Vemex s.r.o.	33	Gas trading
Estonia	Eesti Gaas	37.2	Gas trading and transport
Finland	Gasum Oy	25	Gas transportation and marketing
	North Transgas Oy	100	Pipeline construction beneath the Baltic Sea
France	FRAgaz	50	Gas trading
	Sofrasi	30	Representative office
Germany	Agrogaz GmbH	100	Via ZGG
	Centrex Beteiligungs GmbH	38	Gas trading and investment company
	HTB Europa GmbH	N/A	Media
	Gazprom Germania (formerly known as ZGG)	100	Gas trading
	Verbundnetz Gas (VNG)	5.3	Gas transportation and marketing
	Wingas	33a	Gas transportation and storage
	Wintershall Erdgas Handelshaus (WIEH)	50	Gas trading
	ZMB Mobil	100	Gas-fuelled automobile technology
ZMB-Zarubezhgaz Management und Beteiligungsgesellschaft GmbH (ZMB GmbH)	100	Gas trading	

Table 2: Gazprom's Joint Ventures in Europe in 2006 (including off-shore locations) (Cont'd)

Country	Joint venture	Share	Activities
Gibraltar	Bleakend Holdings Limited	N/A	Media???
Greece	Prometheus Gaz	50	Marketing and construction
Hungary	Borsodchem	25	Petrochemicals
	DKG-EAST Co. Inc.	38.1	Oil and gas equipment manufacturing
	Gazkomplekt KFT	N/A	
	NTV Hungary Commercial Limited Liability Company	N/A	Media
	Panrusgas	40	Gas trading and transport
Ireland	GPB Finance Plc.	N/A	Investment company
Italy	Promgaz	50	Gas trading and marketing
	Volta	49	Gas trading and transport
Latvia	Latvijas Gaze	34	Gas trading and transport
Lichtenstein	IDF Anlagegesellschaft	50	Investment company (holding via Siritia Ventures Ltd., Cyprus)
Lithuania	Kaunas power plant	99.5	Gas fired heat and power plant
	Lietuvos Dujos	37.1	Gas trading and transport
	Rizhskiy Farfor	N/A	N/A
	Stella-Vitae	30	Gas trading
Poland	Gas Trading	18.4	Gas trading
	Evropol Gaz (Europolgaz)	48	Gas transport
Romania	WIEE Romania SRL	50	Gas distribution
	WIROM Gas S.A.	26	Gas trading (controlled through WIEH)
Serbia	Progresgaz Trading Ltd.	25-50	Gas trading
	YugoRosGaz	75	Gas trading and transport
Slovakia	Slovrusgaz	50	Gas trading and transport
Slovenia	Tagdem	7.6	Gas trading
Switzerland	Baltic LNG	80	Development and sale of LNG
	Gaz Project Development Central Asia AG (GPD)	50	Gas development and marketing
	Nord Stream AG	51	Operator of the planned 'Nord Stream' pipeline
	RosUkrEnergo AG	50	Gas trading
	Sibur-Europe	100	Investment company
	Wintershall Erdgas Handelshaus Zug AG (WIEE)	50	Gas trading
	ZMB (Schweiz) AG	100	Gas trading

Table 2: Gazprom's Joint Ventures in Europe in 2006 (including off-shore locations) (Cont'd)

Country	Joint venture	Share	Activities
The Netherlands	Blue Stream Pipeline Co	50	Gas transportation and construction
	Brochan B.V.	N/A	N/A
	Gazinvest Finance B.V.	N/A	Investment company
	Gazprom Finance B.V.	100	Investment company
	Gazprom Netherlands B.V.	100	N/A
	Gazprom Sakhalin Holdings B.V.	100	Owens 50% and 1 share in Sakhalin Energy, the operator of the Sakhalin-II oil and gas field
	NTV-HTB Holding and Finance B.V	N/A	Media
	NTV Plus B.V.	N/A	Media
	Pieter-Gaz	51	Gas trading
	Sib Finance B.V.	N/A	Investment company
	West East Pipeline Project Investment	100	Construction and investment company
Turkey	Bosphorus Gaz	40	Gas trading
	Turusgaz	45	Gas trading
UK/ Belgium	Interconnector	10	Pipeline which connected Bacton (UK) with Zeebrugge (Belgium)
UK	Gazprom UK Ltd	100	Investment company
	Gazprom UK Marketing and Trading Ltd.	100	Gas trading
	HydroWingas	16.6a	Gas trading
	Sibur International	100	Petrochemicals
	WINGAS Storage UK Ltd.	33	Underground gas storage reconstruction
Virgin Islands	Benton Solutions Inc.	N/A	N/A
	Media Financial Limited	N/A	Financial services
	Nagelfar Trade & Invest Ltd.	N/A	N/A
	NTV Media International Limited	N/A	Media
	Sib Oil Trade	100	Oil trading

Note: a) In 2007, Gazprom increased its shareholding in the German Wingas to 49.9%. As a result, its holding in HydroWingas (UK) increased to 25%.

Sources: Gazprom company information; Tillack, Hans-Martin (2007) *Die Gazoviki, das Geld und die Gier*, Stern, No. 38, 192-198.

Table 3: EU members' dependence on gas supplies from Russia, 2006

	Imports from Russia (in bcm)	Percentage of total gas imports
Bulgaria	2.7	100
Estonia	0.7	100
Finland	4.9	100
Slovakia	7.0	100
Latvia	1.4	100
Lithuania	2.8	100
Romania	5.5	87.3
Greece	2.7	84.4
Hungary	8.8	80.0
Czech Republic	7.4	77.9
Austria	6.6	75.9
Poland	7.7	72.6
Slovenia	0.7	63.6
UKa	8.7	41.2
Germany	34.4	37.9
Italy	22.1	28.6
The Netherlandsa	4.7	25.4
France	10.0	20.2
Belgium	3.2	14.1

Note: a) The Netherlands and the UK are still large gas producers on their own; their dependency level on Russian gas is therefore rather misleading.

Source: Gazprom (2007) Annual Report 2006. Moscow: Gazprom, pp. 49-50 BP Statistical Review of World Energy June 2007, p. 30; own calculations.

Table 4: EU-27 Natural Gas Supplies, 2006

	Volume (in bcm)	Percentage of the total supplies
EU-27 production	195.3	42.2
Russia	118.7	25.7
Algeria	54.6	11.8
Norway	46.6	10.1
Nigeria	13.5	2.9
Egypt	8.5	1.8
Libya	8.4	1.8
Others	17.0	3.7
Total	462.6	100

Source: BP Statistical Review of World Energy June 2007, pp. 24, 30.

About the Russian Analytical Digest

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