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Today or not today: Deregulating the Russian gas sector

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Abstract

Although Russia is the world's biggest producer of natural gas, its ability to maintain timely and reliable supply to meet the growing global demand has come under question in recent months. The gas war with Ukraine notwithstanding, concern has been raised by a number of observers that underinvestment in the gas sector will lead to a systemic failure of the state monopolist OAO Gazprom to increase or even maintain current levels of production. Yet with a quarter of European gas coming from Russia, and with increasing presence of Gazprom in European downstream operations (such as Germany, Hungary, and other CIS states) as well as seemingly closer ties with Algeria, another major supplier of gas to Europe, there has been a strong reaction from Europe's policy-makers to decrease dependence on Russian gas.

Deregulating and liberalising the gas sector would see the lifting of restrictions to foreign or independent investors wishing to gain access to Russian reserves, as well as the unhindered access to the pipeline infrastructure and export markets. It would also signal the unbundling of Gazprom and an end to the artificially low price of gas to the domestic consumer. This paper discusses whether deregulation is the optimal way to raise capital, attract investment and increase supply security for Russia's Western neighbours. In doing so, the paper identifies the objectives of the EU as the importer whilst trying to align them with the objectives of the Russian Federation as the exporter, in the current political context.

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Keywords: Russia; Natural gas; Deregulation

1. Introduction

The state of the Russian gas sector is of paramount importance. Not only does Russia hold the world's biggest reserves of natural gas, it is also the world's biggest producer and exporter. It plays a major role in the energy security of Europe, supplying over 25% of its gas needs, with recent shipments of LNG to America¹ and a sub-Caspian gas line to Turkey (Blue Stream). Gas also comprises the biggest part of the Russian domestic energy mix. But the sector is heavily under-invested and some have cast doubt on the ability of OAO Gazprom, the state gas

It seems that everybody has called for deregulation, specifically price deregulation, from the WTO to Gazprom itself. Yet the Russian government seems reluctant to allow this, for with deregulation there must follow liberalisation of the sector. If there is no government oversight, competition must be introduced to ensure fair pricing to consumers, argue economists. This paper seeks to determine what type of reform, if any, is needed. The first section provides a snap-shot of the current state of the Russian gas sector. The following two sections discuss the arguments for and against deregulation with the penultimate section identifying the desires of the supporters of deregulation and suggesting how these desires may be achieved without the need for deregulation.

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company, to continue sufficient investment into the development of new reserves and upkeep of ailing infrastructure.

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¹A Gaz de France 'swap' allowed Gazprom to ship gas to the US without operating its own LNG terminal.

List of Acronyms		JVA PSA	Joint Venture Agreement Production Sharing Agreement
BCG	Boston Consulting Group	NEGP	North European Gas Pipeline
BCM	Billion Cubic Meters	RUR	Russian Rouble
bn	Billion	TCM	Thousand Cubic Meters
CIS	Commonwealth of Independent States	Tcf	Trillion cubic feet
FTS	Federal Tariff Service	UGS	Unified Gas Transportation System
IMF	International Monetary Fund	WTO	World Trade Organisation

2. Current climate

2.1. Rationale of the Russians and the ration of natural gas

The gas sector in Russia is perhaps the most protected industry in the Russian economy. Historically it has been considered a strategic sector and this has been the position of the Russian government to this day. Currently the sector is dominated by a state owned enterprise OAO Gazprom, which after a recent round of acquisitions has allowed the government to increase its stake in the enterprise to 51%. Increasing the government's stake from a previous 38.4% had the effect of securing the political control over the company, meeting President Putin's agenda of protecting national interests as well as at the same time allowing foreign access to the company shares. Before this, foreigners could only buy Gazprom ADRs², of which the number was very limited and always at a premium to the domestic stock. The agenda of the government to secure strategic sectors in what has been dubbed by commentators as Putin's 'resource nationalism' has raised doubts about the possibility of seeing liberalisation in the near future. With the current state of affairs, it might be concluded that it would be against the current government strategy to allow foreign ownership of hydrocarbon reserves on the territory of the RF. Yet the numbers of fields off-limits is quite limited and only exceed specific reserve quantity (75 MMcm or c. 2.65 bcf)³. Other fields are available for exploitation, some of which are currently under no license. and many of which currently belong to a licensee but are not producing and/or require investment. Although not in the scope of this paper, the motivation for this push towards nationalisation (e.g. the Yukos affair, namely the purchase of Yuganskneftegaz by Baikal Finance, which secured the required funds from the Russian Government) and consolidation (e.g. the buy out of Sibneft by Gazprom and the rumoured merger between Gazprom and Rosneft) is multidimensional. After the Soviet Union collapse in 1991, the democratic Russia was built on corruption, the roots of which can be traced back to the pre-Perestroika era. This in turn translated into business practice, much of which can still be seen today. The privatisation process was not immune from this conduct and as a result many anonymous beneficiaries (the majority of whom were part of or closely linked with the Yeltsin Administration) were able to remain incognito through the use of front men, better known as the Oligarchs. The fact that these men were able to acquire state assets on the terms that they did so soon after the collapse of the communist regime and very often with little funds or education or both, has more than a whiff of implausibility. Nevertheless, two important conclusions come from this, namely that in order to establish a strong state with true democratic principles, corruption and criminality needs to be eradicated. But with a system where such practices are inherent, the only way to achieve this is to return to the beginning and start again. That may involve centralising power to effectively enforce such changes as well as retaking control of prior state assets to perhaps privatise at some later stage. The recent \$10.4 bn London IPO of the state oil company Rosneft is perhaps a good example of how future re-privatisation may take place. Secondly, that the anonymous beneficiaries behind the privatised state assets (and this goes beyond just the resource sector) can begin the process of 'profit-taking'. From the \$13.1bn paid by Gazprom for Sibneft (recently renamed Gazprom Neft) the liquid cash can be appropriated accordingly. With a bigger state company operating on a lower average cost curve and benefiting from synergies, it may be difficult for new entrants to compete. However, with the renowned inefficiencies of state companies, and access to new technologies some independents may be able to gain a competitive advantage in some areas. Although there are many other issues at stake, some of which are discussed below, one area where the current administration is keen to attract foreign involvement in the gas sector is the gas-to-chemicals (GTC) production chain. Russia has traditionally been an exporter of raw materials, yet more value can be captured if it becomes an exporter of final products. In a small comparison, Germany produces Ethene with a feedstock cost of \$240/TCM whereas in Russia the feedstock costs \$10/TCM (production cost) and further benefit from lower labour costs. These and other

²American Depository Receipts—a security issued by a commercial bank representing a claim on underlying foreign security.

³Kommersant. 2006. *Big Deposits/Fields to Become Strategic*. Kommersant, June 6.

⁴Whether this does take place will depend on the role that Russia places on hydrocarbons as a political tool. One can imagine that Saudi Arabia would have little power in OPEC and the international community if its reserves were owned and operated by a handful of IOCs.

Russian gas market structure in 2005

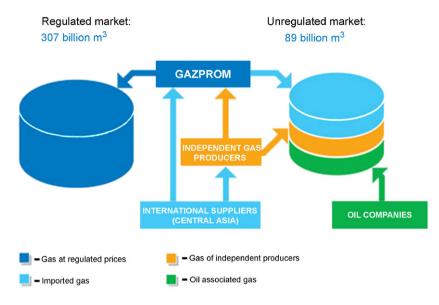


Fig. 1. Source: www.gazprom.com.

technologies will be further able to help monetise the socalled stranded gas. It is difficult to isolate where one agenda finishes and where the next begins, but it would be wise to say that the intricacies of political stratagem are often difficult to predict and almost always impossible to confirm.

2.2. Gazprom the incumbent

Gazprom is a financially vertically integrated company, structured around eight main producing companies. The producing companies sell their gas to Gazprom at internal transfer prices (usually below production costs)⁵, solidifying their dependence on the parent company. Furthermore, Gazprom holds a monopoly on transport, through a wholly owned subsidiary, Transgaz, compelling other gas producers to sell to Gazprom at prices regulated by the incumbent, often below an economically viable price. As a result, in 1997, after a request from the IMF, the Russian government introduced a common carrier principal on the gas pipeline network; however, with no effective body to enforce this, implementation of this provision was left to the goodwill of Gazprom management.^{6–8}

Gazprom does not, however, own the distribution networks and as such the low pressure regional and city networks still fall under the control of the local administration. Yet during the late 1990s, Gazprom acquired some 10% of these distribution networks through a series of shares-for-debt swaps and bankruptcy

proceedings. Since that time, the company has acquired just under 75% of the distribution system (about 428,000 km) through 179 gas distribution companies.

Gazprom also holds a monopoly on export, through another wholly owned subsidiary, Gazpromexport (formally known as Gazexport), which took over all former Soviet Union long term export contracts. Since all the export contracts have been consolidated into this company, which holds a monopoly on transport and export, it is impossible for other producers to enter the export market.

Currently, the price for gas supplied by Gazprom to the domestic market is regulated by the state, under the Russian Federation Act on Natural Gas Supply [1999], and only the remaining 30% supplied by other producers, whose prices are not regulated by the state. "Other producers" include some independent producers of gas as well as oil producing companies, who produce associated gas. (Fig. 1)

Russia has the lowest energy prices out of all European countries. Households pay between €20 and €40 per 1000 cubic metres of gas. Both residential and industrial consumers pay a gas price according to the pricing zone in which they live or operate. These zones are defined by the distance from the wellhead 10 and until 2005 there were seven zones. From the 1 January 2005, there are 13 pricing zones. 11 (Fig. 2)

Not only is there subsidisation by the government in the form of low prices but also subsidies in the form of non-monetary settlements. This includes non-payments as well

⁵Kryukov and Moe (1996).

⁶Locatelli (2003).

⁷In 1998, six independent producers shipped 28.2 BCM.

⁸Common carrier subsequently became third party access.

⁹Russia Energy Survey, OECD/IEA (2002).

¹⁰"Wellhead" is considered to be the Yamal-Nenets Autonomous District in the Tyumen Region.

¹¹Gazprom in Figures 2000–2004.

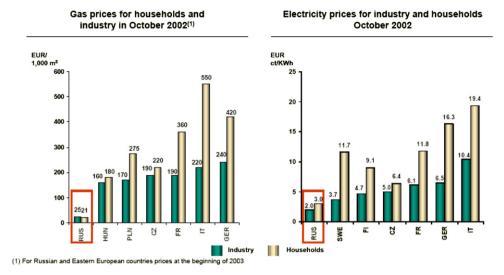


Fig. 2. Source: BCG internal report 2003.

as barter, promissory notes¹² and inter-enterprise credits. In 1999, for example, monetary payments comprised only 18.5% of revenues received by Gazprom from domestic sales.¹³ However, this has largely been eradicated in recent years.¹⁴

It is also interesting to note that over 80% of Russia's households are billed for energy regardless of consumption levels. Bills are calculated on living space (per m²) or registered persons (per household). For instance, a household with three registered persons may expect to pay three times more than a household with one registered person for the same use of the gas oven. Even if a meter is fitted, there are further discrepancies: a pensioner living in the same building as an office space hired by a medium sized company, would pay the same rates for the utilities used. (Fig. 3)

Russia currently has a dual pricing system. The price for gas on the domestic market is considerably lower than the price charged for gas to the export market. Domestic prices, even though the tariffs have increased in recent years, remain low at an average of ϵ 30 per TCM. Prices for export to Europe have always been substantially higher, with the current price averaging US\$230 per TCM (approx. ϵ 196).

There exists a third tier, which is overlooked in the title of 'dual pricing' formula of Russian gas. This tier refers to the sale of gas to the CIS states, where the average netback value has until recently been US\$50 (\approx €35) per TCM. This price was derived from a discounted price sold to Europe.

The income of the CIS states is clearly lower than that of their European counterparts, and the demand less strong, and thus Gazprom felt that the price is adequate, so long as it continues to cover their short run marginal costs. As of this year however, Gazprom has begun to raise the price of gas sold to CIS members, however.

3. Arguments for deregulation

3.1. Investment into production and infrastructure

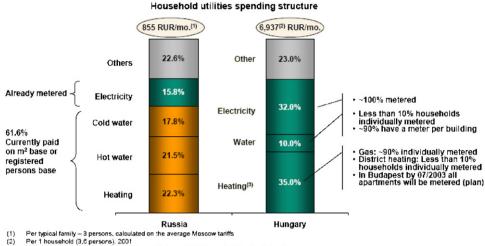
Perhaps the strongest argument for deregulation and liberalisation of the sector is the financial position of the state concern. OAO Gazprom is heavily in debt, continuing most operations through securing further funds in the capital markets. Yet most of the resource base is comprised of old Soviet deposits which are in the declining stage and in need of further investment. Further investment is needed to develop new fields to continue the current level of production, or to increase it as is currently planned. Furthermore, the infrastructure is mostly Soviet built and ailing in the majority of cases. Not only has a considerable time elapsed since construction (the united gas transportation system began with the first pipelines in the 1940s) but there has been little maintenance or replacement. In any case, the infrastructure was built and installed in a hurry, corresponding to less strict standards that might be expected of similar projects today. Gazprom has been making some necessary investment to maintain and replace some of this infrastructure; however financial constraints prohibit wide-ranging initiatives. It is argued that once the domestic price of gas is increased to mirror European levels, Gazprom would increase its profits by US\$60bn annually allowing the much needed investment into new reserves and infrastructure. According to a BCG report if the price of domestic gas was increased to only US\$50,

¹²One of the most common forms of commercial credit in Russia is the promissory note, or "veksel". "Veksel" is the Russian word for "promissory note": the two terms are used interchangeably in the Russian banking sector.

¹³Russian Federation: OECD Economic Studies (2000).

¹⁴Information received in a private conversation with Arild Moe, Deputy Director, Fridjoff Nansen Institute, June 2006.

¹⁵Impact of Gas Price Increase (2003).



(2) 60% of gas payments consists of gas burned by households themself, 40% - district heating system Source: Moscow municipal services; BCG estimates: Statistical Committee of Hungary

Fig. 3. Source: BCG.

Gazprom revenues 2003 (estimation) and after gas price rise to \$50/1,000 m³

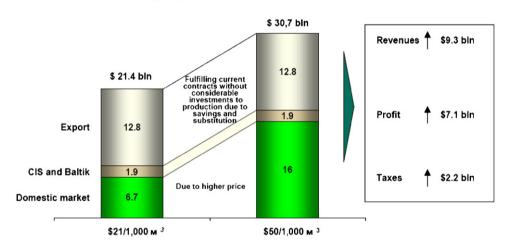


Fig. 4. Source: BCG.

ceteris paribus, Gazprom's revenue would increase by US\$9.3bn, and the subsequent increase profit would be over US\$7bn. (Fig. 4)¹⁶

Alternatively, introduction of competition would ensure that investment is made by new independent players in the market. This argument is null. Due to the extensive nature of the existing infrastructure, any additional construction would be uneconomical (it would be more than double the costs associated ¹⁷) and the free rider problem here is also obvious. If one is to force the new entrants to commit some funds to infrastructure maintenance and replacement, positive regulation is reintroduced, which was to remove

by the introduction of competition and the argument becomes self-defeating. If we leave this to market forces, the free rider problem prevails.

3.2. Consumption and efficiency

On the other hand, artificially low price for natural gas means there is no incentive to conserve energy, which translates into a growing demand for the fossil fuel. By Gazprom's calculations¹⁸, the demand for gas grows at an average annual rate of 3 BCM. Research by BCG has indicated that consumption can be substantially decreased by an increase in price and the installation of valves and meters. (Fig. 5)

¹⁶Actual profits from export were US\$18bn and US\$25.7bn in 2004 and 2005, respectively.

¹⁷ESMAP (2003).

¹⁸Gazprom in questions and answers.

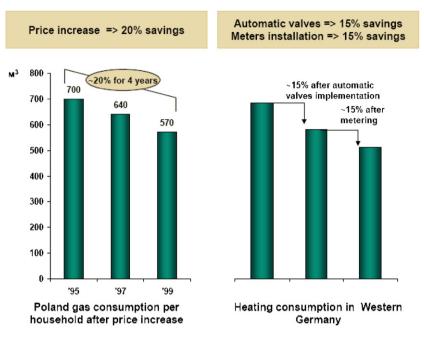


Fig. 5. Source: BCG.

Increased gas prices would also encourage greater energy efficiency on the part of the industrial users. An increase in the price of gas would also stimulate other energy industries, not only increasing energy security through diversification but also creating growth in new industries, such as fuel oil and coal.

3.3. Regulatory capture

The argument here is that regulation of Gazprom is really but a concept. Because of the phenomenon of regulatory capture which is particularly applicable to countries of the FSU, regulation becomes only theoretical. The Federal Tariff Service, the regulator, has been responsible for setting gas prices for the domestic market, as well as tariffs for transmission of gas for non-Gazprom organisations. This is always done in consultation with Gazprom, often because it possess the necessary information without which such decisions would be baseless. In essence Gazprom is a quasi-ministry that is regulating itself. If one is to remove the regulatory body, the benefit is the removal of a wasteful resource, and very little downside effect.

4. Arguments against deregulation

4.1. Price deregulation

In order for total deregulation to take place there must be some mechanism to ensure that the current monopolist is kept in check and to ensure fair price to the consumer. In fact, one of the arguments for deregulation is that competition will prevent the monopolist from exercising monopoly pricing, and eating away at consumer surplus. This point is obviously moot because the current regulated price for gas in the domestic market is at or below short term marginal cost—certainly for the residential consumer.20 Under a system of perfect competition, the residential consumers would be charged long term marginal cost, which without subsidy would be unaffordable to a large percentage of the population. In Russia's case, we can say that the fair price for domestic consumption of natural gas would not exceed the price which the consumers would be able to pay. If the price exceeds this level, there will be wide non-payment and because natural gas is a vital part of the domestic utilities and so consumption will continue. In this case the government will have to intervene and distort the natural market forces. If the price remains regulated on the domestic market, there will be no incentive for new entrants to supply the domestic market, and all new natural gas production will be aimed at the export market. With no overall regulation, Gazprom will have no incentive to supply the domestic market either and all the production will also be aimed at the export market. This creates a problem in itself: if such large volumes hit the export market, the price will drop considerably, due to the simple theory of supply and demand.²¹ In 2005, Gazprom exported over 230 BCM, with 156 BCM being sold to Europe and the rest to CIS and Baltic states, whilst 307 BCM are delivered to Russian consumers. 22 Therefore,

¹⁹A term coined by Richard Posner, detailing how the regulator may unwittingly perform tasks to the ultimate benefit of the entity being regulated.

²⁰The industrial consumer does pay more (household prices are lower by an average of 28%), and some consumers are supplied from a spot market.

²¹Tarr and Thomson (2001).

²²Gazprom, Questions and Answers, 2006.

if additional 300 BCM were added to the export market, this would hugely distort the market power of Gazprom and with it, the price premium. The government could impose a tax levy on export of gas, one which would make the independent producers indifferent as to which market to supply, but this would also have to apply to Gazprom, since it is a public company. Until the price for gas on the domestic market will not reach a level which will make all producers indifferent as to which market to supply, the government cannot remove the regulation of domestic price for gas. This can only happen when the Russian consumers will be able to pay the same price for gas as European wholesalers (minus the transit fee and export duty). But even if we were to assume that competition would bring about further efficiencies, these efficiencies may often be socially undesirable. Russia is the largest country in the world, with extreme temperature swings, and in many cases operating long-distance pipelines to supply a small town with gas is economically inefficient. Without regulation, there is nothing to stop these remote locations being cut off from the gas supply altogether. The supply of these towns may not be efficient, but the goal of equity must nevertheless take precedence.

4.2. Unified gas transportation system

Apart from prices, there remains the question of Gazprom's vertical integration. The incumbent's position is solidified by the ownership and control of the transmission network. Oil companies that produce associated gas are unable to access the pipeline despite TPA rights. However, an unbundling of the enterprise would remove the much needed finance that is being directed by Gazprom to the infrastructure. In 2004, Gazprom's investment into transportation and storage was 125bn roubles,²³ which at the then exchange rate is just under US\$4.5bn whilst in 2005, 158bn roubles were invested (c. US\$5.6bn), of which nearly US\$1bn was committed entirely to reconstruction and refurbishment.²⁴ An entity unbundled from Gazprom would be unable to continue such investments from revenues generated through transit fees. In any case, because pipeline operation is considered a natural monopoly that shows strong signs of subadditivity, it would have to remain as either a state-owned entity, requiring the state to reimburse stakeholders, or heavily regulated, which counteracts the initial desire.

4.3. Political dogma

Although there is no political dogma as such, the natural gas sector is considered of strategic national importance. The reasons for this are obvious: apart from being the world's biggest producer, gas constitutes more than 50% of the Russian energy mix. Obviously the government needs

Natural gas consumption in Europe (30)

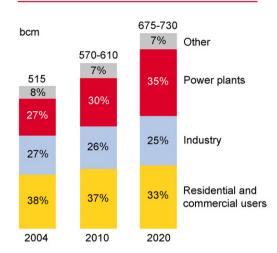


Fig. 6. Source: E.ON Ruhrgas.

to maintain some control over such a vital part of the country's lifeblood. This is not hugely unusual; in fact in the UK the Labour Party policy has traditionally been to control the "commanding heights" of the economy. The French and Italian governments have also sought to take ownership stakes in certain industries. The government strategy however is more practical than dogmatic. The task is evident, to grow Gazprom into a multinational energy company. After its capitalisation reached US\$300bn, it became the world's third biggest company after Exxon-Mobil and General Electric. The superior of the country of the

5. What is the desired outcome?

Having identified the arguments surrounding the liberalisation and deregulation debate, it is perhaps worth extrapolating the desired outcome of the proponents of deregulation. The strongest argument seems to be the underinvestment by Gazprom into infrastructure and new production. The concern is that Gazprom will be unable to continue the current levels of production, and thereby threaten the energy security of the European Union which relies on timely delivery of Russian natural gas. This is also highly topical as the consumption of natural gas in Europe is set for steady growth. (Fig. 6)

The pipeline network and compressors are also an important part of this equation. Granted the wellbeing of the Russian population who rely heavily on natural gas is likewise a concern. Therefore the outcome would be an increase in Gazprom profits (or decrease of debts) through some mechanism which would allow greater investment into new production and infrastructure.

²³Ibid.

²⁴Gazprom Annual Report, 2005

²⁵Waterson (1988).

²⁶Take over of Lukoil and Surgutneftegas would make sense for this strategy.

²⁷Cook, 2006.

Average domestic gas prices (excl. VAT) and price forecast as envisioned by Russia's Energy Strategy

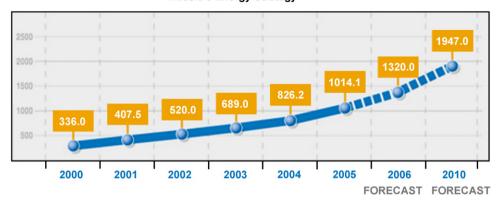


Fig. 7. Average gas prices dynamics (VAT excluded) in the domestic market and forecast of price changes based on the energy strategy of Russia, roubles/1000 m³. Source: Gazprom in Figures.

Just as importantly, access should be made available to foreign or independent firms to enter the gas sector. This is often tied into the investment claim but is also the fundamental demand of the Washington Consensus. Because independents are free to own gas resources, and indeed they do, 28 the crux of the matter lies in access to the pipeline network which is currently owned by Gazprom. What is required here is that there exists a transparent tariff system, an open third party access or common carriage policy, and an efficient mechanism to settle disputes in a fair and timely fashion. Independent producers should be able to collect reasonable rent from the exploitation of the hydrocarbon reserves. This should be done by selling in the domestic Russian market at or close to the price levels prevalent in the European market. In the absence of this, they should be freely able to export the gas to a market where they can secure such a price.

This arrives at the next point, that Russian industry which is energy intensive or consumes considerable amount of natural gas in the production chain, such as metallurgy, cement, petrochemicals and fertilisers should not be subsidised via cheap sources of natural gas as electricity or feedstock. The WTO sets this as a condition of joining the organisation. Therefore the desired outcome would be for the aforementioned industry to be supplied with European prices for gas.

6. Other ways to reach the desired outcome

Once the actual desires of the proponents of deregulation and liberalisation have been established, it is worth seeing if these can be satisfied by other methods other than deregulation and liberalisation.

The increase of Gazprom profits for the purpose of increased investment into production and infrastructure is achievable without the increase of prices on the domestic market to world levels.

Gazprom has started to acquire other oil producing companies, thereby adding their profits to its own balance sheet. After some time, the companies will amortise the loans received by Gazprom for the acquisitions through their own profits, and thereafter continue to contribute these profits to the Gazprom balance sheet. It is also likely that their profitability ratios will increase, as some benefit is achieved through increased economies of scale and scope. and from the new market for the natural gas reserves. Sibneft was the first acquisition, which will certainly be followed by others, such as Lukoil and Surgutneftegas. As these assets are added, Gazprom will be able to secure further credit on the basis of these assets, using them as collateral²⁹. Also, from 2007, those independent producers that wish to use the UGS on long term contract basis will be required to make some contribution to the rehabilitation, expansion and upgrade of the transit network. To increase its operating profits in the near term, Gazprom will continue with the cost cutting strategy outlined by Alexey Miller, the Chief Executive.³⁰

The introduction of foreign partners into the Russian gas sector has become a recent occurrence³¹ but has allowed Gazprom to continue to diversify its production portfolio. Technology transfer as well as capital injection of foreign partners is achieved via this process.

On the domestic market there has been a gradual increase of the domestic prices for natural gas and this will continue if the economy continues to expand. (Fig. 7)

A good way to increase revenues for Gazprom is to increase the price of gas sold to FSU countries. As mentioned above, these countries pay a heavily discounted price for gas. However as of the end of 2005, some countries have moved closer to a world³² price for gas, such

²⁸Independent producers own 20.9% of total Russian reserves.

²⁹Debt is the cheapest method of raising finance, and so this strategy seems to be economically sound.

³⁰Pravda (2004).

³¹Excluding the Sakhalin projects.

³²Although no official 'world' price exists, this term is often used in reference to the price received in Western Europe.

as Ukraine, which now pays US\$230 per TCM of Russian gas, up from US\$50 and Moldova which now pays US\$110, up from US\$80. The Moldova deal, for example, will bring in an additional profit of US\$102 million in 2006.

Another method, which has not been implemented by Gazprom, is to increase the pricing tiers used to calculate end-user gas price on the domestic regulated market. Currently, the price is set for residential and non-residential users who pay by pricing bands in accordance to their distance from the well-head (considered the Yamal-Nenets Autonomous Region). However, no distinction is made between commercial and industrial users. This should be introduced so that industrial users that rely on gas as a feedstock or are very energy intensive and thereby calculate their profits as a function of natural gas price pay a higher price than commercial organisations that use the gas for heating or electricity. Furthermore, commercial and industrial organisations should pay a gas price set by price bands according to annual turnover. It is agreed that the price for the domestic market must not exceed that which consumers are able to pay, and since this is far below the market price of the European market where consumers are able to pay a higher price, those consumers that are able to pay the higher price should be charged that same higher price. It also seems rational that a shop with an annual turnover of US\$40 million³³ should pay a higher price for gas than a small kiosk on the same street. It is not uncommon to find a travel agency, for example, paying the same rate for gas as a pensioner living in the same building.

The participation of foreign firms and independents in the gas sector is an understandable desire of the West. Access to independent producers has been open and indeed over 20% of gas reserves in Russia are currently owned by independent producers. The FTS clearly outlines the TPA rules for access to the UGS which have been incorporated into Federal Law. The tariff for the transit of gas is also published³⁴ and incorporated into Federal Law. Despite criticism by certain analysts that Gazprom does not allow access to the pipelines, 31 independent producers successfully shipped 115 BCM (≈4 TCF) in 2005. Seeking to simplify access to its gas mains, Gazprom will, in the first two quarters of 2007, finalise the drafting of its new internal Policy Governing the Preparation and Issuance of Permits to Independent Entities Seeking Access to Gazprom's Gas Transportation System. The compliance of independent suppliers with the terms and conditions of access to Gazprom's gas mains is monitored by a special government panel whose decisions are binding for all the parties concerned.

In any case, Gazprom now invites major international energy companies to participate in projects ranging from production (Shtokman) to pipeline operation (NEGP) with companies such as Wintershall, E.On, Gasunie as well as MOL and others.

For smaller energy companies that are unable to participate in these JVA with Gazprom, the unregulated spot market is growing, and is currently in excess of 89 BCM. Gazprom has been lobbying the government to increase the spot market by allowing more industrial users to be supplied from this market.

On the issue of entry into the WTO, Russia has been under pressure to increase the price of gas to Russia's export-orientated manufacturers, considering the supply of cheap gas as export-subsidising. However, the Russians have pointed out that this does not violate WTO ascension requirements. In any case, the author is not entirely convinced that entry into the WTO will be wholly beneficial to Russia from an economic perspective. The above-mentioned retariffication and widening of the spot market should go some way to satisfy the WTO demands.

7. Conclusion

Although perhaps not all the intricacies of the Russian gas market have been captured by this paper, it nevertheless touches on a number of important points. The two major concerns of the European policy-makers and their US counterparts are the future physical availability of Russian gas to supply the growing global demand coupled with an efficient and economical method of delivery and the assurance that supplied are not interrupted as a result of political intervention. The 2006 G8 summit hosted by Russia has chosen energy security as the main agenda, underlining Kremlin's commitment to the subject. For some 30 years, Russia has been a reliable supplier of natural gas to Europe, perhaps fostering the confidence that this will remain so ad infinitum. But the recent events surrounding the dispute between Russia and Ukraine, as well as the decrease in Europe-bound gas due to colder than normal weather conditions has raised the issue of European energy security to the highest level. The IEA further compounded fears by announcing that it was under the belief that Gazprom would be unable to continue current levels of production due to insufficient investment. At recent roundtable discussion in Moscow it was proposed that a shortfall of about 100 BCM by 2010.35 Yet Gazprom maintains that it is continuing an investment strategy and hopes to increase reserves by over 21 TCM by 2030, an increase of over 100%. ³⁶ But Gazprom strategy has so far been to use excess profits to acquire downstream assets, mainly access to distribution networks in a bid to reach the final consumer. Whether through debt-for-share agreements, or upstream-downstream swaps (UDS), Gazprom has been quite successful in solidifying its presence in Europe and the so-called European corridor, consisting mainly of CIS states. The rather cold reception by Europe

³³For example Arbat Prestige, a perfume and cosmetics outlet.

³⁴Transit tariff presently constitutes US\$0.92 per TCM per 100 km for export and RUR 23.87 per TCM per 100 km for the domestic market.

³⁵Belton (2006).

³⁶Grib (2006).

to Gazprom's cross-border commercial transactions compelled the Russian President to accuse the West of double standards towards Russian companies.

These events prompted the discussion of deregulation as a mechanism to generate much needed investment into the gas sector as well as, through liberalisation, stem the tide of growing political control over the resource. Following the discussion presented in this paper, it becomes apparent that the domestic market is unable at this stage to absorb the price increase that has been suggested by Gazprom itself as well as other entities. With no incentive to supply a loss making domestic market, new entrants as well as a newly unregulated Gazprom would aim their production at the export market, affecting that price and abandoning the Russian consumer, half of whose energy mix is made up of natural gas. Until such a time that the price of the domestic market is close to the export price (where a producer is indifferent which market to supply) deregulation cannot be seen as a sound and prudent policy to undertake. Certainly when the domestic price does reach such a level (and one may assume that such a rise can only be achieved with sustained strong economic growth, which in turn will be achieved with widespread positive socio-economic reform) it may be necessary to revisit this discussion if there is still a desire by independent producers to participate in this market such that competition will emerge, or that such gross mismanagement of the sector has occurred that affairs cannot continue ab hinc. A more pertinent discussion at this time may be how independent investors may be able to gain access and secure a reasonable rate of return with the current state of affairs.

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