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THE STATE OF THE RUSSIAN ECONOMY

■ ANALYSIS		
Economic Growth Remains Surprisingly High		2
By Pekka Sutela, Helsinki		
■ TABLES AND GRAPHS		
Macroeconomic Statistics		6
■ ANALYSIS		
How Sustainable Is Russia's Energy Power?		8
By Philip Hanson, London		
■ DOCUMENTATION		
Russia in Economy-related Country Rankings		12

Note: Table of contents is clickable

Analysis

Economic Growth Remains Surprisingly High

By Pekka Sutela, Helsinki

Abstract

Russia's economic growth remained surprisingly high in 2007. The strong performance seems to be due both to unexpectedly high global energy prices and structural change continuing in the domestic economy. A new feature was fast growth in investments. This increase may imply that Russia is entering a phase of investment-led growth. On the other hand, there are evident signs of overheating, and higher inflation towards the end of the year has given rise to worries. The macroeconomic framework of the economy is undergoing change, and it remains open how policies will react to that. Growth will presumably remain robust for a number of years to come.

Growth Drivers: Oil Prices, Middle Class

In 2007 Russian economic growth was again unexpectedly fast; according to current information the economy grew at a rate of 8.1 percent. Most forecasts had been somewhere above 6 percent.

There seem to be two prime reasons for such a forecasting error. First, the price of oil – and also of some other major Russian exportables – was higher than expected. While the forecasts were based on an expected price of \$50–70, the actual price at the end of the year was close to \$100. It should be remembered, however, that the average annual price was not all that far from the expected, and growth was strong already during the first half of the year, before the price peak. Also the dollar, which remains the key contract currency for Russian exports, has weakened vis-à-vis the euro, which is the major currency in Russian import contracts. Therefore, Russia was not in a position to gain fully from stronger crude price. Opinions differ on the future price of crude oil. Many have raised their expectation to the level of \$85, while others remain true to the traditional \$50–70 forecast. Nevertheless, there seems to be a strong consensus on two matters. A collapse in the crude price is not in the cards. We remain in a high-energy world for at least years to come. On the other hand, there is little reason to believe in another period of wildly surging energy prices. A future with stable energy prices suits Russia fine. Assuming that will in fact be the case, Russian growth forecasts are again at the 6 percent level. At the same time, there likely will be less inflationary pressure, and consequently annual price increases could be closer to five percent than ten percent.

There has been less discussion of the second cause for the forecasting error. In our minds, we all too easily equate Russia with oil and gas. Doing that, we tend to lose sight of the most essential fact, the deep struc-

tural change that Russia has been undergoing, and which continues in the actual production structure of the country. The modern services that were quite alien to the Soviet Union have only emerged in Russia during the last couple of decades. The scope extends from banks, shops and cafes to travel bureaus and service stations. This shift has a self-strengthening character. The Russian new middle class is not very large, and its relative size has hardly been growing. But the middle class consumes those very commodities, whose production and sale give it jobs. The new middle class is both the producer and the consumer of the ongoing structural change. This dynamic therefore has a very strong self-supporting character and is the major source of Russia's future economic growth.

Many Soviet subjects have thus become consumers. Increased incomes have created totally new possibilities of choice. These new consumers are increasingly being satisfied through the global markets, which can always offer many more brands, better quality and greater variety than even the biggest of domestic markets. This is also true of investment goods. That is why Russian imports are growing so fast, recently at 25–30 percent in euro terms.

Three Positive Changes: Current Accounts Surplus

The Russian economy has benefited from three positive changes over the last eight years: a current accounts surplus, increased investment, and a balanced budget. The real appreciation of the ruble, which has so far been an undervalued currency, boosts purchasing power in terms of foreign currencies. But there is a downside to this development. Real exchange rate appreciation spells problems for domestic price competitiveness, even while there are ample possibilities for enhancing productivity. There are few, if any, visi-

ble signs of a diversification of export structure. What we know is that Russia's current surplus, which currently is very large, will shrink and perhaps even disappear in a few years.

The shrinking surplus will change the framework for economic development and policies. As less currency flows into the country through the current account, inflationary pressure and the weakening of price competitiveness will ease. Economic policies will face fewer challenges in these respects. Of course, growth in foreign exchange reserves and other funds will slow down.

Obviously, the real exchange rate is a key matter for price competitiveness. Still its role is over-emphasized in Russian debates. One has to remember that no country, having even partially liberalised its trade and payments, is in a position to freely choose its real exchange rate, which translates into its price competitiveness. As the ruble has been much undervalued, its appreciation is inevitable. And this is not only a negative development. At the same time, as the production costs of domestic producers increase, as measured in foreign currency, the purchasing power of households and producers, also measured in foreign exchange, strengthens. The actual competitiveness problem of Russian produce is usually not in the price, but in quality, reliability, choice and marketing. The fact that imports swell in step with purchasing power means that products and services of higher quality than that available before enter the Russian market. That is a bitter pill for uncompetitive domestic producers, but a boon for Russian consumers of goods and services.

Increased Investment

Domestic consumption has risen at double digit rates for years now. Clearly, consumption is greatest in the metropolitan cities, but its growth is fastest in such traditional industrial regions as the Urals and the Volga basin. The most positive piece of news last year was that investment is joining consumption as a pillar of growth. It increased approximately 20 percent. Russia may well be entering an investment-based boom. This increase is excellent news, particularly for those who produce the investment goods that Russia will need. True enough, the volume of investment is not sufficient and it is excessively concentrated in a few branches of the economy, but still the investment growth has been welcome.

Balanced Budgets

A third major change is also visible. Russia has used its booming export revenue in a wise manner: it has paid foreign public debt, facilitated the monetization of the economy, accumulated funds, and increased public sector wages. The time has come, so it is per-

ceived, to increase public investment in activities ranging from infrastructure through health care and education to innovation. How well the money will be spent remains to be seen. In any case, pressure for expenditure is strong. At the same time, revenue will grow at a more modest pace. Current taxation of the resource sector will need loosening. The budget surplus will disappear. These factors imply that politics will make a comeback in Russia through the necessity of prioritizing competing goals in fiscal policy. The current balance of interests inside the power elites can no longer be maintained by allocating increased resources to everybody.

In past years, planners sought to balance the federal budget at an oil price of just over \$30. In 2008 this breakeven level is almost \$60. The budget will balance and even reach a surplus, but the results will be much less than was typically achieved recently. The only reason why a permanent surplus in the budget of an emerging economy would be justified is to use it to limit aggregate demand, thus trying to prevent overheating and spiraling inflation. Such a policy would be fully justified in the case of Russia, but then there is also no denying the need for increased expenditure. There is a political side involved as well. How long might it be possible to convince consumers of a need to accumulate surpluses, which would be used to finance the US double deficits through sovereign debt paper markets?

Beginning a New Era of Inflation

Though the change is a gradual one, these three factors – current account surpluses, greater investment, and a balanced budget – will economically separate the past eight years from the ones ahead. Though they have no immediate connection with ongoing political change, future economic historians will note that one era has now ended and another is approaching.

The key issue of debate in 2007 was inflation. Although planners had set the goal of 8.5 percent, the final result was 11.9 percent. The trend of declining inflation, evident since 1999 almost without deviation, has been broken. If the higher inflation persists, both businesses and households might change their expectations. The population consistently tells pollsters that inflation is the biggest economic risk they perceive. The bitter experiences of the 1990s are still alive in the popular memory. The nervousness of the decision-makers is easy to understand, remembering that a political transition with the potential for major instability is underway at the same time.

Putting in place an effective policy to reduce inflation is hampered by the fact that there are different views on the causes of higher inflation. Some argue that higher international food prices are to blame. Russia currently imports close to a third of its foodstuffs. Still,

the price reaction in Russia would seem to be more than in most countries, perhaps excluding China. That, on the other hand, hints at the impact of domestic incomes growing faster than agrarian production. Another view lays the blame on export revenue, which has been growing faster than expected. As public expenditure has been allowed to increase following revenue, the economy has been stimulated at exactly the wrong time, seen from the business cycle angle. This view is also not difficult to defend. Finally, a third viewpoint refers to a more general kind of overheating in the economy. Qualified labor is in very high demand, especially in the biggest cities. Wages are drifting upward. The same is also true of electricity and gas, not all of which is sold at the fixed centralized tariffs. Freer energy prices may be very high. Construction costs have spiraled. The existence of different, but credible, explanations for higher inflation hinders the formation of a consistent policy response. So far, policies have tended towards temporary solutions, which typically worsen rather than remedy the situation. Price controls, labeled as voluntary, are the prime example of this.

Increased Domestic Energy Prices

On a more positive note, it is worth underlining that the current inflation worries did not in the end lead to abandoning the November 2006 plan for increasing domestic tariffs for natural gas. The aim is to reach a net-back situation in 2011. Gas tariffs paid by industrial users should then equal those paid by European importers, minus export tariffs and transit costs. There are many reasons why domestic gas prices should be increased steeply. Even today, Russia is only able to fulfill its export commitments by importing increased volumes of gas from Central Asia, in particular Turkmenistan. At the same time, Turkmenistan also has other commitments, and doubts linger about its ability to increase production as needed. Russian production only increases slowly, and it is probable that the exploitation of Yamal and Shtokman, as well as the use of the Nordstream pipeline, will be at least postponed. Improved domestic energy efficiency, therefore, becomes a key issue, also for the energy supplies of the rest of Europe. Higher prices are the best incentive available. At the same time, Gazprom and other gas producers would also have an improved cash inflow, which they badly need to be able to finance the massive investment needed in the future.

It should be noted that the current plan for tariff increases only concerns industrial users. Household use of energy would remain very cheap. The plan also only concerns the centralized tariffs. An increasing share of gas will be sold at other prices that may be much higher. Furthermore, this year's hike of 25 percent does not

even cover past increases in extractive industry production costs. Finally, the above-mentioned net-back would only be reached in 2011 if the international gas prices would then be notably lower than what is now expected. Domestic prices should increase much faster than now planned, if production for the domestic markets is to be profitable and gas markets are liberalized. But then, raising prices so quickly would have an impact on domestic inflation.

Monetary Policy

Monetary policy has for years been based on a conceptually problematic use of twin goals: containing inflation and maintaining an (almost) stable exchange rate vis-a-vis a basket of currencies consisting of euros and dollars. It would have been possible to reach lower inflation by allowing ruble nominal exchange rate appreciation. But, as Russia has a tradition of a dual-currency economy, using both rubles and dollars, a stable nominal exchange rate has been good for anchoring economic expectations. It remains to be seen if a more flexible nominal exchange rate will be allowed.

This issue is important not only concerning inflation but also concerning capital flows. As noted above, there are good grounds to believe that the net capital inflow through the current account will drop, if not disappear. What then happens to the capital account? The officials naturally hope that Russia will become a major recipient of long-term and stable capital flows, like foreign direct investment (FDI). FDI would bring modern technologies, know-how, management skills, famous brands and, hopefully, produce to be exported. In 2007 FDI into Russia increased greatly, to 3.7 percent of GDP. The pessimists point out that this increase was exceptional, due to three large-scale ownership arrangements. Ongoing discussion about the so-called strategic sectors, where foreign ownership would be strictly limited, contributes to political uncertainty, reducing likely FDI flows in the future. In addition, quickly rising production costs and further ruble real appreciation will make Russia a more improbable platform for exports. Ruble real appreciation will basically come to an end in a few years, if the current account is balanced. The price competitiveness worries of Russian producers will ease, and import growth will slow down.

Russian Competitiveness?

Russia will never be able to compete with the Asian economies on the strength of low costs. True, labor is better educated than in other emerging economies, and according to much experience, good incentives lead to good performance. Qualified labor is, especially in the bigger cities, in low supply, and wages are increasing fast. This situation will further deteriorate in com-

ing years, as the number of 18-year old cohorts will decline in size to just about half of what they have been in recent years. Immigration could, in principle, compensate for the ongoing relatively slow decline in population were that alternative not marred by social and political problems. Even in principle, however, using immigration to compensate for the change in population age-structure and the decline in the numbers of young cohorts would be very difficult.

According to the largest study on the topic conducted in Russia, just 10–45% of companies across a variety of industrial sectors are competitive. More often than not, competitiveness is based on cost advantages, which will largely disappear. Typically, even the capital stock was inherited during the privatization stage, fundamentally at almost no cost. Future competitiveness requires sizable and costly investments. Making those investments will further increase production costs.

If Russia does not belong to low-cost Asia, is it part of high-technology Europe? Clearly, this is no petrostate. After all, it inherited a major research and development capacity, as well as a large industrial base, from the Soviet Union. There are instances of spear-heading global excellence. It would be a wonder if no competitive high value-added commodities could be produced on this basis. But so far, at least, measured by international patent filings, Russian R&D output is modest. In 2007, Russians submitted such filings on a scale that was one fourth that of Finland and one seventh that of Sweden. The distance from Germany and Japan, not to mention the United States, was simply huge. And there has been no growth in filings. Actually, after years of stagnation, the number of Russian filings declined by a fourth in 2007. Among the BRIC's, Russia compares in this respect with Brazil and India, not with China, which continuously had a major surge in filings.

In 2007, Sukhoi, the aviation manufacturer, introduced a short-haul passenger jet developed together with Boeing and other partners. It primarily challenges Brazilian and Canadian competitors. The competitiveness of this airplane, which should become the first new Russian high-tech export product, still remains unknown. But as one plane is expected to be priced at about \$30 million, large amounts of them must be sold to make a noticeable mark in Russian export statistics.

Another example concerns the automotive industry. Most international brands have established assem-

bly plants in Russia or are about to do so. For some of them, Russia is already the largest European market. As a result, most cars sold in Russia are either imported or assembled from foreign-made components. Altogether, Russia may well become the biggest European car market in a couple of years. But, at least for the time being, all foreign assembly plants – most of them in St. Petersburg or nearby – only produce for the Russian market. They are struggling to find qualified workers and Russian subcontractors. The industrial conflicts at the Ford plant in recent months may be a harbinger of things to come, not least because of the hefty wage rises reportedly gained there.

The aviation and automotive industries are important examples not least because they are a major part of the industrial backbone left by the Soviet Union. They had a key role both in military and civilian industries. Quite often also larger cities – with population ranging from 0.5 – 1 million inhabitants – are highly dependent on the jobs they provide.

So, Russia will not be a low-cost producing platform. Officials would like to see it as a high-tech producer. True enough, the research and development share of GDP is about 1.5 percent, not low for a country at this income level. It basically equals the share in China. The problem is that most of the financing comes from state sources, and much of it is used for military purposes. That is needed, if Russia wants to have a functioning military industry in the future. But this is not the way to produce a large number of marketable commodities.

Russian companies usually have no or almost no research and development effort. In addition, they are often inflexible, hierarchic, closed and unfocused. Betting on the so-called national champions hardly supports innovation. But there is an even deeper problem. How many Russian companies in fact should aim at innovation-based development? They are, after all, in most cases so far from the global technology frontier that imitation would still be the best way to enhance productivity. The various institutions that the state aims to develop – from top down – to support innovation, may under the circumstances be left without sufficient social demand. What is good for an economy at the global frontier, is not necessarily good for an economy in catching up.

About the author

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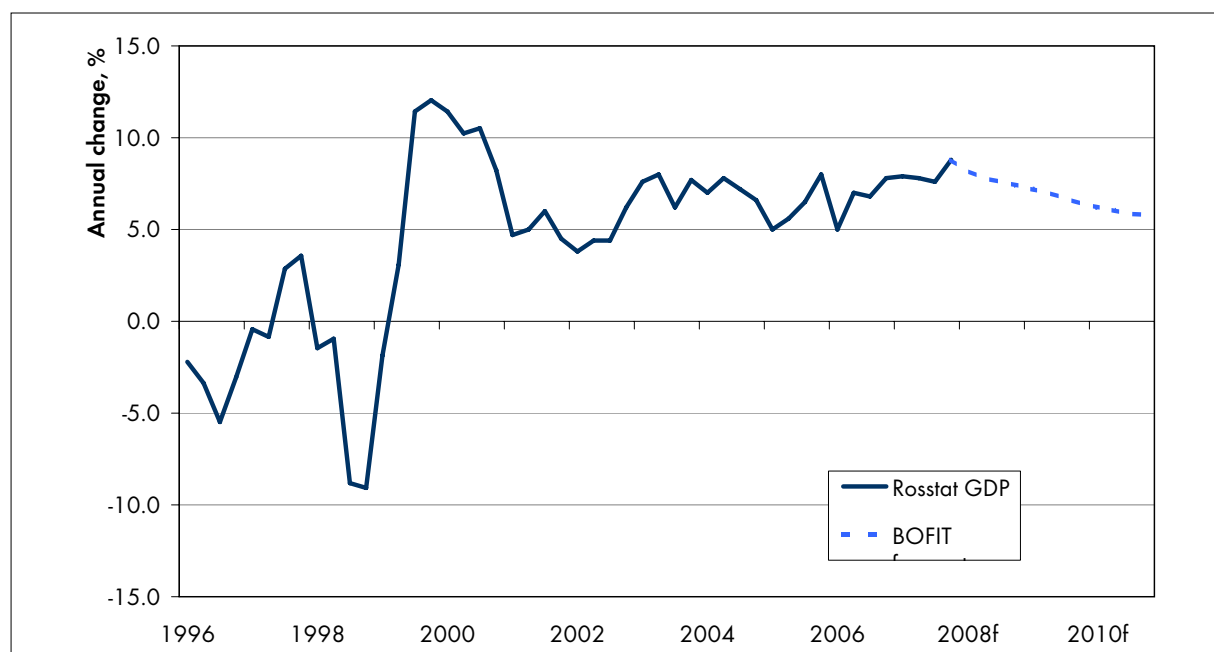
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Tables and Graphs

Macroeconomic Statistics

Yearly Changes in Russian GDP, 1996–2010



Source: BOFIT Forecast for Russia 2008–2010, p. 6; data for 1996–2007: Rosstat, for 2008–2010: BOFIT,
<http://www.bof.fi/NR/rdonlyres/258ED784-5359-4D4D-9566-B8187F8D99A5/0/brf108.pdf>

Macroeconomic Indicators

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	as of
GDP, %-change	-5.3	6.4	10	5.1	4.7	7.3	7.2	6.4	7.4	8.1		
Industrial production, %-change	-5.2	11	11.9	2.9	3.1	8.9	7.3	4	3.9	6.3	4.8	1/08
Fixed investments, %-change	-12	5.3	17.4	10	2.8	12.5	11.7	10.7	13.5	21.1	19	1/08
Exports, \$ billion	74.4	75.6	105	101.9	107.3	135.9	183.2	243.6	304.5	355.2		
Imports, \$ billion	58	39.5	44.9	53.8	61	76.1	97.4	125.3	163.9	223.1		
Current account, \$ billion	0.2	24.6	46.8	33.9	29.1	35.4	59.5	84.4	96.1	54.5		1–9/07
Unemployment, % (end of period)	13.2	12.4	9.9	8.7	9	8.7	7.6	7.7	6.9	6.1	5.8	1/08
Population, mln persons, Jan. 1st	147.8	147.5	146.9	146.3	145.6	145	144.2	143.5	142.8	142.2	142	

1) New methodology from 1.1.2005. figures for 2001–2004 revised. not comparable with previous years.

Sources: BOFIT Russia Statistics http://www.bof.fi/bofit_en/seuranta/venajatilastot/, compiled from data from Rosstat and CBR.

Fiscal Indicators for Federal Government
(% of GDP, unless otherwise indicated; end-year figures for debt)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	as of
Revenues ¹	11.4	12.6	15.4	17.8	20.3	19.5	20.1	23.7	23.4	23.6 ^e		
Expenditures ¹	17.4	16.8	14.6	14.8	19	17.8	15.8	16.3	16	18.1 ^e		
Balance	-6	-4.2	0.8	3	1.4	1.7	4.4	7.5	7.4	5.4 ^e		
External debt		66.8	44.5	33.3	27.7	22.4	16.1	9.2	4.4	3.1		9/07
External debt, \$ bn		130.8	115.5	102	95.7	96.9	95.7	70.1	43.2	38.1		9/07
Stabilisation fund, \$ bn							18.9	43	89.1	156.8	157.4	1/08

1) Since 2002 part of the unified social tax is included in the federal budget.

e) Preliminary figure.

Sources: BOFIT Russia Statistics http://www.bof.fi/bofit_en/seuranta/venajatilastot/, with data for the budget: IMF 1998–2000, Rosstat 2001–2005, MinFin 2006; for debt: CBR; for the stabilisation fund: MinFin.

Monetary Indicators

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	as of
Inflation (CPI), 12-month, % ¹	84.4	36.5	20.2	18.6	15.1	12	11.7	10.9	9	11.9	12.7	2/08
M2, 12-month growth, % ¹	21.3	57.5	61.5	39.7	32.4	50.5	35.8	36.8	48.8	47.5	48.4	1/08
Average wage, \$ ²	108	62	79	111	142	180	237	301	408	550	615	1/08
Deposit interest rate, % ¹	17.1	13.7	6.5	4.9	5	4.5	3.8	4	4	5.2		
Lending in- terest rate, % ¹	41.8	39.7	24.4	17.9	15.7	13	11.4	10.7	10.5	10.8		
Forex reserves, \$ bn (incl. gold)	12.2	12.5	27.9	36.6	47.8	76.9	124.5	168.4	303	476.4	490.7	2/08
RUB/USD exchange rate ¹	20.65	27	28.16	30.14	31.78	29.45	27.75	28.78	26.33	24.55	24.12	2/08
RUB/EUR exchange rate ¹		27.23	26.14	26.49	33.11	36.82	37.81	33.94	34.7	35.93	36.41	2/08

1) End of period

2) Period average

Sources: BOFIT Russia Statistics http://www.bof.fi/bofit_en/seuranta/venajatilastot/, with data from Rosstat, CBR.

Analysis

How Sustainable Is Russia's Energy Power?

By Philip Hanson, London

Abstract

Russia has extensive resources, but will it be able to continue production at current levels and maintain its rapid growth? This article points to several trends that raise concern.

Russia's Resource-Rich Economy

The Russian Federation owes much of its recent growth and much of its rediscovered influence in the world to oil. What are the prospects of its hydrocarbon reserves continuing to support that growth and that influence in the longer run?

Those resources are not about to melt away. Russia's proved reserves of natural gas were 26.3 percent of the world total at the end of 2006, and are the largest held by any country. Its proved oil reserves, at 6.6 percent of the global aggregate, are less striking, but still put Russia in seventh position among oil producers (BP 2007). If there is any doubt at all about the continuing role of those ample resources, it stems from two sources. Will Russia's oil and gas producers be able to continue to increase – or even to maintain – production levels during the next decade or so? And, even if they can, is a Russia that continues to rely heavily on oil and gas exports likely to continue to grow fast?

These are the questions to which this article is addressed. The next section is a description of the nature and scale of current Russian "energy dependence." Then we consider the prospects for future output and export levels. After that we review the main risks attending future Russian growth.

The main conclusions are that hydrocarbons output growth is not secure over the next decade and will at best be slow; that gas export volumes, in particular, could well stagnate; that symptoms of the so-called "Dutch disease" can already be seen; and that Russian policy-makers are dangerously complacent both about future world oil prices and about the prospects of a state-led "innovation" strategy for diversifying the economy.

Russia's Dependence on Oil and Gas

Oil and gas are greatly important to the Russian economy, as Graph 1 (on p. 11) shows. Revenues from the hydrocarbons sector contributed around half of the income of the federal budget in 2006. The oil price is important to this relationship because the resource-tax and export-duty rates rise with the world oil price.

Oil, oil products and gas contribute about three-fifths of aggregate export earnings (59 percent in 2007 – www.customs.ru/ru/stats/stats/trfgoods/popup.php?id286=376). If coal and metals are added, the overall natural resource share of exports in recent years has been on the order of four-fifths. Within hydrocarbons exports, crude oil makes up somewhat over a half by value, oil products about a quarter and natural gas only a fifth.

Russian gas exports are nonetheless newsworthy because of the nature of the gas market. Russian gas is supplied almost entirely by pipeline. Liquefied natural gas (LNG) supplies from Sakhalin to Asia-Pacific markets are only just beginning. Pipelines entail segmented markets, potential transit problems and, in general, little flexibility, so that any disruption in supplies from producer A affects customer B and is not diffused across a wider gas "market." In most places, indeed, there is no such thing as a gas market. Gas supplies are dominated by long-term bilateral contracts.

Thus Russian gas exports are far less important financially to Russia than the trade in its oil, but they are a more sensitive issue for the countries that receive them.

The contribution of oil and gas to GDP is around 25–30 percent at present, if value added in hydrocarbons and GDP are compared at current (ruble) prices. (see Graph 1 on p. 11)

Russia is not a typical petro-state. The oil and gas sector employs less than 2 percent of the workforce. This share is less than the proportion employed on the railways. Nor do oil and gas extraction and processing contribute greatly to demands on the output of other sectors (Nakamura 2006). This disconnect does not mean that Russia is immune to the complications associated with the so-called natural resource curse. But it does mean that there is a lot of activity in the economy that is not directly tied to oil and gas.

When commentators describe recent Russian economic growth as "oil-fuelled," however, they are quite right. When oil prices (and hence oil-product and gas

prices) rise, Russian export earnings rise and this wealth feeds into business profits, government revenue and personal income, in turn fuelling investment, government spending and household consumption, raising demand for the output of the rest of the Russian economy (and for imports), and thus indirectly boosting production as a whole.

Therefore Russian GDP is sensitive to the international price of oil. A sustained fall in the oil price would slow and even, if large enough, reverse Russian economic growth. The Institute of the Economy in Transition estimated that a fall to \$25/barrel in the Brent oil price between 2005 and 2009 would generate a fall in GDP in 2009 (Gaidar 2007, p. 255). A more recent exercise by Merrill Lynch analysts concludes that a fall to \$50/barrel would (other things equal, and against the background of 8.1 percent growth in 2007) lower Russian GDP growth to 5.3 percent (*Vedomosti* 3 March 2008).

Lately oil prices have been in a historically high range, and rising. This increase has masked the fact that Russian oil production and export volume have slowed markedly from 2004. Oil output growth was 11 percent year on year in 2003, and has since fallen steadily to 2.1 percent in 2007 (Rosstat data). The number of new fields opened has fallen alongside this deceleration of output (Kryukov and Borkova 2008). Export volume growth has slowed in a similar fashion, as Graph 2 (on p. 11) illustrates. Therefore recent earnings growth has come mainly from price rises whereas in 2000–04 it was driven by both price rises and volume growth.

Can Russia Maintain Oil and Gas Export Growth?

So far as geology is concerned, Russian exports of oil and gas could grow quite strongly for a long time to come. So far as practical possibilities in the next ten years are concerned, prospects are less rosy. Gas output growth, dominated by the state-controlled near-monopoly, Gazprom, has been sluggish for decades. Oil output growth, as has just been noted, slowed more recently as state influence on the industry was re-asserted, with high officials using administrative pressure to acquire previously private assets, while the government increased the tax burden.

The Russian government's draft energy strategy to 2030 accepts that slow growth will continue. Its more optimistic (of two) scenarios has gas production growing at an average annual rate of 0.9 percent, 2005–2030, and oil production growing at only 0.8 percent p.a. (Minpromenergo 2007). These projections at no point show output falling, across any of the five-year periods for which the projections are shown. Both

the favorable and the “conservative” scenario also show total exports (including re-exported Central Asian gas) growing, albeit slowly. It is nonetheless striking that the Russian authorities apparently accept that the recent slow growth will continue – indeed, that it will become even more sluggish. World hydrocarbon demand is widely expected to grow over this period at more than 1 percent a year.

The draft strategy makes two key assumptions about the future: the authors expect everyone else's hydrocarbons output to stagnate, and they expect high prices to continue. The Russian planners project the average Urals price in 2030 at either \$60/b (conservative scenario) or \$70/b (favorable scenario). This looks dangerously complacent.

Gas exports rise, in the favorable scenario, from 203 billion cubic meters (bcm) in 2005 to 275 bcm in 2030. This expansion is made possible, despite the slow growth of output, by

- Increasing the import and re-export of Central Asian gas;
- Extensive substitution of nuclear and coal for gas in Russian power stations, releasing more gas for export;
- Increased domestic energy efficiency through large increases in domestic electricity and gas prices (initially to business users and then to households), thereby also releasing more gas for export.

For all of this to happen, Russian control of a large share of Central Asian gas needs to be maintained, a considerable number of nuclear power stations need to be built rather fast, fields in Yamal need to be brought on stream soon, the offshore Shtokman field has to be producing in 2014, the East Siberian Kovykta field needs to do likewise, and gas prices to industrial users need to be raised about three-fold in 2011.

For gas exports to Europe, in particular, to be maintained requires more than this. The Eastern Gas Program of the same ministry (www.minprom.gov.ru/activity/energy/news/329) envisages gas exports to the Asia-Pacific region at 78 bcm in 2030. That implies a drop in the total of gas exports to other CIS countries, Turkey and Europe between 2005 and 2030 – even if all the output and total export targets are met. It is probably unfair to assume that any ministry anywhere does joined-up planning; but at the very least the basis for maintaining gas export levels to Europe looks flimsy.

Will Oil and Gas Keep Russia Growing Fast?

These worries about Russian export capability in the medium and long term could (just about) be misplaced. Even if they are, the question remains whether Russia's oil-fuelled economy can continue to grow fast.

There are several grounds for skepticism so far as Russia is concerned, over the next few years.

The oil price might, despite conventional wisdom to the contrary, fall significantly and for a substantial period. Slowdown or recession in the West is one likely influence. More speculatively, and looking further ahead, it may be noted that it is precisely when everyone expects the oil price to stay high long-term that there is an incentive for business to invest in energy-saving equipment.

The Russian non-oil, non-gas, non-metals economy is vulnerable to the continuing rise in the real effective exchange rate of the ruble, reducing its competitiveness. This “Dutch disease” effect is one element in the natural resource curse. Already there is evidence that, product-group by product-group, imports have been rising faster than domestic production (Ollus and Barisitz 2007).

The spare capacity that assisted recovery growth after the big drop in output in 1989–99 has been used up.

The working-age population began to fall in 2007.

The pre-requisites for Russia to develop successfully as a knowledge economy (which is what the government is aiming at) are weaker than is widely believed (Cooper 2006). Therefore economic diversification will

probably be harder than the Russian leadership claims to believe.

Conclusions

Those Russian policy wonks who do national economic projections in the Ministry of Economic Development and Trade see Russian growth as slowing if the country continues to rely on oil and gas (Elvira Naibullina interview, *Vremya novostei*, 29 February 2008). Those who plan developments in the oil and gas sector project very slow growth in that sector. They show exports of gas increasing long-term, but only under a number of heroic assumptions. Even then they appear to be projecting, implicitly, a fall in gas exports westwards over the next 22 years.

The Russian economy is probably not about to implode, but the basis on which it has enjoyed rapid growth for the past nine years does not look secure over the next decade. Europe’s problem with Russia as an energy supplier, particularly of gas, is not that “Moscow” will “turn off the tap” for the sake of some political gain or other. Short of a near-war situation, that is very unlikely. Russia needs the money. It is not Russian political will that is in doubt; it is Russia’s ability to maintain supplies.

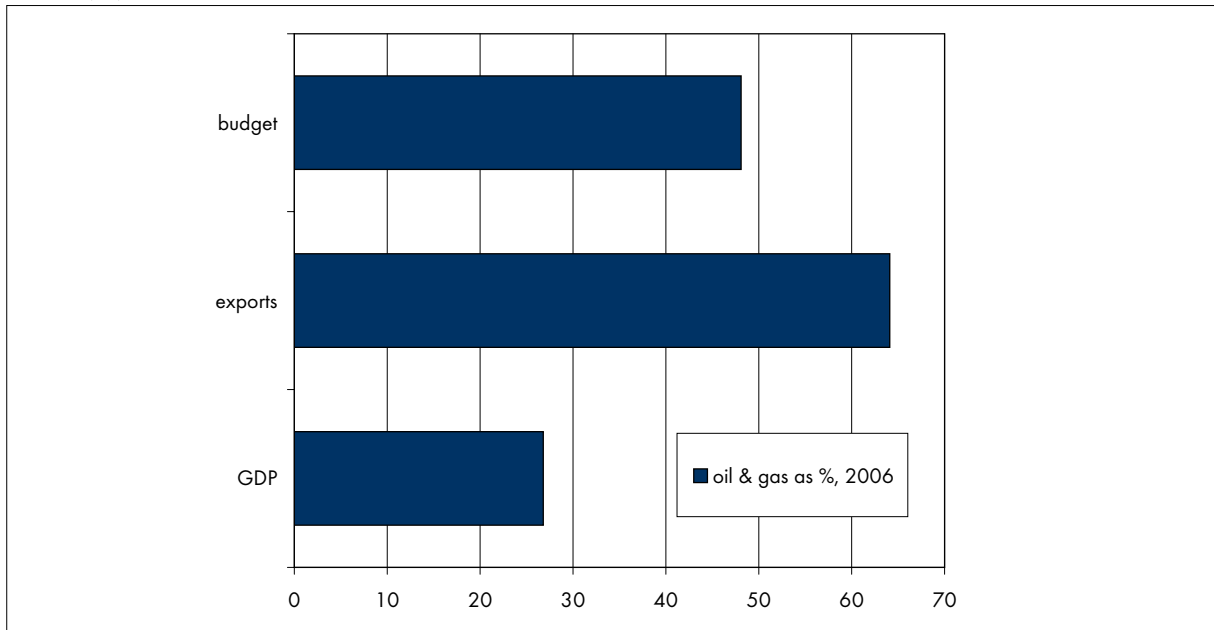
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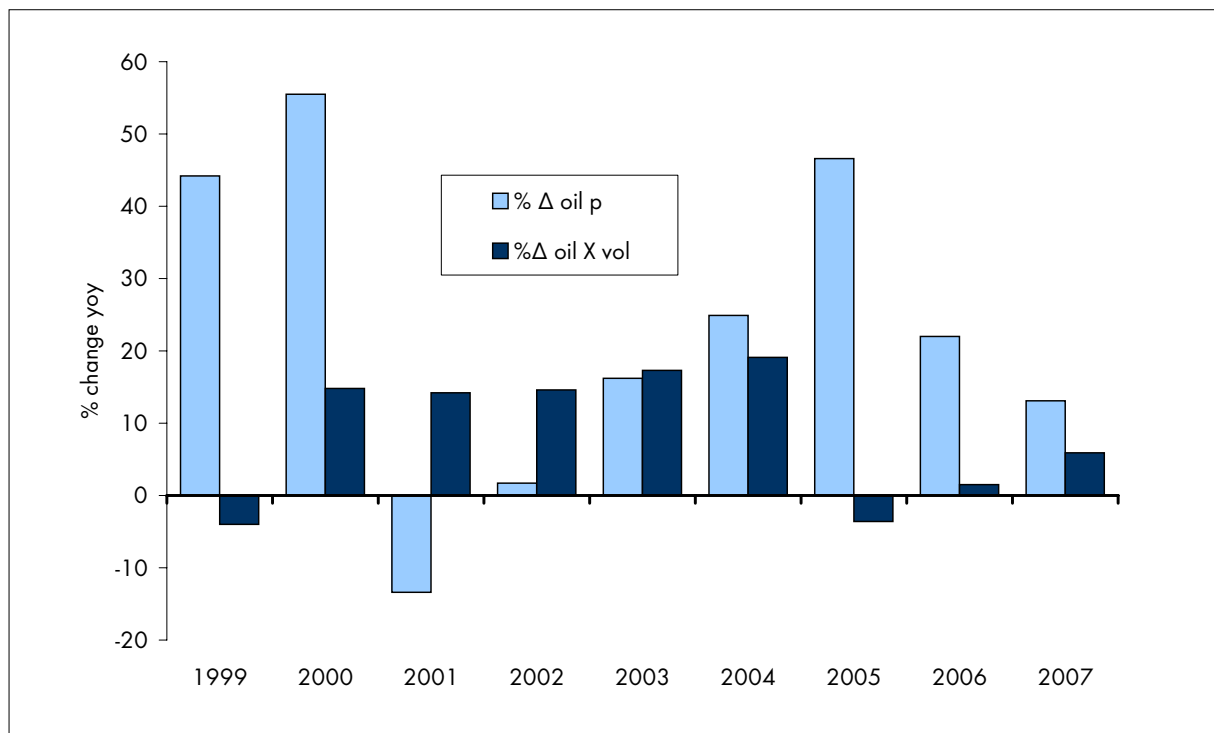
Graph 1: Oil and Gas Sector's Share in Russian Federal Budget Revenue, Exports and GDP, 2006 (%)



Sources: Central Bank of Russia; Aleksei Kudrin lecture at Higher School of Economics, 21 February 2007 (GDP share, presumably value added share of GDP in current prices).

Note: The Economist of 1 March 2008 quotes an estimate of 31.6 percent for the oil and gas share of GDP in 2007, from Andrei Illarionov.

Graph 2: From 2004, Oil Price Rises, Not Volume Growth, Drove Earnings: Year-On-Year Changes in Oil + Oil Products Export Volume and Average Urals Oil Price Per Barrel (%)



Sources: Russian Customs Service (www.customs.ru) for tonnage figures; Troika Dialog for average annual price.

Documentation

Russia in Economy-related Country Rankings

Part 1: Economic System	
Index of Economic Freedom	13
Global Competitiveness Index (GCI)	15
Part 2: Doing Business	
Ease of Doing Business	16
Worldwide Governance Indicators – Regulation	19
Business Competitiveness Index (BCI)	20
Index of Economic Freedom – Business Freedom	21
Part 3: Corruption	
Corruption Perception Index	22
Worldwide Governance Indicators – Control of Corruption	23
Part 4: State Budget Transparency	
Open Budget Index	24
Part 5: Socioeconomic Level of Development	
Human Development Index	25

List of Graphs

Graph 1: Index of Economic Freedom: Index Values and Rankings	13
Graph 2: Index of Economic Freedom: 1995 – 2008	14
Graph 3: Global Competitiveness Index: Index Values and Rankings 2008	15
Graph 4: Ease of Doing Business. Overall Rank 2008	17
Graph 5: Worldwide Governance Indicators – Regulation: Index Values 2005	19
Graph 6: Worldwide Governance Indicators – Regulation: 1996 – 2006	20
Graph 7: Business Competitiveness Index: Rankings for 2007	21
Graph 8: Corruption Perception Index 2006: Index Value and Rank	22
Graph 10: Worldwide Governance Indicators – Corruption Control: Index Values 2006	23
Graph 11: Worldwide Governance Indicators – Corruption Control: 1996–2005	24
Graph 12: Open Budget Index 2006	25
Graph 13: Human Development Index: Index Value and Ranks 2005	25
Graph 14: Human Development Index: 1980 – 2005	26

List of Tables

Table 1: Index of Economic Freedom: Individual Values: Selected Countries 2008	14
Table 2: Global Competitiveness Index: Individual Values. Selected countries 2007–2008	16
Table 3: Ease of Doing Business: Individual Indicators 2008	17
Table 4: Index of Economic Freedom: Business Freedom 1995 – 2008	21

Note: Table of contents is clickable

Part 1: Economic System

Index of Economic Freedom

Prepared by: The Heritage Foundation and Wall Street Journal (USA)

Established: 1995

Frequency: Annual

The data refer to the previous respective year.

Covered countries: 163

URL: www.heritage.org/research/features/index/index.cfm

Brief description:

The 2007 methodology has been revised to provide an even clearer picture of economic freedom. The index measures 10 specific factors and averages them equally into a total score. Each one of the 10 freedoms is graded using a scale from 0 to 100, where 100 represents the maximum freedom. A score of 100 signifies an economic environment or set of policies that is most conducive to economic freedom. The ten component freedoms are: Business, Trade and Fiscal Freedom, Freedom from Government, Monetary, Investment and Financial Freedom, Property rights, Freedom from Corruption, Labor Freedom.

Graph 1: Index of Economic Freedom: Index Values and Rankings

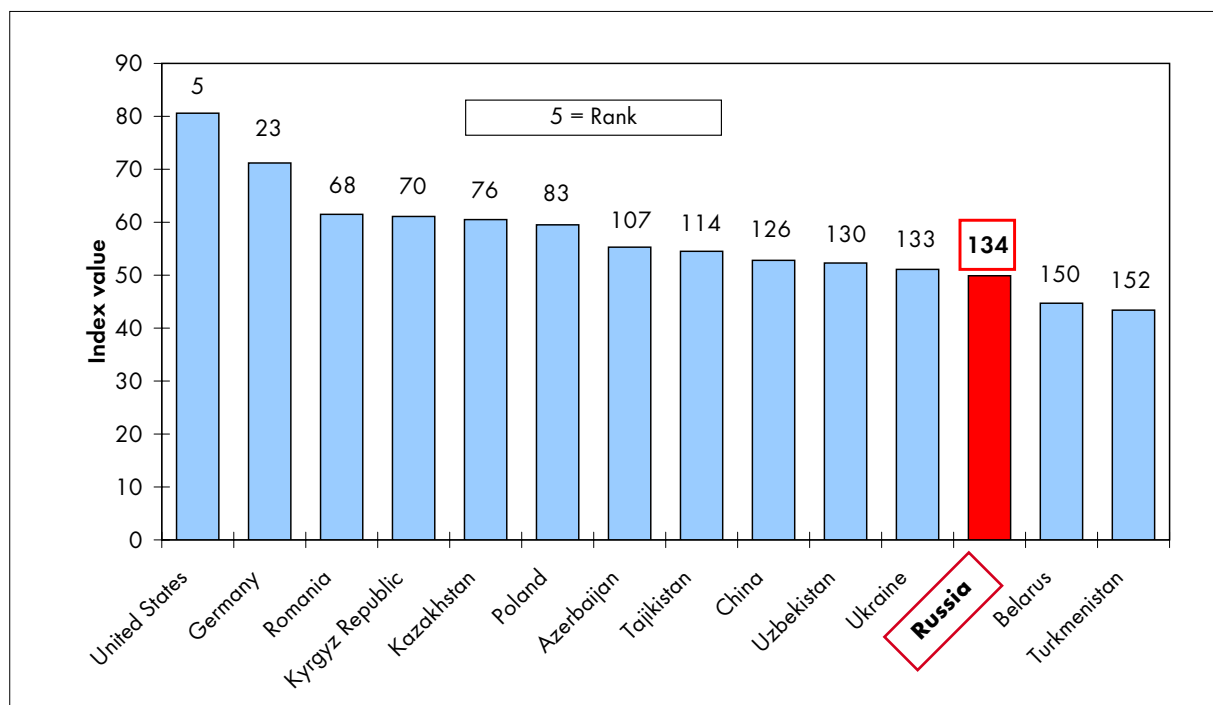
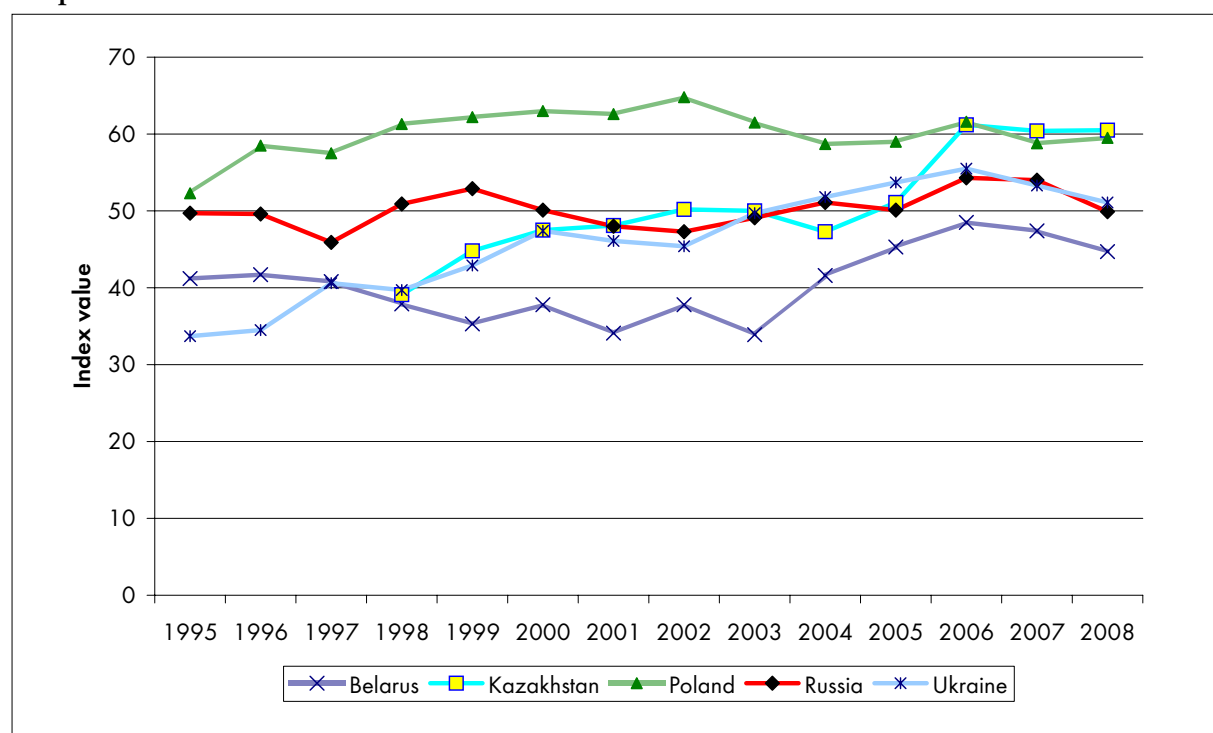


Table 1: Index of Economic Freedom: Individual Values: Selected Countries 2008

	USA	Germany	Kazakhstan	Romania	Poland	China	Ukraine	Russia	Belarus
Business Freedom	91.7	88.9	56.5	74.1	54.1	50.0	44.3	52.8	58.6
Trade Freedom	86.8	86.0	86.2	86.0	86.0	70.2	82.2	44.2	52.2
Fiscal Freedom	68.3	58.4	80.1	85.6	68.6	66.4	79.0	79.2	81.0
Freedom from Government	59.8	34.0	84.7	70.8	43.5	89.7	43.0	69.5	55.5
Monetary Freedom	83.7	81.4	71.9	72.5	82.3	76.5	69.9	64.4	66.2
Investment Freedom	80	80	30	60	60	30	30	30	20
Financial Freedom	80	60	60	50	60	30	50	40	10
Property Rights	90	90	30	30	50	20	30	30	20
Freedom from Corruption	73	80	26	31	37	33	28	25	21
Labor Freedom	92.3	52.8	80.0	55.3	53.5	62.4	54.3	64.2	62.0
<i>All 10 Freedoms</i>	<i>80.6</i>	<i>71.2</i>	<i>60.5</i>	<i>61.5</i>	<i>59.5</i>	<i>52.8</i>	<i>51.1</i>	<i>49.9</i>	<i>44.7</i>

Graph 2: Index of Economic Freedom: 1995 – 2008



Global Competitiveness Index (GCI)

Prepared by: World Economic Forum

Established: 2005 (2001 – 2004: Growth Competitive Index)

Frequency: Annual

The data refer to the respective previous year.

Covered countries: 131

URL: <http://www3.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.html>

Brief description:

The GCI assesses the competitiveness of nations and provides a holistic overview of factors that are critical to driving productivity and competitiveness. These factors are grouped into nine pillars with 90 indicators: institutions (property rights, ethics and corruption, undue influence, government inefficiency, security, accountability), infrastructure (infrastructure quality, transport, energy, telecommunications), macro economy, health and primary education, higher education and training, market efficiency (competition, distortions, market size, flexibility and efficiency of labor market, sophistication and openness of financial markets), technological readiness, business sophistication, innovation.

The rankings are drawn from a combination of publicly available hard data and the results of the Executive Opinion Survey, a comprehensive annual survey conducted by the World Economic Forum, together with its network of Partner Institutions. Over 11.000 business leaders were polled in a record 125 economies worldwide. The survey questionnaire is designed to capture a broad range of factors affecting an economy's business climate that are critical determinants of sustained economic growth.

Graph 3: Global Competitiveness Index: Index Values and Rankings 2008

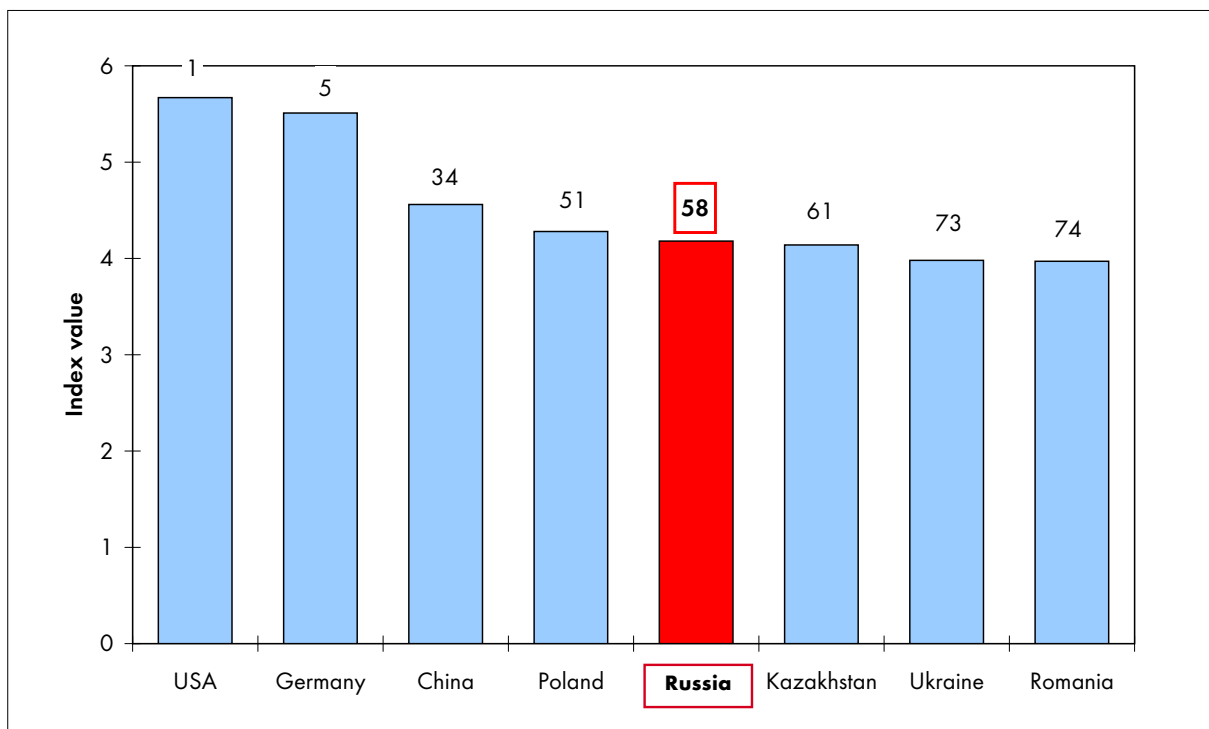


Table 2: Global Competitiveness Index: Individual Values. Selected countries 2007–2008

	USA	Germany	China	Poland	Russia	Kazakhstan	Ukraine	Romania
Institutions	5.41	5.82	4.80	4.41	4.36	4.40	4.06	4.07
Infrastructure	4.76	5.83	3.71	3.65	3.10	3.67	3.12	3.44
Macro economy	6.10	6.65	3.97	3.03	3.48	3.22	3.09	2.57
Health and primary education	4.78	4.93	6.03	5.01	5.35	5.63	4.67	4.64
<i>1st sub-index: Basic Requirements</i>	<i>6.00</i>	<i>5.88</i>	<i>5.49</i>	<i>5.96</i>	<i>5.51</i>	<i>5.09</i>	<i>5.37</i>	<i>5.62</i>
Higher education and training	5.77	5.28	4.26	4.30	4.19	4.03	3.93	3.98
Market efficiency	5.68	5.33	3.77	4.62	4.33	4.11	4.20	4.14
Technological readiness	5.32	5.29	4.26	4.12	3.94	4.20	3.74	4.04
<i>2nd sub-index: Efficiency Enhancers</i>	<i>5.43</i>	<i>5.05</i>	<i>3.00</i>	<i>3.44</i>	<i>3.03</i>	<i>2.98</i>	<i>2.75</i>	<i>3.29</i>
Business sophistication	5.68	5.70	4.06	3.66	3.50	3.43	3.52	3.54
Innovation	5.60	5.93	4.65	4.04	3.70	3.76	3.83	3.99
<i>3rd sub-index: Innovation Factors</i>	<i>5.77</i>	<i>5.46</i>	<i>3.48</i>	<i>3.28</i>	<i>3.31</i>	<i>3.10</i>	<i>3.22</i>	<i>3.09</i>
<i>Total score</i>	<i>5.67</i>	<i>5.51</i>	<i>4.56</i>	<i>4.28</i>	<i>4.18</i>	<i>4.14</i>	<i>3.98</i>	<i>3.97</i>

Part 2: Doing Business

Ease of Doing Business

Prepared by: Worldbank

Established: 2003

Frequency: Annual

The data refer to the respective previous year.

Covered countries: 175

URL: www.doingbusiness.org

Brief description:

The ease of doing business index ranks economies from 1 to 175. The index is calculated as the ranking on the simple average of country percentile rankings on each of the 10 topics covered in Doing Business 2007. The survey uses a simple business case to ensure comparability across countries and over time – with assumptions about the legal form of the business, its size, its location and the nature of its operations. Surveys are administered through more than 5,000 local experts, including lawyers, business consultants, accountants, government officials and other professionals routinely administering or advising on legal and regulatory requirements.

Graph 4: Ease of Doing Business. Overall Rank 2008

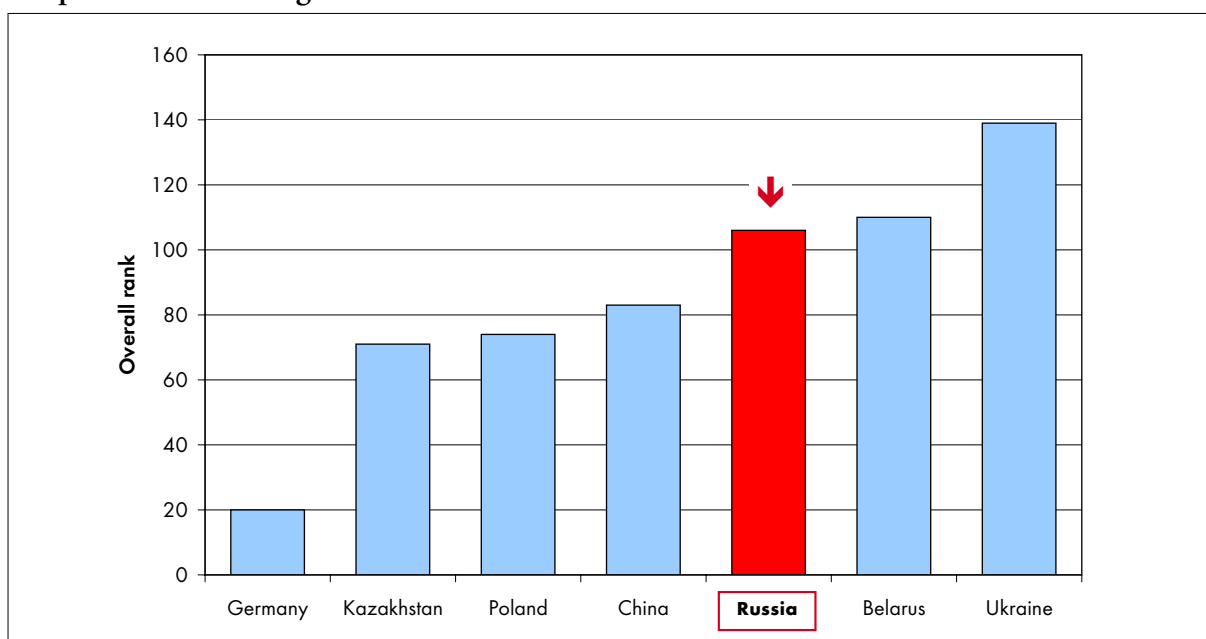


Table 3: Ease of Doing Business: Individual Indicators 2008

	Russia	Ukraine	Belarus	Kaza- khstan	China	Poland	Germany
Criterion							
Starting a Business							
International ranking	50	109	119	57	135	129	71
Procedures (number)	8	10	10	8	13	10	9
Time (days)	29	27	48	21	35	31	18
Cost (% of income per capita)	3.7%	7.8%	8.8	7.6%	8.4%	21.2%	5.7%
Minimum capital (% of income per capita)	3.2%	203.1%	29.7	22.9%	190.2%	196.8%	42.8%
Dealing with Licenses							
International ranking	177	174	94	173	175	156	16
Procedures (number)	54	29	17	38	37	30	12
Time (days)	704	429	350	231	336	308	100
Cost (% of income per capita)	3,788.4%	668.5%	60.9%	2,129.9%	840.2%	159.8%	63.1%
Employing Workers							
International ranking	101	102	43	22	86	78	137
Difficulty of Hiring Index	33	44	0	0	11	11	33
Rigidity of Hours Index	60	60	40	40	20	60	60
Difficulty of Firing Index	40	30	40	20	40	40	40
Rigidity of Employment Index	44	45	27	20	24	37	44
Non-wage labor cost (% of salary)	31%	38%	0,39	14%	44%	21%	19%
Firing costs (weeks of wages)	17	13	39	9	91	13	69
Registering Property							
International ranking	45	138	94	72	29	81	47
Procedures (number)	6	10	7	8	4	6	4
Time (days)	52	93	231	52	29	197	40
Cost (% of property value)	0.3%	3.3%	0.1%	0.9%	3.6%	0.5%	5.2%

Table 3: Ease of Doing Business: Individual Indicators 2008 (continued)

	Russia	Ukraine	Belarus	Kaza- khstan	China	Poland	Germany
Criterion							
Getting Credit							
International ranking	84	68	115	48	84	68	3
Legal Rights Index	3	8	2	5	3	4	8
Credit Information Index	4	0	3	4	4	4	6
Public registry coverage (% adults)	0.0%	0.0%	*	0.0%	49.2%	0.0%	0.7%
Private bureau coverage (% adults)	4.4%	0.0%	0.0%	13.7%	0.0%	51.5%	98.1%
Protecting Investors							
International ranking	83	141	98	51	83	33	83
Disclosure Index (scale of 0–10)	6	1	5	7	10	7	5
Director Liability Index (scale of 0–10)	2	3	1	1	1	2	5
Shareholder Suits Index (scale of 0–10)	7	3.7	8	9	4	9	5
Investor Protection Index (scale of 0–10)	5.0	177	4.7	5.7	5.0	6.0	5.0
Paying Taxes							
International ranking	130	99	178	44	168	125	67
Payments (number per year)	22	2,085	124	9	35	41	16
Time (hours per year)	448	39490	1,188	271	872	418	196
Profit tax (%)	51.4%	57.3%	144.4%	36.7%	73.9%	38.4%	50.8%
Trading Across Borders							
International ranking	155	120	137	178	42	40	10
Documents for export (number)	8	6	8	12	7	5	4
Time for export (days)	36	31	24	89	21	17	7
Cost to export (US\$ per container)	2,050	1,045	1,672	2,73	390	834	740
Documents for import (number)	13	10	8	14	6	5	5
Time for import (days)	36	39	29	76	24	27	7
Cost to import (US\$ per container)	2,05	1,065	1,672	2,78	430	834	765
Enforcing Contracts							
International ranking	19	46	16	28	20	68	15
Procedures (number)	37	30	28	38	35	38	33
Time (days)	281	354	225	230	406	830	394
Cost (% of debt)	13.4%	41.5%	23.4%	22.0%	8.8%	10.0%	11.8%
Closing a Business							
International ranking	80	140	69	100	57	88	29
Time (years)	3.8	2.9	5.8	3.3	1.7	3.0	1.2
Cost (% of estate)	0.09	42	22	0.18	0.22	0.22	0.08
Recovery rate (cents on the dollar)	29.0	9.1	33.2	23.4	35.9	27.8	53.4

Worldwide Governance Indicators – Regulation

Prepared by: Worldbank

Established: 1996

Frequency: Annual, between 1996 and 2002 every two years.

The data refer to the corresponding year of evaluation and are published one year later.

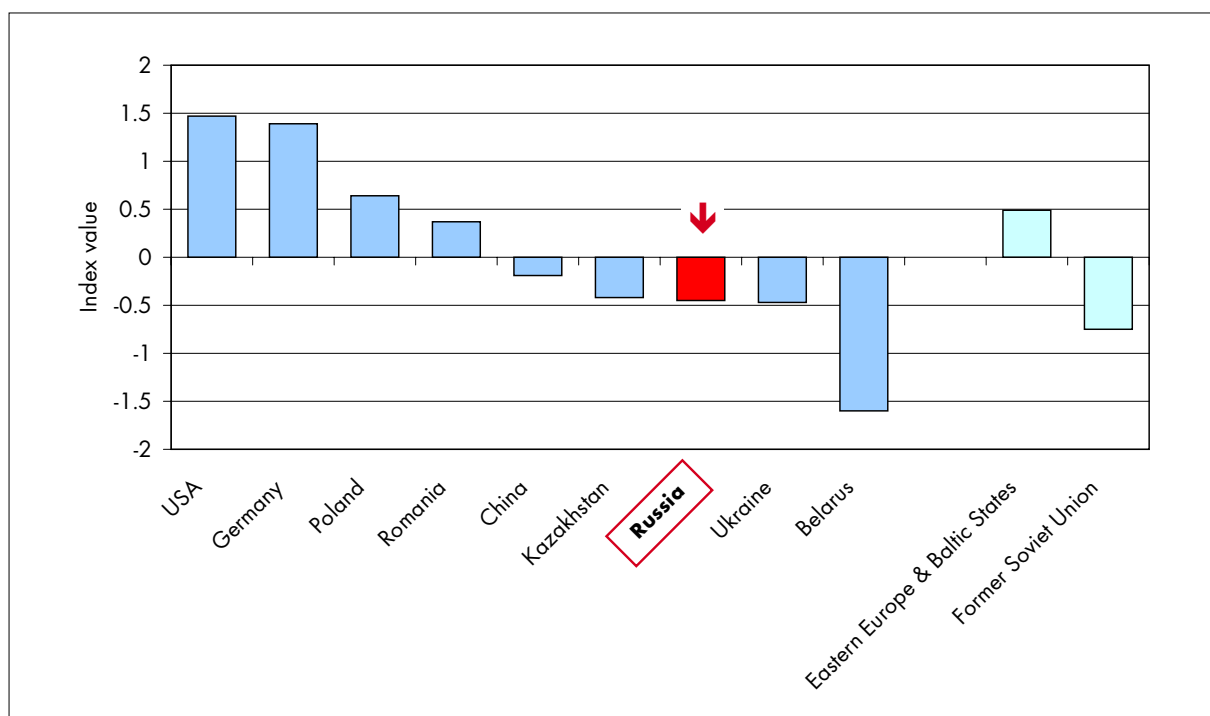
Covered countries: 212

URL: www.worldbank.org/wbi/governance/govdata/

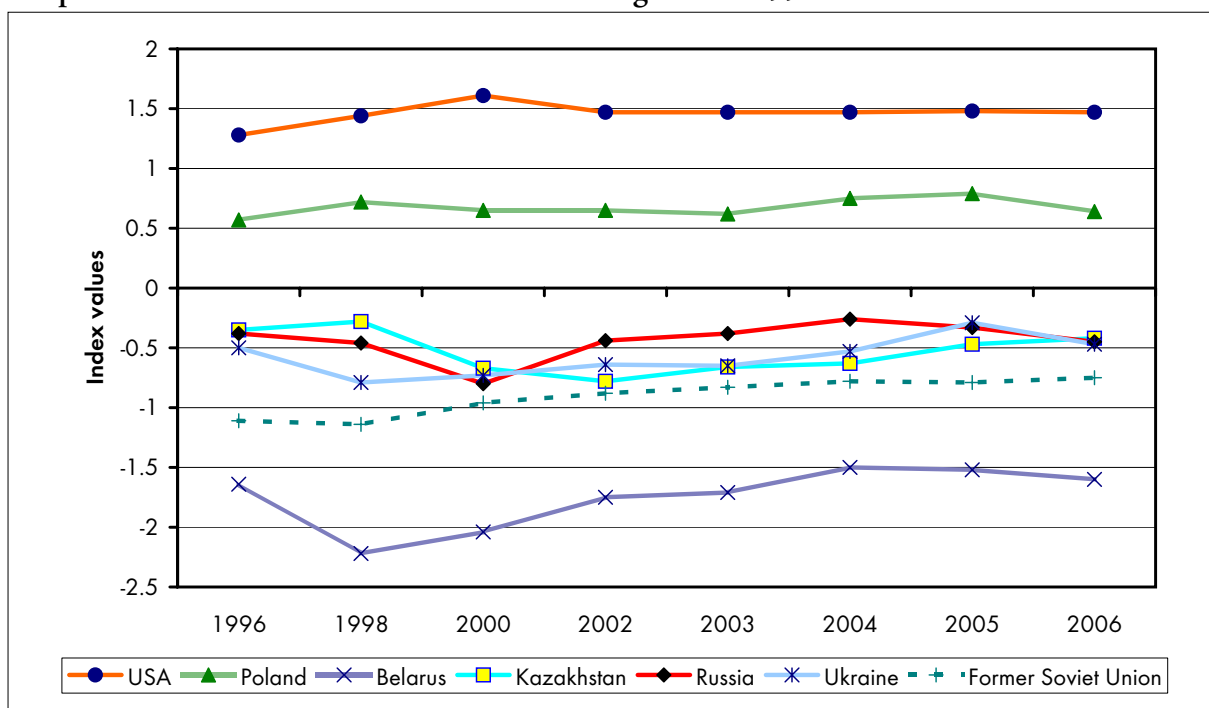
Brief description:

This index covers 212 countries and territories and measures six dimensions of governance since 1996 until end-2005: voice and accountability political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption. The indicators are based on several hundred individual variables measuring perceptions of governance, drawn from 31 separate data sources constructed by 25 different organizations. Regulatory quality describes the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. The relevant index value shows the average of all relevant sources according to their reliability. Virtually all scores lie between -2.5 and 2.5, with higher scores corresponding to better outcomes.

Graph 5: Worldwide Governance Indicators – Regulation: Index Values 2005



Graph 6: Worldwide Governance Indicators – Regulation: 1996 – 2006



Business Competitiveness Index (BCI)

Prepared by: World Economic Forum

Established: 2001

Frequency: Annual

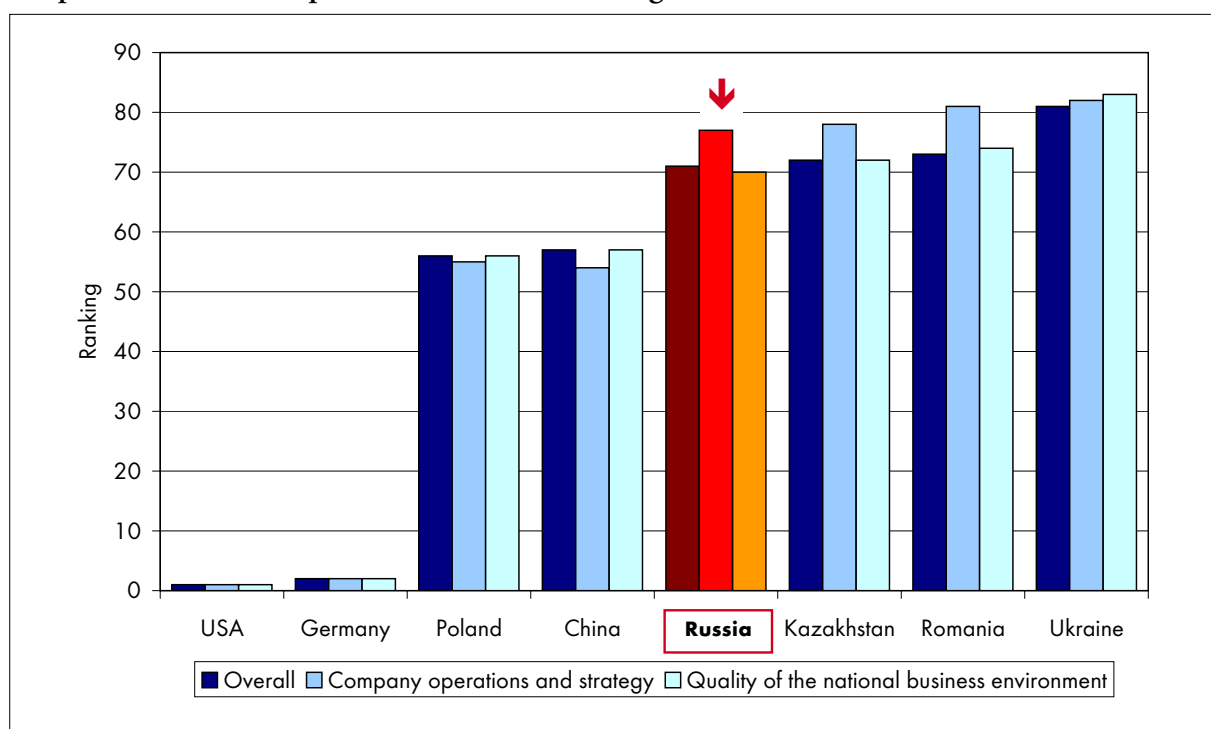
The data refer to the respective previous year.

Covered countries: 131

URL: <http://www.gcr.weforum.org/>

Brief description:

The Business Competitiveness Index (BCI) ranks countries by their microeconomic competitiveness, identifies competitive strengths and weaknesses in terms of countries' business environment conditions and company operations and strategies, and provides an assessment of the sustainability of countries' current levels of prosperity. The index refers to the GCI.

Graph 7: Business Competitiveness Index: Rankings for 2007


Editor's note: Since more ratings have been considered for the company operations and strategy than for the national business environment, the overall index can not be derived from the individual rankings.

Index of Economic Freedom – Business Freedom

Prepared by: The Heritage Foundation and Wall Street Journal (USA)

Established: 1995

Frequency: Annual

The data refer to the respective previous year.

Covered countries: 163

URL: www.heritage.org/research/features/index/index.cfm

Brief description:

Business freedom is the ability to create, operate, and close an enterprise quickly and easily. Burdensome, redundant regulatory rules are the most harmful barriers to business freedom. Business freedom is graded using a scale from 0 to 100, where 100 represents the maximum freedom.

Table 4: Index of Economic Freedom: Business Freedom 1995 – 2008

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Belarus	50	50	50	30	30	30	10	10	10	10	10	53.9	55.7	58.6
China	30	30	30	30	30	30	30	30	30	30	30	50.9	46.9	50.0
Germany	70	50	50	30	50	50	50	50	50	50	50	88.2	88.9	88.9
Kazakhstan	*	*	*	30	30	30	30	30	30	30	30	66.1	58.5	56.5
Poland	50	50	50	50	50	50	50	50	50	50	50	67.4	55.3	54.1
Romania	30	30	30	30	30	30	30	30	30	30	30	74.5	73.2	74.1
Russia	70	50	30	30	30	30	30	30	30	30	30	66.1	62.0	52.8
Ukraine	30	30	30	30	30	30	30	30	30	30	30	53.3	43.6	44.3
USA	70	70	70	70	70	70	70	70	70	70	70	92.3	91.4	91.7

Part 3: Corruption

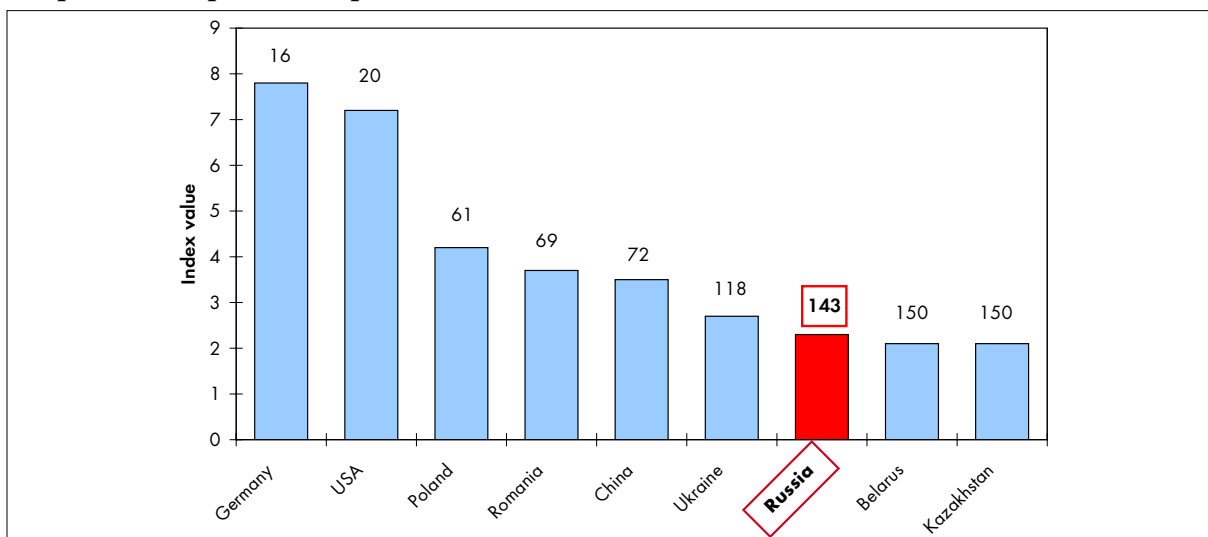
Corruption Perception Index

Prepared by: Transparency International
 Established: 1995
 Frequency: Annual
 Covered countries: 1679
 URL: <http://www.icgg.org/corruption.index.htm>

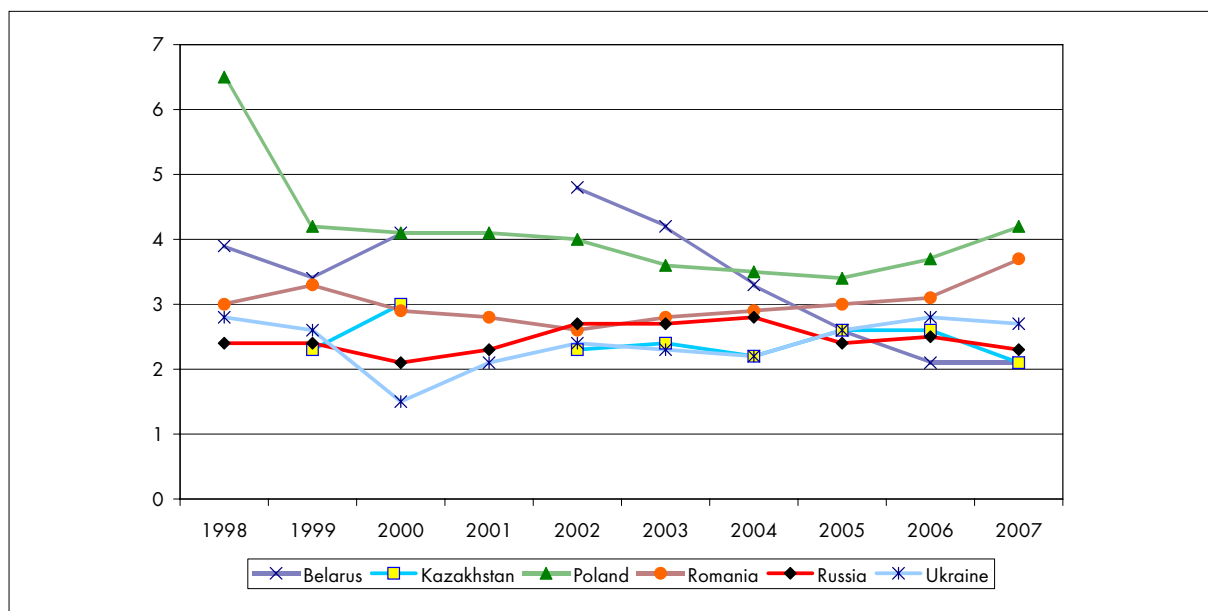
Brief description:

The Corruption Perceptions Index is a composite index that draws on multiple expert opinion surveys that poll perceptions of public sector corruption in 163 countries around the world. It scores countries on a scale from zero to ten, with zero indicating high levels of perceived corruption and ten indicating low levels of perceived corruption.

Graph 8: Corruption Perception Index 2006: Index Value and Rank



Graph 9: Corruption Perception Index 1998–2007



Worldwide Governance Indicators – Control of Corruption

Prepared by: Worldbank

Since: 1996

Frequency: Annual, between 1996 and 2002 every two years.

The data refer to the corresponding year of evaluation and are published one year later.

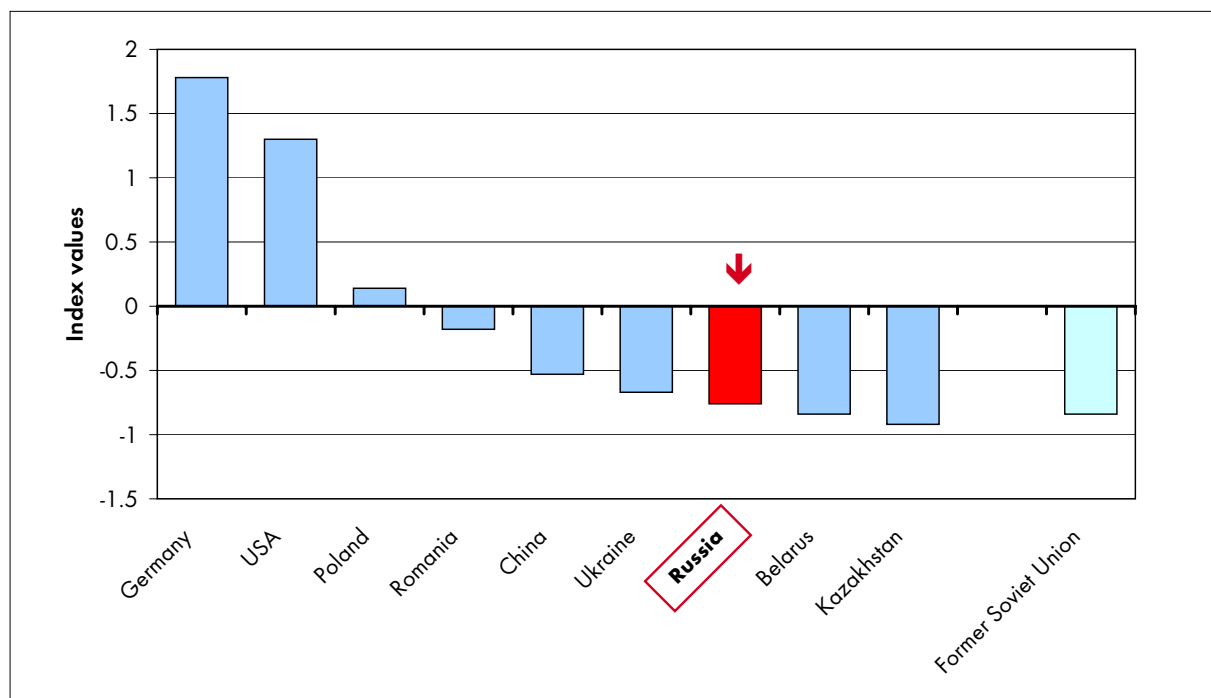
Covered countries: 213

URL: www.worldbank.org/wbi/governance/govdata/

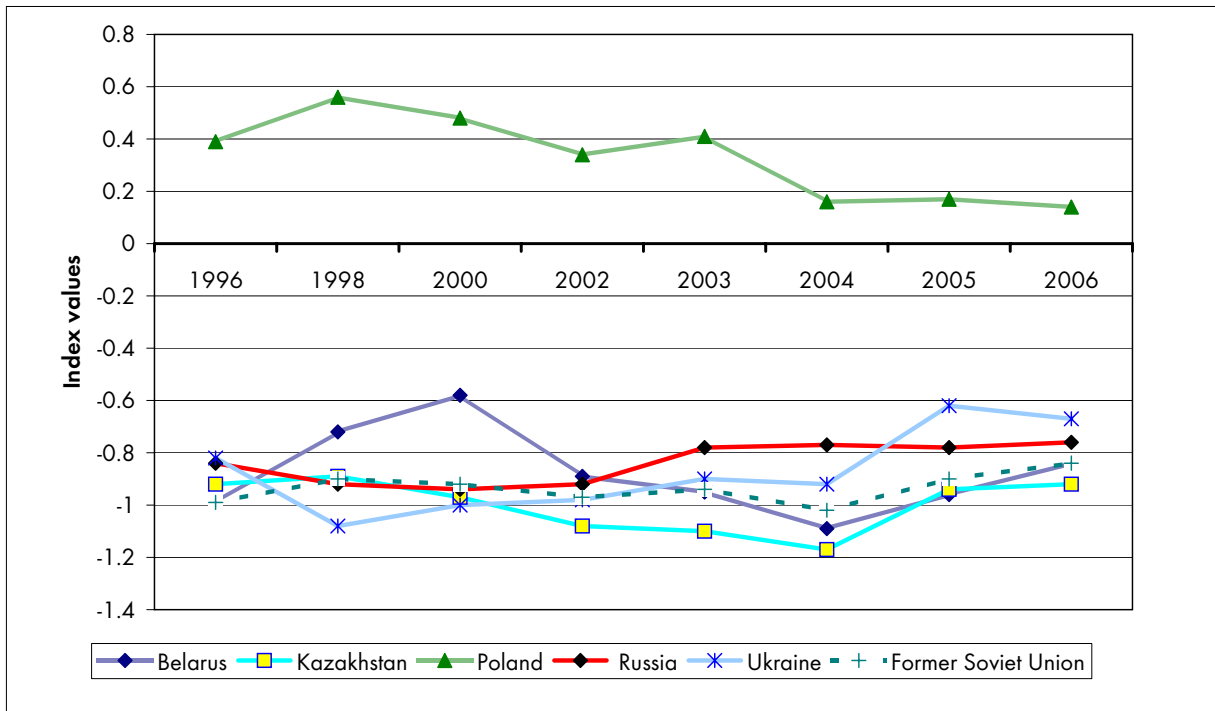
Brief description:

This index measures six dimensions of governance since 1996 until end-2005, among them Control of Corruption. The indicators are based on several hundred individual variables measuring perceptions of governance, drawn from 31 separate data sources constructed by 25 different organizations. The relevant index value shows the average of all relevant sources according to their reliability. Virtually all scores lie between -2.5 and 2.5, with higher scores corresponding to better outcomes.

Graph 10: Worldwide Governance Indicators – Corruption Control: Index Values 2006



Graph 11: Worldwide Governance Indicators – Corruption Control: 1996–2005



Part 4: State Budget Transparency

Open Budget Index

Prepared by: Center on Budget and Policy Priorities

Since: 2006

Frequency: biennial (projected)

The data refer to the respective previous year.

Covered Countries: 59

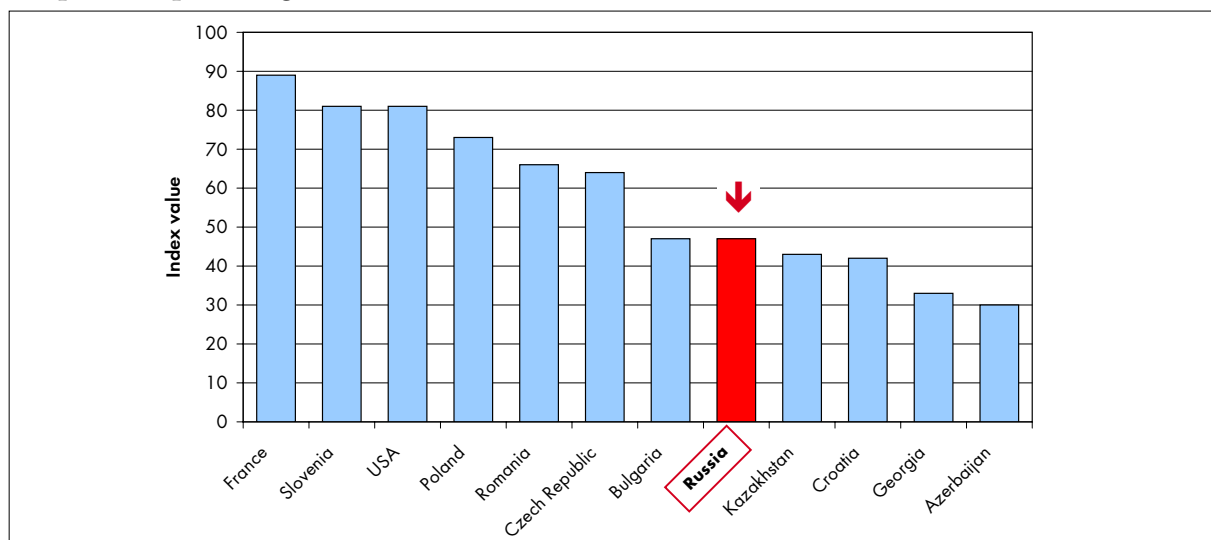
URL: <http://www.openbudgetindex.org/>

Brief description:

The Open Budget Index is derived by taking the average of the responses to 91 questions involving publicly available budget information on the Open Budget Questionnaire which are also used to gather the Open Budget Report. This is a survey instrument to collect comparative information on public access to budget information and budgeting practices involving central governments.

The index evaluates in that respect the quantity of publicly available information in the seven key budget documents that all countries should issue during the course of the budget year

Graph 12: Open Budget Index 2006



Part 5: Socioeconomic Level of Development

Human Development Index

Prepared by: United Nations Development Program (UNDP)

Established: from 1975 to 1990 without the socialistic countries

Frequency: Annual

The data refer to the corresponding year of evaluation and are published one year later.

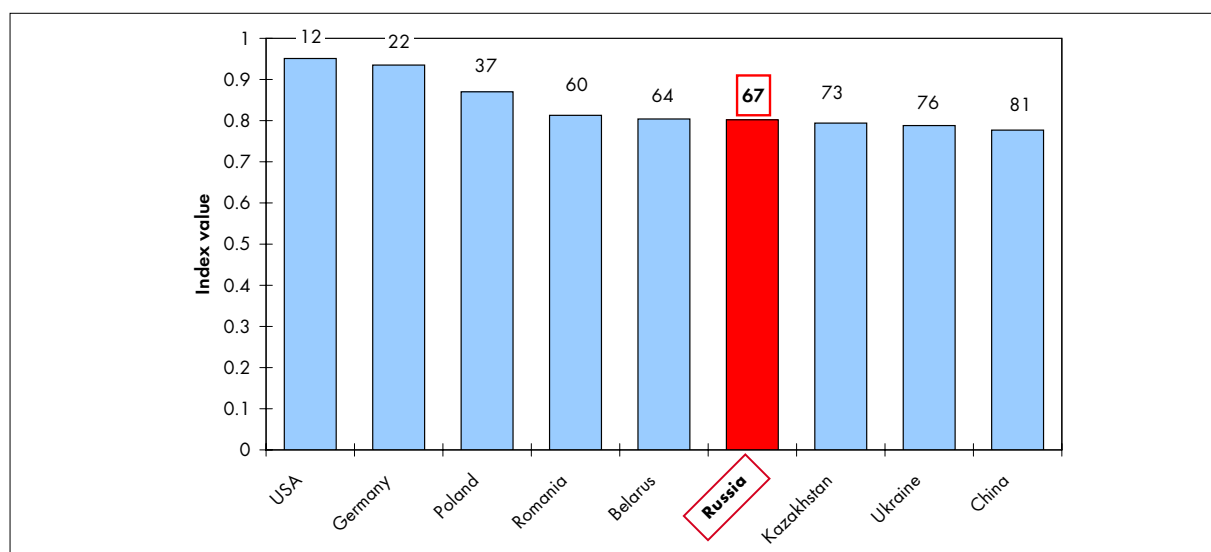
Covered countries: 177

URL: www.undp.org

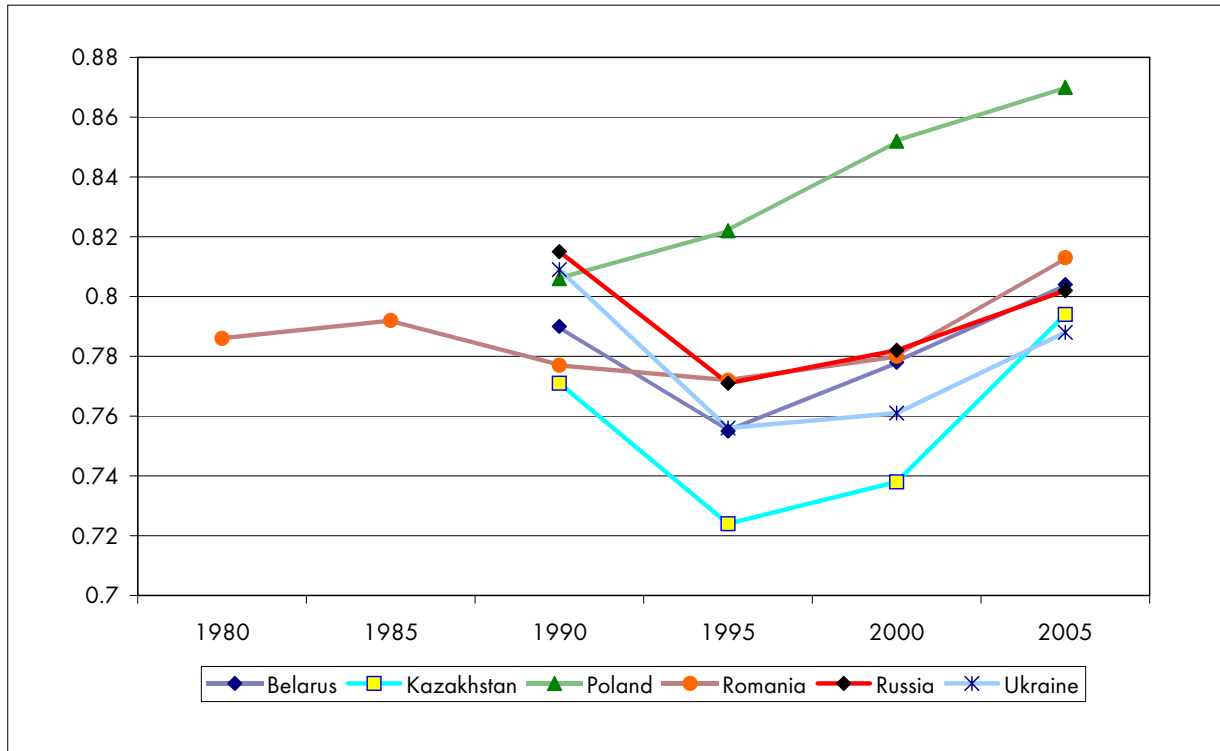
Brief description:

The Human Development Index (HDI) measures the average achievements in a country in three basic dimensions of human development: a long and healthy life (life expectancy), knowledge (adult literacy (2/3) and school enrolment (1/3) rate) and a decent standard of living (GDP per capita in purchasing power parity). Performance in each dimension is expressed as a value between 0 and 1. The HDI is then calculated as a simple average of the dimension indices.

Graph 13: Human Development Index: Index Value and Ranks 2005



Graph 14: Human Development Index: 1980 – 2005



About the Russian Analytical Digest

The Russian Analytical Digest is a bi-weekly internet publication jointly produced by the Research Centre for East European Studies [Forschungsstelle Osteuropa] at the University of Bremen (www.forschungsstelle-uni-bremen.de) and the Center for Security Studies (CSS) at the Swiss Federal Institute of Technology Zurich (ETH Zurich). It is supported by the Otto Wolff Foundation and the German Association for East European Studies (DGO). The Digest draws on contributions to the German-language *Russlandanalysen* (www.russlandanalysen.de), the CSS analytical network on Russia and Eurasia (www.res.ethz.ch), and the Russian Regional Report. The Russian Analytical Digest covers political, economic, and social developments in Russia and its regions, and looks at Russia's role in international relations.

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Research Centre for East European Studies [Forschungsstelle Osteuropa] at the University of Bremen

Founded in 1982 and led by Prof. Dr. Wolfgang Eichwede, the Research Centre for East European Studies (Forschungsstelle Osteuropa) at the University of Bremen is dedicated to socialist and post-socialist cultural and societal developments in the countries of Central and Eastern Europe.

The Research Centre possesses a unique collection of alternative culture and independent writings from the former socialist countries in its archive. In addition to extensive individual research on dissidence and society in socialist societies, since January 2007 a group of international research institutes is participating in a collaborative project on the theme "The other Eastern Europe – the 1960s to the 1980s, dissidence in politics and society, alternatives in culture. Contributions to comparative contemporary history", which is funded by the Volkswagen Foundation.

In the area of post-socialist societies, extensive research projects have been conducted in recent years with emphasis on political decision-making processes, economic culture and the integration of post-socialist countries into EU governance. One of the core missions of the institute is the dissemination of academic knowledge to the interested public. This includes regular email service with nearly 15,000 subscribers in politics, economics and the media.

With a collection of publications on Eastern Europe unique in Germany, the Research Centre is also a contact point for researchers as well as the interested public. The Research Centre has approximately 300 periodicals from Russia alone, which are available in the institute's library. News reports as well as academic literature is systematically processed and analyzed in data bases.

The Center for Security Studies (CSS) at ETH Zurich

The Center for Security Studies (CSS) at the Swiss Federal Institute of Technology (ETH Zurich) is a Swiss academic center of competence that specializes in research, teaching, and information services in the fields of international and Swiss security studies. The CSS also acts as a consultant to various political bodies and the general public.

The CSS is engaged in research projects with a number of Swiss and international partners. The Center's research focus is on new risks, European and transatlantic security, strategy and doctrine, state failure and state building, and Swiss foreign and security policy.

In its teaching capacity, the CSS contributes to the ETH Zurich-based Bachelor of Arts (BA) degree course for prospective professional military officers in the Swiss army and the ETH and University of Zurich-based MA program in Comparative and International Studies (MACIS), offers and develops specialized courses and study programs to all ETH Zurich and University of Zurich students, and has the lead in the Executive Masters degree program in Security Policy and Crisis Management (MAS ETH SPCM), which is offered by ETH Zurich. The program is tailored to the needs of experienced senior executives and managers from the private and public sectors, the policy community, and the armed forces.

The CSS runs the International Relations and Security Network (ISN), and in cooperation with partner institutes manages the Comprehensive Risk Analysis and Management Network (CRN), the Parallel History Project on NATO and the Warsaw Pact (PHP), the Swiss Foreign and Security Policy Network (SSN), and the Russian and Eurasian Security (RES) Network.

Any opinions expressed in Russian Analytical Digest are exclusively those of the authors.

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