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**The bases of a new organisation of
the Russian oil sector**

Between private and State ownership

**Sadek Boussena
Catherine Locatelli**

septembre 2010

The bases of a new organisation of the Russian oil sector: between private and State ownership

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Abstract:

The reforms and privatisation programmes of the 1990s structured the Russian oil industry around a few large national and private companies. This organisational structure poses some questions in respect of the Russian authorities will to take back the oil sector. Three factors may explain this evolution. First, the Russian authorities want to ensure the long-term future of the oil industry by encouraging new strategies in exploration. Second, the government can use the oil sector to support economic growth. This would involve sharing out the rent in a different manner. Third, and it is a new but important factor, the State intends to use Russia's oil power in this international relationships with the United States, Europe and Asia (China, Japan, South Korea, and India). The future of the Russian oil industry has some importance for the stability of the international oil market. Could Russia produce 12 Mb/d and challenging the dominant position of the Saudi Arabia?

Key Words :

Oil industry, Russia, Ownership rights, Access to the natural resource, State policy, rule of law, market reform, Russian international policy.

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The reforms and privatisation programmes of the 1990s structured the Russian oil industry around a few large national and private companies within a network of complex power relationships with the Federal State and the Regions. Since 2004, the evolution of this model has casted doubt on the durability of such a structure. In terms of production and export, Russia is a decisive player in the international oil markets. However, the decline in output observed in 2008 following the slowdown in growth of 2005 and 2007 has rekindled the debate not only on the long-term outlook for Russian oil production and its contribution to the balance of world markets, but also on the country's economic growth. The question we should be asking is whether or not the drop in Russia's output is simply related to the current economic climate or if it is symptomatic of changes of a more structural nature.

The main aim of this article is to underline the fundamental principles of the new Russian oil policy, those that will structure its future organisation. Our conclusion is that the changes brought about under the wing of the Russian authorities do not seem to be aimed at calling into question the main objective of an oil industry in line with the principal logics, coordinating mechanisms, standards and rules of a market economy. It is in the approach itself that there seems to be innovation. From now on, the State intends to exercise stricter control over this industry by relying on a private sector which would be closely linked with a public sector, and which would respect the "national interest" as defined by the government. The failure of the reforms, especially with regard to setting up a clearly defined and secure system of private ownership rights, implies the need for a different development model for rent industries from that of a system of private holdings dominated by banks.

There are three main reasons why the Russian authorities want to take back the oil sector. First, they want to ensure the long-term future of the oil industry by encouraging greater

investment in exploration. This would bring an end to the overexploitation of existing deposits. In this respect, the lack of transparency and uncertainty in the institutional environment in Russia has until now cast serious doubt on the capacity of the State to regulate rent industries through classic market mechanisms, from the point of view of both taxation and access to resources. Other logics are therefore necessary. The State seems to choose an “hybrid governance” of the hydrocarbons sector, in which it remains, in the final instance, the authority that coordinates rights concerning the disposal of assets. Second, the government can use the oil sector to support economic growth, which is largely dependent on the hydrocarbons sector. This would involve sharing out the rent in a different manner (more in favour of the State). Third, given the tensions observed in the hydrocarbon markets, the State intends to use Russia’s oil power as an international political tool in its relations with the major powers of the United States, Europe, China and Japan. In contrast with the situation over the last ten years, the Russian State now wants to harmonise its oil policy in accordance with the means it effectively has at its disposal and the economic and institutional constraints resulting from its transition to a market economy.

These three objectives are not incompatible with a redistribution of the oil rent between different private groups and clans that are close to or useful to the Russian government. The conflicts surrounding the merger of Gazprom and Rosneft (2005) are an indication of the various power struggles affecting the reorganisation of the Russian oil industry. They show that the methods of sharing oil revenues adopted in the 1980s under the presidency of Boris Yeltsin are being challenged.

1. The revival of the Russian oil industry

As part of the “liberal” approach to transition developed by the Washington Consensus⁽¹⁾ Russian oil industry reform was intended to produce a new organisational model based on different private enterprises. The idea was to redefine ownership rights through vast privatisation programmes, while trying to stimulate competition by breaking up the old Soviet hierarchies. But this reform has not removed the uncertainties about the future of this industry, despite considerable production increases since the end of the 1990s. In particular, the industry has to deal with the major challenge represented by the necessary development of oil-rich Eastern Siberian in light of the gradual depletion of the major deposits in Western Siberia.

1.1 Restructuring of the oil industry in the 1990s

The profound restructuring that took place in the 1990s led to the emergence of an oligopoly structured around three main groups which replaced the hierarchical centralised organisation of the Planned Economy⁽²⁾. The first, which accounts for most of the country’s oil production (72.6% in 2003), is formed by private industrial and financial groups. It is made up of five large vertically integrated companies responsible for production through to distribution: Lukoil, Yukos (at least until the end of 2004), TNK (now TNK-BP) and Surgutneftgaz account for 65% of production and over 50% of crude exports. This concentration of the oil industry was brought about by the vast merger movement that took place in the late 1990s when Lukoil acquired 100% control of KomiTek, Yukos acquired 54.2% control of VNK, TNK and Sibneft acquired equal shares in control of Slavneft, and TNK acquired control of Sidanko. Following the *Loans for Shares* programme of 1995⁽³⁾, most of the shareholders in this group were Russian banks, with nevertheless a fundamental distinction between the companies held by banks “outside” the group (Yukos, Sibneft, TNK-BP) and the companies

held by “insiders”, that is the banks created by the holding companies themselves (Lukoil, Surgutneftegaz).

The second group is made up of small or medium-sized companies that are not vertically integrated. The last and more heterogeneous group is made up of integrated or non-integrated companies majority-owned by the State (for Rosneft and Slavneft until 2002) or by regional governments (Tatneft, Basneft, etc.). Their share in production however is marginal, with Rosneft accounting for 4.8% of production in 2003 (cf. Table 1).

Table 1 : The main Russian oil companies and the composition of their capital

	Companies	Production : Mb/j, 2003	Crude oil exportations :Mb/j, 2004
Private vertically integrated companies			
1. Group owned by Bank	Yukos	1,6	0,6
	TNK-BP	1,2	0,58
	Sibneft	0,6	0,2
2. Group owned by insiders	Lukoil	1,6	0,59
	Surgutneftegaz	1,1	0,41
Total		6,1	2,38
Majority State or Region ownership			
- State	Rosneft	0,4	0,1
- Regions	Basneft	0,2	-
	Tatneft	0,5	0,23
Total	-	8,4	3,7

Source : *Petroleum Argus*, 28 February 2005, p. 2.

During the period of restructuring of the Russian oil industry, production dropped considerably, with reductions of 5.3 Mb/d between 1987 and 1998. However, since the end of the 1990s, its spectacular recovery (7.1 Mb/d in 2002, 8.4 Mb/d in 2003 and 9.2 Mb/d in 2004) might suggest that a new development phase is opening up in the wake of the reforms. The slowdown in the oil output growth (9.65 Mb/d in 2006, 9.87 Mb/d in 2007) and the first annual decline in output in 2008 (9.71 Mb/d) are rekindling the debate about Russia’s contribution to world oil supply.

1.2 Uncertainties concerning Russian oil production in the medium term

Forecasts for 2020-2030 show the scale of the uncertainty surrounding Russian output, with estimates varying between 9 and 11.9 Mb/d for 2020, and between 9.7 and 12 Mb/d for 2030, depending on the scenario (see Table 2). The latest official forecasts (Energy Strategy 2030 endorsed in 2009) place output at 10.7 Mb/d for 2030, equivalent to an average annual growth rate between 2008 and 2030 of no more than 0.4%. The IEA has also made a drastic revision to its forecast for 2030. According to the latest World Energy Outlook (IEA 2009) Russian output will be only 9.0 Mb/d by 2030 in contrast to the 10.6 Mb/d forecast in the WEO of 2004.

This outlook in terms of production will naturally have repercussions in terms of exports. According to the available “Russian” scenarios, exports could vary between 6.8 and 8.1 Mb/d by 2020, and 6.3 and 7.3 Mb/d by 2030. These low projections, whether for 2020 or 2030, are likely to have a significant impact on the balance of the international markets, and this despite a slowdown in world demand linked to the current economic crisis.

Table 2 : Estimates of Russian oil production
Mb/d

	2010	2015	2020	2030
WEO, 2009, IEA		9.2		9.0
WEO 2008, IEA		10.4		9.7
WEO 2004, IEA	<i>10.4</i>			<i>10.6</i>
Makarov, 2007	10.2	10.6	10.6	10.6
Energy Strategy 2030, approved in 2009				10.6-10.7
Project of Energy Strategy 2030, (Bushuev 2007)				
- Inertia scenario	10.0	10.0	10.0	9.8
- Raw energy scenario	10.3	10.6	10.9	10.8
- Innovative scenario	10.3	10.6	10.7	11.4
Institute of Energy Strategy, 2008				
- Innovative	10.2	10.9	11.3	10.8
- High level hydrocarbon prices	10.3	11.2	11.9	12.0

- Ecological oriented scenario	10.3	10.9	11.2	10.7
Institute of oil & gas geology	10.0	10.6	11.0	12.0
Energy Strategy 2020				
-Optimistic variant	9.8	10.1	10.4	-
- Moderate variant	8.9	9.0	9.0	-
- Critical variant	7.2	-	6.3	-

Sources: IEA, *World Energy Outlook* (Paris, OECD, 2009); IEA, *World Energy Outlook* (Paris, OECD, 2008); A. Gromov, A. "Strategic development of the Russian gas industry for the year 2030", Séminaire. *Le futur des marchés du gaz en Europe*. LEPII, Grenoble, 24 April 2009; P. Hanson, "Russian energy policy and the global crisis", *Energy Economist*, 336, October 2009, pp. 5-7

2. Renewal of reserves: a matter of growing concern

The significant differences between the various estimates bear witness to the uncertainties characterising the Russian oil industry despite the sweeping reforms of the 1990s. The factors that have enabled production to increase since the beginning of the 2000s are disappearing. Future increases in output (or even maintenance of present levels) will depend on implementation of development policies different from those that have driven the revival of this industry. Consequently, this new approach will require other types of strategies from the main private actors in this sector.

2.1 The period of intensive exploitation of existing deposits

Most of the additional output of the last few years can be attributed to two main sources: oil that was not extracted during the transition period in the 1990s (in 1994, 28% of Russia's oil wells had ceased production), and oil left in the ground because of the extraction practices of the 1980s. In other words, the increase has come from the rehabilitation of existing deposits⁽⁴⁾. Thus, the additional 2.4 Mb/d produced between 1999 and 2003 came from deposits already being worked at the end of the soviet era. But taken as a whole, Russia's hydrocarbon deposits currently in production are 50% depleted⁽⁵⁾

The strategy of maximising production and thus of rehabilitating (the most profitable) deposits during the Soviet era was accompanied by very low investment in exploration, riskier strategies and longer time frames. Investment in exploration has been falling steadily since the early 1990s⁽⁶⁾. Despite individual differences among them, vertically integrated companies have invested very little in exploration. Between 2000 and 2002, less than 2% of investments made by Yukos and Sibneft were in exploration. In the case of TNK, this figure was 5%⁽⁷⁾. Only Surgutneftegaz and Lukoil have maintained a real strategy of investment in the exploration of new oil-rich areas⁽⁸⁾, which they did even during the period of reorganisation

- *Cash stripping*

This situation was brought about by the behaviour of actors born of the privatisation movement. These companies have adopted a short-term strategy of seeking immediate liquidity by maximising exports in order to rapidly increase the value of current assets. This strategy is known as *cash stripping*. The strategies of vertically integrated companies are characterised by two aims: maximisation of exports, which is a way of obtaining a much higher unitary income than that obtained from domestic sales, and its corollary, maximisation of production. The substantial increases in oil production over the last three years enabled Russia to boost its exports from 2.90 Mb/d in 2000 to 4.98 Mb/d in 2004 (4.43 Mb/d in 2007), although exports to Europe have always been high despite the decline in production between 1990 and 1998.

- *Significant differences depending on the type of vertically integrated company*

Such strategies expose the development of the oil resource to stripping practices, particularly

when the main shareholders of these private companies are “outside banks”. The essentially financial rationale of these private groups means that their sole concern is financial performance, their aim being to increase the value of their shares. Management of the oil industry is thus extremely unbalanced, with investment being made in enhanced recovery techniques to produce oil from the most accessible resources at the expense of a balanced drilling programme⁽⁹⁾. Companies have increased their reserves essentially through *asset stripping* made possible by operating huge mergers and creating an extremely concentrated industry. Yukos is the best example of this type of development. This company’s increase in production (0.8 Mb/d between 1998 and 2004) has been achieved through use of enhanced recovery techniques to extract oil from the most profitable deposits, while at the same time 35% of its oil wells have closed and investments in exploration are now among the lowest of the Russian oil companies. Furthermore, Yukos has made extensive use of the tax reduction schemes set up by the Federal Government and regional authorities.

2.2 Probable long-term effects

Even if we do not wish to enter into the debate over the true extent of Russia’s estimated reserves, a few comments should be made⁽¹⁰⁾. While there is no denying the productivity gains from re-opened wells, the problem of ensuring the efficient management of existing reserves must be addressed. In fact, the increase in output seems to have been achieved without any control from the Russian authorities concerning the conservation of deposits.

If Russian oil production is to increase, or even be maintained at its present level, new production capacity and thus considerable investment will be needed. Two factors in particular are likely to be problematic in this respect. First, the proportion of total proven reserves in all

explored reserves, has dropped considerably (categories A + B in the Soviet classification), falling from 67.8% in 1958 to only 26.5% in 2000⁽¹¹⁾. From the mid-1990s, additions to reserves have no longer exceeded production, in contrast to the situation during the Soviet era. And although in 2005 and 2006 additions were once more in excess of production, this was mainly due to the reassessment of the potential of developed oil fields in the light of new technologies⁽¹²⁾. And second, according to the IEA, 60% of these proven reserves are in the “difficult to recover” category⁽¹³⁾. The low level of exploration since the beginning of the 1990s raises questions concerning the start of production in the new oil-rich areas in light of exhaustion of deposits in the large Western Siberian basins. The country has potential production areas⁽¹⁴⁾, namely in Eastern Siberia, the northern territories (Timan Pechora and the Komi Republic), and offshore with Sakhalin ⁽¹⁵⁾. Despite the significant reserves, the contribution of these regions to oil production (except the Vankor’s field⁽¹⁶⁾) is marginal, around 4% for Eastern Siberia. This development will require investment and therefore considerable financial commitment given the production conditions (climate, geographical constraints, long distance between points of consumption and production areas, low population density, geological complexities) which are much more difficult than those in Western Siberia⁽¹⁷⁾.

3. Unexpected results of privatisation

A key question still remains unanswered today: why has privatisation failed to achieve its stated aim of creating a more efficient and balanced (to ensure its long-term future) oil industry in Russia? Why has privatisation led Russian oil companies to adopt short-term strategies? The principal goal of reform was to create Western type private enterprise and so encourage the development of management methods and behaviour in the oil industry that

were more efficient than those prevailing in the Soviet Centrally Planned Economy. Privatisation was based on two main logics: organisational reform centred on a principle of vertical integration in order to determine the optimum boundaries of a company, along with a redefinition of ownership rights through privatisation.

3.1 Uncertainties surrounding ownership rights

The short-term strategies of oil companies, and particularly the lack of investment in exploration, stem from the unexpected results of a privatisation process that has taken place in an institutional environment characterised by weakness of the Rule of Law. Despite a reform programme aimed at establishing a clearly defined and secure system of ownership rights, these rights are still subject to considerable uncertainty. Privatisation of the oil industry has essentially attenuated the former Soviet system of ownership rights, giving holders of private ownership rights temporary and partial access rights to asset ownership⁽¹⁸⁾. So the investment strategies adopted by Russian oil firms in the 1990s can be explained by the institutional architecture of this industry. They resulted more specifically from the incompatibility between the “liberal oil model”⁽¹⁹⁾, born of the reforms and focussing on private property rights, and the Russian institutional environment.

- *Right to sell assets is coordinated by the State*

Privatisation of the hydrocarbons sector has led to lack of security concerning the right to use assets. First, privatisation processes have been widely perceived as illegitimate. The purchase of shares at rock-bottom prices, the lack of tendering procedures, participation of banks in auctions they themselves have organised and won, and the failure of the successful bidders to

realise the investments they were supposed to realise in the company all bear witness to the lack of transparency surrounding these privatisations⁽²⁰⁾. Second, manipulation of the bankruptcy law linked to the weakness of the rule of law (in other words the way in which the law is applied) has taken away the traditional function of the bankruptcy process and made it into a tool for stripping⁽²¹⁾. In such conditions, the State does not feel bound to respect ownership rights, as would happen in market economies, the Yukos affair being a good example of this. When Yukos was negotiating the sale of 40% of its shares to ExxonMobil in 2003, the State blocked the transaction knowing that the transfer of strategic assets was at stake.

- *Uncertainties over access rights to resources*

Despite a legal framework based for the most part on Western standards and rules, the way in which exploration and development licences are granted is creating extreme uncertainty over access rights to Russian oil resource. In order to rapidly reorganise and privatise the oil industry, most of the licences granted to companies were not subject to a tendering procedure, as required by law. This practical approach gave a kind of legal recognition to the exploitation of deposits that the Soviet Union had *de facto* granted to production associations that were used as the basis for creating holdings⁽²²⁾. But at the same time, it offered the State the perfectly legal option of reallocating certain licences. This shows that it was hardly appropriate to transpose the most advanced institutional models of market economies to the Russian environment of the early 1990s.

- *Certain doubts surrounding the right to income from ownership*

Finally, it should be pointed out that the quota system for gaining access to the Transneft

transportation network, and thus to export markets, limits access to revenues (particularly in hard currency) given the considerable difference between domestic market prices and those of export markets. In theory, oil companies have had the right to export 25% of their production. In practice, some of the most powerful (Lukoil, Yukos) have been able to “bargain” for much higher percentages while other companies have been unable to access the Transneft network. The discretionary practices of Transneft (depending on the objectives of the State) are creating an unstable environment for Russian companies and making any kind of contractual relations largely ineffective.

3.2 Sharing the oil rent: a battle between the State and the major companies

The weakness of the formal market institutions has stood in the way of operation of classic market economy mechanisms with respect to the State’s retribution as owner of underground natural resources. In the 1990s, the state was unable to persuade private operators to take its own interests into consideration⁽²³⁾ through the use of classic market economy incentives like tax regimes.

Inspired by practice in Western economies, Russia’s fiscal regime is organised around two main taxes. The first one concerns the mining of mineral resources (*Mineral Extraction Tax*) and imposes a tax akin to a royalty, based on the value of the oil production. The second is a tax on exports. A further tax is levied on profits (see Box 1).

Box 1: Main characteristics of Russia’s oil sector taxation policy

Russia has two principal oil taxes:

- the Mineral Extraction Tax, of the order of \$17.40 per barrel,
- and an export duty that varies with the international price of crude oil.

Today, oil companies pay between 75 and 80% of their revenue in taxes. These high levels of taxation are often quoted as one of the reasons for the lack of investment from oil companies, especially in

areas where production costs are high such as Eastern Siberia, offshore fields and the Yamal peninsula.

Given this situation and the urgent need to renew investment in exploration, the government has agreed to a certain number of tax breaks. The main ones are:

- a “tax holiday” for oil companies developing offshore fields (for 15 years), fields of East Siberia (for 10-15 years) and the fields of Timan Pechora and the Yamal (for 7 years).
- the mineral extraction tax would be applied only above the threshold of \$15 per barrel compared with 9 at present.
- a zero export tax for certain fields in Eastern Siberia. A list of oil fields has already been approved by the government. It could be lengthened to include other fields. No details have yet been released on when this tax break will be introduced or for how long it will be effective.

The export duty remains unchanged, although different rates could be introduced according to the quality of the petroleum products. However, since adjustments should reflect oil price trends they would be made more rapidly to avoid having the highest tax rate at the moment when prices fall.

Sources: “Petroleum Moscow Urged to Clarify Output Policy”, *Petroleum Intelligence Weekly*, 22 September 2008; “More tax breaks for offshore fields”, *Argus FSU Energy*, 31 July 2009 ; “Russia redesigns fiscal policy to boost oil E&P”, *Oil and Gas Journal*, 20 April 2009, p. 18-21 ; “More fields lined up for zero duty”, *Argus FSU Energy*, 20 November 2009 ; “Duty calls”, *Argus FSU Energy*, 5 February 2010.

The tax system is a vital tool in the hands of the state for influencing the strategies of oil companies. In Russia, it has not really provided the economic incentives needed to persuade players to help the state achieve its objectives.

In the first instance, the State does not exercise efficient control over its tax revenues (Box 1). It is struggling to get the large industrial groups to pay their tax debts. The most powerful vertically integrated companies have thus been able to develop a wide variety of tax evasion schemes. The extremely complex structure of certain vertically integrated companies makes it possible to practise transfer prices⁽²⁴⁾. This internal pricing system⁽²⁵⁾ is seen as a way of reducing the tax burden from hydrocarbon sales through offshore subsidiaries of oil companies established abroad. Transfer prices also provide a way of limiting tax pressure in that crude oil prices are undervalued⁽²⁶⁾. The extreme use by some companies (Yukos, Sibneft, TNK) of the tax exemption schemes set up by certain regional authorities (regions of Chukotka, Mordovia and Kalmykia) is part of this logic. The authorities thus organise “offshore zones” within their regions and play a very significant role in these tax evasion

schemes.

Second, the State is incapable of setting up an effective taxation system based on the quality of deposits. Compared with the tax regimes in place in market economies such as Norway or the UK, it seems in many respects to be fairly basic or at least to pay little attention to the particular exploration and development conditions of the various oil fields (especially differences in costs related to geographic location and geological conditions). Given its particularities, Russia's oil taxation system has offered very little in the way of incentives to induce oil companies to commit themselves to the higher-risk investments required for developing areas with the most adverse production conditions. Yet differentiation is essential to stimulate exploration⁽²⁷⁾. But perhaps the State is not in a position to specify in detail the exploration and production licences to be granted, since it does not have the necessary information. Information asymmetry between the State and Russian oil companies is particularly marked in this area. Furthermore, in a context marked to a greater or lesser extent by corruption, it would probably be very difficult for the State to implement an elaborate system of differentiated taxation. The use of a single tax, irrespective of the quality of the deposits, at least has the merit of simplicity and, to a certain extent, prevents large-scale fraud.

4. Why does the State want to regain control of the hydrocarbons industry?

The need to orient strategies toward investment in exploration in order to conserve oil resources, a desire to contribute to maintaining high international prices and to redistribute the oil rent to provide a basis for economic growth are factors justifying the State's determination to regain control of the hydrocarbons sector. An analysis of the institutional context reveals a vital requirement: This new oil arrangement must be compatible with Russia's current institutional endowment (where market institutions are in their infancy, where the Rule of

Law is difficult to implement and where privatisation has not produced the desired behaviour). The State must now define a coherent, centralised oil strategy to serve its goals both at home and abroad.

4.1 Will taking back control of the oil industry provide a way out of the “institutional deadlock”?

The State must attempt to find a way of getting the oil industry out of the “institutional impasse” in which privatisation has more or less locked it. The development of strategies to enable more balanced management of the Russian oil industry is crucial for its long term future. In the Russian institutional context, more or less, this must involve better management of oil production growth (slower?), greater investment in exploration than in the past, and stricter State control over reserves in order to guarantee renewal. A revival of the reform process might have been seen as a way of getting out of this institutional impasse. But such a revival will only come from a compromise between the various interest groups, notably between the State, the large vertically integrated companies and the Regional authorities. In fact, for a wide variety of reasons, it seems that neither the Regions nor the oil companies have any interest in following this path or in strengthening the market institutions⁽²⁸⁾. The Russian oil companies have to a great extent tried to maintain a certain opacity in the way they operate in order to ensure that the rent continues to be shared out in their favour. In particular, it was important for them to avoid any legal provision that would imply greater transparency (in term of information) and compliance with fiscal regulations, which may explain the strong opposition from certain Russian companies, notably Yukos, to the production sharing agreement regime⁽²⁹⁾. The weakness of the Rule of Law, which allows legal and fiscal regulations to be circumvented and market institutions to be manipulated is something that the dominant actors do not want to see disappear, insofar as the uncertainty

and lack of transparency in the institutional environment enables them to conserve their gains⁽³⁰⁾.

- *Hydrocarbons at the service of the economy*

The State must also arrange with the oil companies for a new way of sharing out the hydrocarbon rent so that this sector can be used to help achieve the economic growth objectives announced by Vladimir Putin. The rent industries must feed the State budget more substantially, in particular via the tax regime, while Russian growth remains largely driven by international hydrocarbon prices. In a study carried out in 2002, J. Rautava showed that a 10% rise in the price of oil would lead to an additional 2.2% increase in GNP⁽³¹⁾. According to a recent World Bank report, only high oil prices have in the past enabled Russia to achieve economic growth of over 5.5%. In this context, international prices will have to remain fairly high and Russia must therefore avoid contributing to a possible period of decline in international prices by exporting excessively large amounts of oil.

In addition, Russian oil output is certainly not insensitive to crude oil price levels. In fact, all the “optimistic” production scenarios are based on relatively high prices on international markets. In particular, the gradual shifting of “core” production to Eastern Siberia could lead to a substantial increase in production costs⁽³²⁾. Consequently, the future of Russia’s oil policy is largely tied to a policy in favour of defending prices. It is important therefore for the Russian State to be able to maintain control over oil company export strategies.

- *Reinforced control of the oil industry without large-scale nationalisation*

Today, the Russian State is seeking to strengthen its control of the hydrocarbons sector while avoiding total re-nationalisation of the oil industry. The State holds 30 % of the Russian oil production with a huge modification of the oil industry structure (Table 3). In our opinion, the final objective of a hydrocarbons industry whose organisation and regulations are in conformity with those of a market economy is not called into question as the deregulated trading in Gazprom shares would tend to suggest. Nevertheless, the government's position might appear ambiguous in the sense that it is trying to reconcile contradictory goals. The challenge is thus to create a system that maximises efficiency through private management while allowing tighter State control in order to set up a market economy that will probably be more in line with Vladimir Putin's vision of Russia's place and role on the international scene.

Table 3 : The main Russian oil companies (in production) in 2008

	Oil companies	Output in Mb/d
Private companies	Lukoil	1.89
	TNK-BP	1.38
	Surgutneftegaz	1.24
	Slavneft (50 private, 50 public)	0.39
	RussNeft	0.29
	Yukos	0.18
Companies in which state has majority stake	Rosneft	2.17
	Gazprom	0.98
	<i>Incl. GazpromNeft</i>	0.73
Regional companies	Tatneft	0.52
	Bashneft	0.23
Others (including PSAs)		0.44
Total		9.71

Source: From "Russia's Output Surge Slows To a Crawl"- *PIW*, 28 January 2007, p. 3.

Stricter conditions of access to Russian natural resources and the State's desire to exercise tighter control over this access are the first important signs that the central authorities are regaining control of the sector⁽³³⁾. The State's discretionary reallocation of exploration and development licences to companies in which it is the main shareholder (Rosneft, Gazprom)⁽³⁴⁾ or which benefit from State support (Lukoil, Surgutneftegaz), and re-examination of the

conformity of a certain number of licences concerning major deposits, are part of this movement⁽³⁵⁾. This renewed control is also being achieved at the expense of the Regions, which in the past had considerable power in the industry. The 2003 amendments to the 1992 Subsoil Law give the Federal Government (the Ministry of Natural Resources) exclusive control over granting exploration and development licences. Regional authorities simply have a consultative role, whereas in the past they had joint power with the Federal Government to allocate licences⁽³⁶⁾. A list has been drawn up of so-called strategic fields for which exploration and development licences are to be awarded directly by the state without the tendering procedure required by the law (gas law of 2006)⁽³⁷⁾. Under the law on foreign investment in strategic industries that was adopted in May 2008 a private foreign investor can hold no more than a 10% share in a hydrocarbons firm, or 5% if the foreign investor is a state-controlled company. For greater participation, special permission must be granted by a commission headed by the prime minister⁽³⁸⁾.

The final form of the new organisation of the oil industry that the Russian authorities wish to establish has not yet been completely defined. It will depend to a large extent on the current conflicts between the various pressure groups, on the need to adapt to market rules and on Russia's foreign strategy. Pressure will come in particular from international oil companies that wish to gain access to Russian resources, from the United States, from the European Union (to which Russia has always been a major hydrocarbons supplier), from Russia's desire to become part of the world economy (the G8, WTO). The new role that Vladimir Putin's government intends to give to hydrocarbons in the country's relations with its major partner countries will also be an important factor. One major question arises. Will there be one or several companies in which the State has majority control⁽³⁹⁾? Will Gazprom and Rosneft be at the centre of the arrangement? The presence of two state-owned companies makes this

model highly original, all the more so since these national companies could actually be competitors in numerous projects. Last, the role that foreign investors will be allowed to play is a major unknown. Even if foreign oil companies are not excluded, they will very likely be subject to restrictions or at least to the approval of the highest authorities in the country (see, for example, the case of Shotkman where Total and StatoilHydro operate alongside Gazprom).

Finally, the government intends to maintain control over the exports of the Russian oil companies. This means reinforcing its control over export networks via Transneft, a State-owned company⁽⁴⁰⁾. Rivalry between Transneft and the Russian oil companies over pipeline routes implicitly involves the important stake of the export capacity of these oil companies. It is a question of restricting, as far as possible, the construction of private pipelines that would be owned by the oil companies.

4.2 International aspects of the Russian oil strategy ⁽⁴¹⁾

In addition to developing the oil sector, the policy of the Russian authorities appears to be increasingly aimed at setting up a coherent centralised strategy that instrumentalises the sector henceforth considered as providing a “comparative advantage” in international competition. At the international level, in a context where world energy supply is strongly constrained, Russia can use not only its oil but more importantly its gas resources to play a major geostrategic role with respect not only to the European market, where it has a determining influence, but also to the major Asian countries (Japan, China, South Korea), and even the North American market. The Russians are seeking to exert their influence through a strong presence in the supply sector for the large European and Asian markets.

Gazprom has now clearly established its intention of defining a truly global strategy⁽⁴²⁾. It is a matter of maintaining or even increasing its market share in the European Union and positioning itself on the Asian and even the US markets. On the one hand, Russia can play on competition between Europe and Asia in its role as a reliable source of supply for liquids and natural gas alike. On the other, it is also tending to bring the major Asian players into competition with one another in its programme to develop the resources of Eastern Siberia. The differences between China and Japan concerning the first Russian oil pipeline to Asia are an example. Today, the decision of the Russian authorities to choose the Japanese option via Nakhodka, without excluding the possibility of a branch to China, clearly shows the ambiguity of the Russian government's position. These developments are accompanied by bilateral oil supply agreements between China and Russia. Thus, the Chinese company CNPC has advanced a payment of \$6 billion in exchange for supply of crude oil from Rosneft until 2010. This source of financing would seem to have facilitated Rosneft's purchase of Yuganskneftegaz. If the Chinese really played a key role in Rosneft's acquisition of Yukos's subsidiary, this would be the sign of a new power relationship emerging on the Asian energy scene. It is also important to underline the new relations that India is establishing with a few large Russian oil companies and in particular its interest in participating in the Sakhalin LNG development projects.

Furthermore, with the globalisation of the natural gas markets, Russia can undoubtedly aspire to a decisive role in price formation for this commodity. In a context where there are tensions in world oil supply (and even gas supply in the case of the United States), Russia undoubtedly has a trump card to play in the context of the proposed "strategic partnerships".

From this point of view, hydrocarbons represent a structuring element in the country's foreign policy with CIS members, its "near abroad", but also with the southern European countries and those of Eastern Europe. The major Russian energy companies must be the principal vectors of this strategy, through a policy of internationalisation. Gazprom and Lukoil are increasing their presence in these areas by securing holdings in companies undergoing privatisation or through joint ventures⁽⁴³⁾. This is particularly true in central Asia and the Caspian region, which enhances the complementarities (rather than the oppositions) between these two zones. The numerous agreements signed between Russia and Kazakhstan, particularly with regard to the transport of Kazakh oil through Russian territory, the "calls" from Russia to coordinate the oil policy of the two countries⁽⁴⁴⁾, demonstrate the extent to which the Russian State intends to "reinvest" the economic space of central Asia and expand its influence in the region⁽⁴⁵⁾. This international policy could also explain the redeployment and multiplication of the interventions of the Russian oil companies (close to the State) in other oil producing regions, notably in the Middle East and North Africa⁽⁴⁶⁾.

The State's attempt to regain control of the oil sector is an important new factor in the development of the oil industry, as it could lead to greater control over production, oil exports and renewal of resources. This recent combination of public and private forms of governance in the industry can be seen as an attempt to get out of the institutional deadlock in which this sector has found itself since the privatisation movement. It reflects the incapacity of the State to regulate a rent industry via the classic institutions of a market economy, whether they be tax regimes or regulations governing access to resources and development of deposits. Privatisation alone has not allowed consolidation and security of ownership rights. The major

private players have had an interest in maintaining institutional uncertainty in order to increase their share of revenues.

This renewed control also raises a number of crucial questions. While the final goal is to set up a market economy that is totally integrated in the world market, a transition phase is now opening up. The conditions and form of this control have yet to be defined, particularly concerning the creation of a large hydrocarbons company with majority public capital. The general configuration of the oil industry and the room given to international investors remain major unknowns. Finally, can this hybrid model, a sort of third option, serve as a form of governance for the hydrocarbons sector in the transition phase and enable Russia to become truly integrated into G8 and the WTO?

Notes

(1) According to G. Roland, the transition envisaged by the Washington Consensus is based on a combination of neo-classical price theory, standard macroeconomic theory and the experience of stabilisation policies. It is opposed to the more institutionalist view of the transition. For a presentation of the two views of the transition, the reader is referred in particular to: G. Roland, *Transition and Economics : Politics, Markets, and Firms* (Cambridge : MIT Press, 2000) and W. Andreff, *La mutation des économies post-socialistes : une analyse économique alternative* (Paris : L'Harmattan, collection Pays de l'Est, 2003), 366 p.

(2) Remember that under the Soviet regime, the oil industry was organised like a government ministry that carried out the classic economic functions of a company. Production was the responsibility of technical production associations that were regulated by the Oil Ministry. In such systems, public or private oil companies do not exist.

(3) The Loans for Shares programme gave Russian banks control of some of the State's shares in the capital of the holding companies for three years in exchange for credit facilities. At the end of this period, the government could take back the shares in return for repayment of the loans. Otherwise the shares had to be repurchased definitively through a tender procedure (which was supposed to open up share trading in the companies).

(4) Over half of the rise in production is attributable to three oil companies, Yukos, Sibneft, Surgutneftegaz, the first two having made huge investments in enhanced oil recovery technologies (hydrofracture, horizontal drilling). Organisation for Economic Cooperation and Development (OCDE), International Energy Agency (AIE), *World Energy Investment Outlook 2003* (Paris : AIE-OCDE, 2003), p. 148.

(5) PIW, 12 October 2009

(6) For example, between 1988 and 1994, investment in exploration fell by 60%. Investment in exploration in the oil sector fell by more than 30% in 2002 compared with 2001. This trend continued in 2003. "Russian Economy : Trends and Perspectives" *Institute for The Economy in Transition*, Monthly Bulletin, September 2003 and July 2003.

- (7) L. Dienes, "Observations on the problematic Potential of Russian Oil and the Complexities of Siberia" *Eurasian Geography and Economics*, Vol 45, n° 5, 2004, p. 321.
- (8) Lukoil has developed a strategy of investment in the exploration of new oil-bearing areas mainly in the North Caspian region and the Timan Pechora basin. In 2000, 45% of Surgutneftegaz production came from new deposits. L. Dienes, op. cit., p. 312.
- (9) "Back to Earth" *Finam Investment Company*, August 17, 2004, 40 p.
- (10) While, Russian oil reserves are known to be substantial, there is considerable debate as to their estimated volume. For example, according to BP, Russia's oil reserves are of the order of 60 billion barrels, the OGJ puts the figure at 48.6 billion barrels, and IHS Energy estimated reserves of 140 barrels at the end of 2001. The USGS evaluation is 207 billion barrels. "Saudi Pact Shows Russia's New Strength" *Petroleum Intelligence Weekly*, September 8, 2003, pp.1-2.
- (11) Dienes, 2004, op. cit., p. 328.
- (12) V. Kryukov and A. Moe, "Russia's Oil Industry: Risk Aversion in a Risk-prone Environment", *Eurasian Geography and Economics*, 48, 3, 2007 pp. 341-357.
- (13) OCDE/AIE, 2003, op. cit., p. 148.
- (14) Scenarios projecting output of close to 12 Mb/d by 2020, in other words the top end of available forecasts, are based on the assumption that there will be significant development of these new areas (Argus FSU Energy, 15 August 2008).
- (15) J. Sagers, "The Regional Dimension of Russian Oil Production: Is a Sustained Recovery in Prospect", *Eurasia Geography and Economics*, 47, 5, 2006 pp; 505-545.
- (16) This Eastern Siberian oil field, exploited by Rosneft, should account for between 4.3 and 4.9% of Russian oil production by 2013, that is around 420 000bd (FSU Energy, Petroleum Argus, 28 August 2009).
- (17) Dienes, 2004, op; cit.,
- (18) A. Runov, "Demand for Private Property Right in Post-Soviet Russia : Causes and Effects in Manufacturing and Extractive Industries" *8th Annual Conference of the International Society for New Institutionnal Economics (ISNIE)*, September–October 2004, 25 p.
- (19) A. Aslund, "Russia's Energy Policy: A Framing Comment", *Eurasian Geography and Economics*, 47, 3, 2006, pp. 321-328.
- (20) B. Black, R. Kraakman, A. Tarassova, "Russian privatization and Corporate Governance : What Went Wrong ?" *Stanford Law Review*, n° 5, 2000, pp. 1731-1808.
- (21) The bankruptcy of Sidanko's main production units in 1999 and their purchase by TNK is a perfect example of this type of procedure. In fact, bankruptcy proceedings are only initiated against "entities" that keep an economic value.
- (22) T. Walde *Oil and Gas Legislation in Russia. From Texas To Siberia : Is a Russian Model Emerging* (University of Dundee : Centre For Petroleum and Mineral Law and Policy, 1992, Professional Paper PP6) 17 p.
- (23) W. Tompson, "Back to the Future? Thoughts on the Political Economy of Expanding State Ownership in Russia", *Les cahiers Russie* 6, CERI Sciences Po, 2008.
- (24) Transfer prices are associated with the creation by the company of trading companies that purchase oil from the company's production units at undervalued prices and then sell it through an intermediate network to subsidiaries that for the most part are established in offshore zones.
- (25) Undervaluation is practised by different oil companies to varying degrees, although it is difficult to put precise figures on the amounts involved. The investment company FINAM has reported that certain companies

have been able to buy crude oil from their subsidiary at 7\$/barrel and resell it at 20-23\$/barrel. FINAM, 2004, op. cit., p. 27.

(26) A single tax on mining resources is applied. A. Konoplianiuk, "A struggle for Mineral rent" *Petroleum Economist*, September, 2003, pp. 23-24.

(27) "A taxing question" *FSU Energy, Petroleum Argus*, February 20, 2004, pp.2-3.

(28) Numerous authors have pointed out that mass privatisation in Russia gave ownership rights to groups that had no interest in reinforcing market institutions.

P. Murrell, "Institutions and Firms in Transition Economies", Chapter of the *Handbook of New Institutional Economics*, Ed C. Ménard and M. Shirley, second draft, May 2003, p.31 and G. Roland, *Transition and Economics : Politics, Markets, and Firms* (Cambridge : MIT Press, 2000)

(29) The Russian oil majors successfully lobbied the Duma against this particular system of investment in exploration-production, making it possible to define a stable legal framework. International oil companies, however, made it a condition of their huge investment in the Russian hydrocarbons sector. Following amendments in 2003 to the Production Sharing Agreement Law, this system has become the exception rather than the rule. P. Bakoulev P, "Dramatic Changes to Production-Sharing Regime" *International Law Office, Energy/Natural Resources*, August 2003, 3 p. Information obtained on 21/03/2005 from http://www.internationallawoffice.com/ld.cfm?Newsletters__Ref=7224

(30) K. Hoff and J. Stiglitz, « After the Big Bang ? Obstacles to the Emergence of the Rule of Law in Post-Communist Societies » *World Bank Policy Research, Working Paper 2934*, December 2002, 44 p.

This position is based on the critique of the thesis developed by A. Shleifer and R. Vishny, whereby the creation of additional market institutions to consolidate ownership rights would result spontaneously from privatisation. According to these authors, the new holders of rights of control over assets following an initial privatisation process would be strongly motivated to encourage the definition of new legal regulations to guarantee their ownership rights. A. Shleifer and R. Vishny, *The Grabbing Hand – Government Pathologies and their Cures* (Cambridge, : MA : Harvard University Press, 1998).

(31) J. Rautava, "The role of oil prices and the real exchange rate in Russia's economy" *Bank of Finland, Institute for Economics in Transition, BOFIT, Discussion Papers*, 2002, n°3, 21 p.

(32) Four main factors are likely to push up these costs: harsher climatic conditions, deterioration in quality of Russian reserves, necessitating the opening to production of smaller less productive deposits, the substantial investments required for opening up deposits in more difficult and more remote areas, and the inclusion of capital cost in the calculation, largely ignored under the Soviet regime due to methods of calculating provision for depreciation. It is nonetheless true that there is – and will continue to be – considerable uncertainty surrounding the cost of producing oil from Russia's reserves.

(33) The more stringent conditions for obtaining production sharing agreements are an illustration of this type of control. A. Konoplianiuk, "PSA debate not over" *Petroleum Economist*, July 2003 p. 12 ; *Petroleum Economist*, July 19, 2004, p. 9.

(34) The re-allocation of licences for the Stockman, Talakan and Sakhalin III deposits is an illustration of this movement, as are the discussions on Gazprom's possible participation in the development of Kovytko.

(35) The Minister of Natural Resources believes that these licences are not forceful enough in establishing development and exploration obligations. The Kovytko, Shtokman and North Astrakan deposits are cases in question.

(36) LeBoeuf, Lamb, Greene & MacRae, L.L.P, *Russian Law News : Subsoil Law Amendments : Two-key to One Key, and More* January 25, 2005: <http://www.russianlaws.com/subsoil3.html>. (21/03/2005).

(37) It is according to this principle that Gazprom was granted the licence to develop Chayandinkoye natural gas field, qualified as a strategic reserve. The reserves of this field situated in Eastern Siberia (Sakha-Yakutia) are estimated at 1.26 thousand trillion m³. "Gazprom given licence to drill", *Argus FSU Energy*, 18 April 2008.

(38) BOFIT, Weekly, 2008.

(39) Gazprom CEO A. Miller announced the merger of Gazprom and Rosneft while S. Bogdanchikov, CEO of Rosneft, declared that he was in favour of keeping the two entities separate. This opposition reflects the power struggles in the Kremlin, and in particular between D. Medvedev and I. Sechin.

(40) I. Gorst, *The Energy Dimension in Russian Global Strategy : Russian pipelines Strategies : Business Versus Politics* The James A. Baker III, Institute for Public Policy of Rice University, October 2004, 23 p.

(41) For a more detailed analysis, see S. Boussena and C. Locatelli, « Vers une plus grande cohérence de la politique pétrolière de la Russie ? » *Revue de l'énergie*, 55 (560), 2004, pp. 505-15.

(42) Y. Komarov, "It's a long time since we have been analyzing implications of gas market liberalization in Europe" *Gazprom*, January 20, 2004, 5 p.

(43) "Broadening export strategy" *Petroleum Economist*, May 2004, pp. 21-23.

(44) "Kazakhstan oil to flow east" *Petroleum Economist*, December 2004, pp. 26-27.

(45) R. Legvold, "Russia's Unformed Foreign Policy" *Foreign Affairs*, n° 5, September- October 2001, p. 70.

(46) For example, the "energy pact" signed between Russia and Saudi Arabia in September 2003 following the visit of Prince Abdullah Bin Abdel-Aziz to Moscow is expected to lead to a certain number of joint projects and the participation the Russian companies (Gazprom, Lukoil) in development of the gas sector in Saudi Arabia. "Saudi Pact Shows Russia's New Strength" *Petroleum Intelligence Weekly*, September 8, 2003, pp.1-2.

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