During the early stages of Russia’s market economic reform, from 1991 to 1994, I had the honor of working as an economic advisor to the Russian government, with the great reformers Yegor Gaidar and Anatoly Chubais, who are the true heroes of Russia’s capitalist transformation together with late President Boris Yeltsin. These were the men who built the Russian market economy. Putin arrived late at a laid table, when the Russian economy had already attained high growth. I am very happy to see Anatoly Chubais here today.

**A Successful Liberal Energy Policy**

In the energy sphere, Gaidar and Chubais believed in the Anglo-American model of private energy companies competing with one another on the market. Amazingly, Chubais has succeeded in the last several years in full-fledged reform of that kind in the electricity sector. That is also true of the coal sector. The oil and gas sectors have moved in the opposite direction, though the oil sector is still semiprivate.

The reformers had a clear and sound strategy in the early 1990s. First, they did away with the old industrial ministries. The merged new Ministry of Energy and Fuel was supposed to formulate energy policy and not to manage enterprises. In each energy sector, the prior state monopoly company was to be broken up into separate state enterprises, which were to be privatized in due time. Immediately after demonopolization, prices should be liberalized. Foreign companies were welcome to participate in all activities.

In effect, this model came to dominate Russia’s energy policy from 1994 till 2003. In the mid-1990s, most oil companies were successfully privatized. In 1999, the state coal association Rosugol was broken up and privatized in parts, giving rise to half a dozen highly successful private coal companies. Immediately after privatization, the new owners were preoccupied with their consolidation of ownership, but by 1999 output took off. The demonopolization and privatization of the oil and coal industries aligned the incentives of the nation and the private companies, as the new enterprise owners endeavored to maximize their personal profits by boosting production.

As business conditions and corporate governance improved, the output of oil and coal rose sharply from 1999, while the output of natural gas, which had not seen much reform, grew insignificantly. Impressively, Russia’s oil production surged by 8.5 percent a year from 1999 to 2004 or by a total of 50 percent. This boost in output was the result of higher investment and greater efficiency, not least because of the rational utilization of foreign companies. BP’s purchase of half of TNK in the spring of 2003 was the biggest foreign direct investment in Russia, but it also marked the peak of the liberal model, which was approaching its end.
State Capitalism

Since 2004, a very different model has evolved. Unlike the preceding model, it was never proclaimed as a program, but it has been rationalized after it has taken shape. Its promoters have not chosen any label, but its content renders “state capitalism” the most natural label. While the old communist model favored state ownership, and the liberal model private ownership, state capitalism insists on state control, that is, at least 51 percent state ownership.

The arrest of Yukos CEO Mikhail Khodorkovsky in October 2003 marked the end of the liberal model and the auguring of state capitalism, and the subsequent confiscation of Yukos through draconian taxation and biased court judgments has helped to reinforce arbitrary state control over the oil industry. Meanwhile, previous plans on the privatization of Rosneft and Zarubezhneftegaz were shelved. The state further extended its ownership in the oil industry through Gazprom’s purchase of Sibneft in September 2005. So far, the coal sector stays private and beyond the reach of the new state capitalism, and the electricity sector has gone against the current, having been liberalized.

Gazprom is most problematic, so I shall concentrate on it in this statement. It is the model of Russia’s new state capitalism. The liberal model never took hold in the gas industry. The former Soviet Ministry of Gas Industry was transformed into the state corporation Gazprom, which retained all regulatory powers. It was privatized for close to nothing to the benefit of its managers and employees, while the state has remained majority owner. Rosneft tries to follow Gazprom’s lead. State monopoly over pipelines and other infrastructure has been reinforced as well as over new oil and gas fields. As a consequence, property rights of both domestic and foreign owners have been undermined. The rise of state capitalism has coincided with high world energy prices, which took off in 2004, and the state has taxed most of the windfall gains of the private energy companies. Ideas of reforming Gazprom in the same way as the UES have been abandoned.

The impact of state capitalism on production and investment was instantaneous. The output of crude oil rose under the liberal policy to a growth peak of 11 percent in 2003, but by 2005 the output growth had fallen to 2.7 percent, and this year production has so far declined. When world prices of energy are high, a rational profit-oriented capitalist would maximize investment. In 2004, the owners of Russia’s coalmines did exactly that and boosted investment by an incredible 67.5 percent. Russia’s oil industry, by contrast, reduced investment by over 20 percent.

The reasons for the declining oil investment are evident. The state companies, notably Rosneft, have spent their money on acquisitions rather than real investment. Only the state companies are allowed to develop new fields, but they are neither interested in doing so nor capable of such undertakings. The remaining big private companies have heeded the government warning against excessive production and they suffer from extremely high taxation. Therefore they first reduced their output increases and then their output. Not only does the Russian government aggravate the conditions for private investment. In 2006, President Vladimir Putin even boasted about how small Russia’s energy investment was: “One of our key priorities is to diversify our economy and make a transition to innovative development. Not many people know that last year investment in capital assets came to $121 billion last year and of this total only $8.7 billion was in the oil and gas sector.”¹ This means that only 7 percent of Russia’s total investment goes to its greatest money-spinner, which generates over 60 percent of its exports and about half of its state revenues.

On Gazprom’s Strategy

Gazprom is the most controversial and enigmatic company in Europe, and it is certainly the largest in terms of energy production, market capitalization, and reserves. But what kind of an animal is it? Gazprom’s management insists that the company is purely commercial, but its European critics claim that this state-dominated corporation is all about politics.

In fact, Gazprom’s actions appear predominantly commercial, but they arouse new concerns. The corporation behaves like a textbook monopolist, but it focuses on the short term. Therefore, it cannot guarantee future supplies or prices, which is likely to harm Gazprom’s interests in the long term, because it is no real monopolist abroad and it is likely to alienate its customers. Russia also suffers from serious corruption, and Gazprom is often pinpointed as the pinnacle of this corruption through both kickbacks and asset stripping.

Gazprom’s strategy has been rather clear and consistent since Rem Vyakhirev was ousted by the Kremlin as CEO of Gazprom in May 2001 and replaced by Alexei Miller. Pricing has formed a centerpiece, but prices have varied between Europe, former Soviet republics, and Russia itself. Export prices to Europe prices have been noncontroversial, because they have been based on a long agreed formula including market prices of different kinds of oil, so with a certain delay they have risen with world oil prices.

Supplies to former Soviet republics have aroused the most acrimonious disputes. Their prices were artificially low until 2005. Since then, Gazprom has moved aggressively to raise them. It has claimed to depoliticize them, but it has boosted prices in big steps, which have varied greatly between different countries. Prices rose faster and higher to weak and not very friendly countries, such as Georgia and Moldova, than to its close and powerful Western neighbor Belarus. Moreover, neither the old nor the new prices have been set according to any objective standard. Admittedly, no world market prices exist for piped natural gas, because all prices are local depending on local supply and demand through one or a few pipes, but Gazprom has long solved that problem in Europe.

Naturally, each customer country has tried to delay price hikes, but their resistance has disrupted supply to most former Soviet republics—Georgia, Azerbaijan, Moldova, Ukraine, and Belarus. When Gazprom temporarily reduced gas supplies to Ukraine and Belarus its European customers were also hit. Few disagree with the principle of gradual transition to market prices, but the transition needs to be transparent and founded on agreed principles.

Prices must rise inside Russia too, and they do in large but regular steps. Sensibly, Gazprom has been pushing for a gradual price increase, aiming at full price liberalization in 2011. But no prices should be truly liberalized in the presence of one monopoly supplier, because a rational monopolist pursues price gorging. Another concern is that Russia maintains large export tariffs for gas, which are hardly compatible with the World Trade Organization, and the European Union has demanded that Russia phase them out before entering the WTO. Furthermore, domestic gas prices should rise about three times, which is always politically difficult.

Overall, Gazprom’s policy to let all gas prices approach plausible market prices makes sense. The higher gas prices have sent its profits and stock prices skyrocketing, rendering Gazprom the third largest company in the world by market capitalization at around $340 billion, considerably more than any European company.

The second part of Gazprom’s strategy is much more controversial, namely to extend monopolistic control over the production of gas in Russia and over sales and transportation beyond its borders. State ownership and monopolization restrict production, efficiency, transparency, and thus reliability. Russia’s natural gas production has long been close to stagnant, with the only real dynamism coming from a few emerging independent gas companies, especially Novatek, and private oil companies that produce associated gas. But Gazprom has maltreated the efficient independents. It has utilized its trading monopoly to force them to sell at artificially low prices. Often, it refuses to buy gas from independent companies, which are forced to flare gas or abstain from production. Several small independent producers, such as Nordgas, have been forced to sell themselves to Gazprom. BP encountered the same treatment at its huge Kovykta field in East Siberia, and Royal Dutch Shell was compelled to give up half of its ownership in the Sakhalin II field. Gazprom’s only comparative advantage is access to nearly unlimited state power, which does not bode well for Russia’s gas economy.

The problem is that Gazprom is not very good at producing gas. Three of Gazprom’s four giant fields (Urengoy, Yamburg, and Medvezhye) are past their peaks and declining, while its fourth giant field (Zapolyarnoe) is at its summit. For sheer administrative reasons, Gazprom cannot develop
the many secondary or tertiary fields that are known but remain undeveloped, and it is increasingly reluctant to allow independents to do so. In 2007, Russia’s gas production fell by half a percent. Gazprom’s management claims that it can easily expand output from secondary fields, but its track record suggests the opposite.

Gazprom needs to develop one of two truly gigantic fields, Yamal in northwestern Siberia or the Shtokman offshore field north of Murmansk. Either is likely to cost something like $50 billion to develop, and the development of either will take a decade before production can start. Gazprom has agreed to exploit the Shtokman field in partnership with French Total and Norwegian Statoil-Hydro, while it intends to develop the even larger onshore Yamal on its own. Alas, if Russia’s future gas production hinges on either of these two fields, it is likely to decline from 2010 to 2016, and it might fall substantially. Moreover, the required investment volume is so large that Gazprom might be forced to choose one of these two projects, which would probably be Yamal, as it is technologically much easier. If so, the company might let its foreign partners down at Shtokman, further undermining confidence in its partnership.

The Gazprom management has responded to this threat of declining production by extending its control over Central Asian supplies, primarily Turkmenistan’s rather stable production and Kazakhstan’s rising output of associated gas. Gazprom has swiftly raised its previously very low purchasing prices and it is projecting a new pipeline from Turkmenistan and Kazakhstan. But this volume will hardly be enough, and energy-hungry China is competing with Russia over access to Turkmenistan’s gas even if Russia has many convincing advantages such as existing pipelines.

To a considerable extent, contracting gas production can be compensated for by substantial energy saving, which will ensue from the sharply higher gas prices in Russia and Ukraine. These countries have long maintained an energy intensity of their production that is five times higher than Italy’s, that is, they have used five times more energy than Italy to produce one euro of GDP. Yet, the combination of large new delivery commitments and uncertain supplies remains worrisome.

In the last two years, Gazprom has received much European publicity for its projected Nordstream pipeline through the Baltic to Germany and its Southstream pipeline on the Balkans. It has also developed extensive cooperation with or purchased energy companies in Germany, Italy, Austria, Hungary, Bulgaria, and Serbia. Its great activity and determination spearheaded by the Kremlin have aroused fears among Europeans of excessive dependence on Russian gas supplies.

Trade statistics, however, reveal another reality. The volume of gas Russia exports to Europe no longer rises but declines. Higher energy prices have finally led to unanticipated energy savings, but the apparent unreliability of Russian gas deliveries is also scaring the ultimate consumers. Sweden has decided against participating in Nordstream. So has Finland that is saving on Russian gas by developing more nuclear power. Estonia minimizes its imports from Russia. So does Poland, and so it goes.

Gazprom has successfully increased control over production in Russia and Central Asia, but it invests primarily in equity and logistics rather than production and development. It has managed to hike prices and it has forged strong alliances with distribution companies, but it scares off its ultimate customers through its manners. Gazprom’s management needs to coopt and breed confidence among its customers rather than frighten them. Natural gas is an excellent fuel, and Europe badly needs Russian gas, but successful business must be based on trust.

The third aspect of Gazprom’s strategy is the most controversial. The corporation is widely seen as the pinnacle of corruption in Russia. According to Transparency International, the only country that is both richer and more corrupt than Russia is Equatorial Guinea. Gazprom is accused of three forms of corruption: transfer pricing, asset stripping, and kickbacks.

Transfer pricing has been notorious in the gas trade with Ukraine. One shady, nontransparent trading company has replaced another. The most recent intermediary is Rosukrenergo, whose ultimate beneficiaries remain in doubt, but its profit level is extremely high and all gas payments between Russia and Ukraine seem to be subject to disputes, underlining the murky nature of this state-to-state trade. Another trading company, Gunvor, controlled by Putin’s friend Gennady Timchenko, is reputedly skimming off the profits from Gazpromneft’s oil export sales.
Curiously, the official value of Russia’s gas exports barely rose in 2007, although officially cited export prices rose sharply, suggesting massive transfer pricing.

In their excellent recent booklet, “Putin—The Bottom Line,” Vladimir Milov and Boris Nemtsov offer multiple examples of asset stripping by Gazprom. For example, in July 2005, Gazprom’s media interests were transferred to the private Rossiya Bank for $166 million, while two years later First Deputy Prime Minister Dmitri Medvedev assessed these at $7.5 billion. Another case of asset stripping was Gazprom’s insurance company Sogaz.

Kickbacks are considered rampant in Gazprom. Hemitage Capital Management publicized that the building of the Blue Stream pipeline through the Black Sea cost three times as much on the Russian side as on the Turkish side per kilometer. This ratio appears to be standard for Gazprom infrastructure investments, and reportedly kickbacks of 50 percent on major infrastructure projects are common. With this level of kickbacks, the question is whether Gazprom is able to build the large infrastructure projects to which it is committing itself. As long as Gazprom shows no interest in improving the legality of its operation, it remains enigmatic, nontransparent, and unreliable as a partner.

A Worrisome Outlook

Russia’s new state capitalist model has both positive and negative features. Its main positive characteristic is marketization. Since the state capitalists care about profits and stock prices, they favor higher prices and oppose remaining rationing of gas within Russia, but since they favor monopoly they cannot pursue price liberalization in gas. The state capitalists also appreciate a greater diversification of export routes.

Alas, the negative aspects prevail. State domination especially of the oil industry is increasing. It is difficult to fathom that this development will lead to anything but a state oil monopoly company so typical of and harmful to the OPEC countries, even if in 2006 President Putin assured: “Regarding the oil and gas sector, I have already said that no nationalization will take place in our economy.” His statement was followed by several renationalizations. Under the current circumstances the Russian government is even less likely to allow Western companies to develop in Russia.

As a consequence of the increasingly dominant state ownership, complicated new fields are unlikely to be developed, and it is questionable whether new technologies, such as LNG and deep-water drilling, will be embraced. The Shтокман gas field in the Barents Sea is in danger of long delays, and the Ковыкта gas field in east Siberia may remain stranded and thus undeveloped. Nor can small and medium-sized fields be developed by large state companies, so they will be left unutilized as is currently the case.

In spite of international scarcity, the Russian government invests little in the energy sector. As long as the domestic price of natural gas is not liberalized, Gazprom has little or no interest in cutting costs, because its negative cash flow is its strongest argument to raise domestic gas prices. But when prices are liberalized, Gazprom will be flooded in money, as it benefits from much lower taxation than the Russian oil industry, so it will have little incentive to economize.

Semi-state ownership offers terrible incentives for managers. On the one hand, they are inevitably tempted to solve all their problems by demanding more regulation to their benefit, that is, reinforced monopoly. On the other hand, Russian semi-state companies tend not to be very transparent, which naturally involved the temptation to extract rents in one form or the other from both government and private shareholders. The combination of huge rising revenues and great nontransparency is likely to generate greater corruption, which might have its own political dynamic.

Ultimately, the consequence of this state capitalist policy is likely to be at best a stabilization of production but probably a decline in output of both oil and natural gas. This means that Gazprom is unlikely to comply with all its new delivery commitments. Considering the horrendous costs of

\[\text{Ibid.}\]
Gazprom construction projects, it is also doubtful whether the many pipeline projects will actually materialize.

**EU Policy on Russian Gas**

Russian gas is far too important for the European Union to ignore. The European Union needs to have an operative energy policy. The Energy Charter is not sufficient, because Russia will not ratify it. Yet, its principles are sound, and the European Union needs to insist on them as it can.

- The foundation of the European energy policy is the deregulation of energy markets and the unbundling of energy companies. If European energy companies are forced to separate generation from transportation, neither they nor Gazprom can form distortional monopolies within the European Union.

- The large Russian export tariffs for natural gas are unacceptable market obstacles. Gazprom should also be interested in letting them go. In 2004, Russia committed itself to abolish them in its bilateral protocol with the European Union on Russia’s accession to the World Trade Organization, as export tariffs contradict the WTO. The European Union can and should insist on their abolition.

- Gazprom jealously defends its monopoly over access to the Russian pipeline system and it is unrealistic to expect Russia to ratify the European Energy Charter or its Transit Protocol, which would grant third party access to its pipelines. The European Union may insist, but success is unlikely without a broader deal.

- Under such circumstances, the European Union has to find alternative solutions to Gazprom. In the long run, the European Union’s priority should be to build both Nabucco and a Transcaspian gas pipeline to tap Central Asian supplies. This will take time and tenacity against Russian resistance, but the Baku-Ceyhan oil pipeline, which was also slow in coming, has proved a considerable success.

- The European Union should also expand the role of LNG (liquefied natural gas) as an alternative to the Russian pipeline gas.

- The lacking reliability of Russian gas supplies is an additional reason (besides climate change and economy) for Europe to focus even more on energy saving.

- In the shorter term, the European Union needs to build up buffer storage for gas. Since this is hardly commercially viable, such investment needs to be public.

Fundamentally, the European Union has a very strong negotiating position. Because of missing infrastructure and excessive transportation costs, Russia cannot possibly sell its natural gas in western Siberia to Asia, and it has no LNG facilities. Therefore, it has little choice but to sell to Europe, which together is a monopsonist in relation to Gazprom, while Gazprom is no monopolist in Europe. Europe’s challenge is to act in unison on a select number of major principles and actions.