

**Competitiveness at the Crossroads:  
Choosing the Future Direction  
of the Russian Economy**

By

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## **1. Introduction**

In early 2006, the Center for Strategic Research (CSR) in Moscow commissioned Professor Michael Porter and his team to conduct a review of the existing evidence on Russian competitiveness. The objective of this report is to synthesize, interpret, and draw implications about Russia's economic progress, applying the Porter competitiveness framework<sup>1</sup> and drawing on learning from dozens of other national competitiveness projects. This review is part of a Strategic Audit of the Russian Federation, a broader set of research activities coordinated by CSR to provide a sound analytical basis for long-term economic policy planning in the Russian Federation.<sup>2</sup>

The Russian economy has been studied by numerous international organizations, academics, and other analysts. This report draws on these studies, but differs in three main respects: First, it focuses on the microeconomic underpinnings of competitiveness at the level of firms, clusters, and the business environment in which firms compete. Existing studies tend to focus on macroeconomic policies, the legal system, and other broader aspects of economic context. Second, we offer an overall, strategic perspective focusing on overall priorities for the future. Existing studies tend to concentrate on detailed assessment of individual policies. Third, this report is intended not only for a technical audience but to inform both policymakers and the broader Russian community about the state of the economy during a very complex historical transition.

There are strongly divergent views about the state of Russian competitiveness. Strong economic growth, fiscal surpluses, and reforms in some areas of the business environment are juxtaposed with huge continuing challenges in doing business in Russia as well as rising government intervention in the market, especially in energy. This mixed evidence has been interpreted very differently. Within Russia (including many foreign companies operating in the country), there is optimism about the progress of the nation's economy just ten years after the 1998 crisis. Outside of Russia, there is deep skepticism about whether the current economic success of Russia extends beyond high oil prices, and whether the increasing concentration of economic (and political) power in the central government has changed the course of Russia's reforms for the worse. There is some

truth in each of these perspectives, but a deeper analysis is needed to truly understand where Russia stands and to guide future policy.<sup>3</sup>

*Figure 1: Divergent Views on Russian Competitiveness*

<b>Russian Competitiveness in 2006/07</b>	
<b><u>Summary</u></b>	
<b>The Positives</b>	<b>The Negatives</b>
<ul style="list-style-type: none"><li>• Strong economic growth</li><li>• Solid growth in GDP per capita</li><li>• Strong fiscal position</li><li>• Improved macroeconomic management</li><li>• High labor utilization</li><li>• Improving foreign direct investment inflows</li><li>• Strengthening overall world export market shares</li><li>• Foreign IPO's of Russian companies</li></ul>	<ul style="list-style-type: none"><li>• Growth has been significantly driven by oil prices and the availability of idle production capacity in the economy</li><li>• Deteriorating non-oil budget balance</li><li>• Productivity level remains moderate</li><li>• FDI inflows primarily related to accessing natural resources and (recently) serving local demand, not expanding exports</li><li>• Export positions outside natural resources remain weak</li><li>• Capital stock is aging</li><li>• Financing constraints for domestic Russian companies</li><li>• Patenting rates far below potential</li></ul>

The report is organized in three sections. First, it outlines an analytical framework to understand the medium- and long-term foundations of Russian prosperity in today's global economy. Globalization, technological change, and widespread economic reforms in other countries have shifted both the imperatives and opportunities for competitiveness. Second, we assess Russia's current competitiveness, highlighting the roles of the country's legacy, its broad economic context, microeconomic conditions, and current economic policies. Third, we offer overall recommendations for policymakers, along with priorities for further research, that seek to address the real complexities the country is facing. We are well aware that Russian leaders have to conduct economic

policy in an environment of many distortions and complexities, where generic advice based on simple economic models is insufficient.

While our report draws on the large body of literature on the Russian economy, it supplements this review with a variety of new sources. With the help of CSR, we conducted a series of interviews with experts on the Russian economy. We also analyzed Russian performance and the business environment using proprietary data and methods developed by Professor Porter at the Institute for Strategy and Competitiveness. While this report does not aim to substitute for an in-depth country study by Russia experts, we hope that it will inform and complement such studies.

## **2. Competitiveness and Competition among Locations**

### ***2.1. The Concept of Competitiveness***

Competitiveness remains a concept that is not well understood, despite widespread acceptance of its importance.<sup>4</sup> To understand competitiveness, the starting point must be to understand the underpinnings of a nation's prosperity. The central economic goal of a nation is to improve the sustainable standard of living of its population. Standard of living is the true goal, not the absolute size of the economy, the level of foreign reserves, or the trade balance. Standard of living must be evaluated for all citizens, not just a few, and to improve standard of living is open to all groups.

A nation's standard of living is determined by the *productivity* of its economy, measured by the value of goods and services produced per unit of the nation's human, capital, and natural resources. Productivity is what allows a nation to support high wages, attractive returns to capital, and a strong currency, and with them a high standard of living. Productivity depends both on the efficiency of production but also the value of the products and services produced, measured by the prices they can command in open markets. True competitiveness, then, is measured by productivity.

Prosperity can be inherited or created. *Inherited wealth* comes from natural resources such as minerals, oil, arable land, and a fortuitous location. Inherited wealth has a positive direct effect on a nation's prosperity. However, the experience of many resource-rich countries has shown that inherited wealth can make it harder to create wealth.

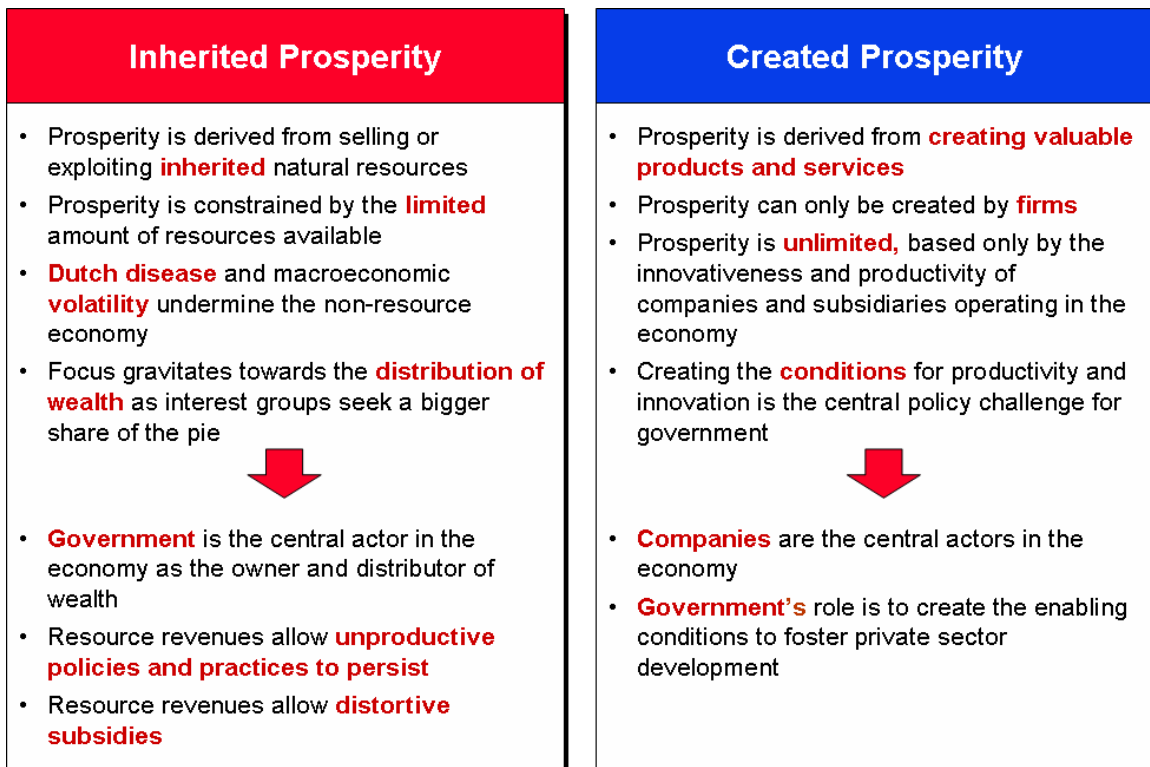
#### *2.1.1. Created versus inherited prosperity*

*Created wealth* arises from the ability to create products and services that can be produced productively and sold domestically and internationally at a profit. Wealth can only be created by companies. Created wealth can include products and services that draw on inherited resources, but enhance their value. Created wealth is limited only by the innovativeness and dynamism of the business enterprises operating in the country.

Government cannot create wealth, but has an important role in putting in place the conditions which allow wealth creation to take place or work against it.

Many resource-rich countries (including Russia) have failed to achieve the level of prosperity of countries with far fewer inherited resources. This is because the availability of resources creates complexities in developing the non-resource economy. These go well beyond Dutch diseases and elevation of domestic costs which price the country out of diversifying into new resource markets. Abundant resources can create governance structures and incentive structures (e.g., competition) that impede competitiveness. Resources also allow governments to support non-economic policy choices, such as subsidies and unproductive employment (see Figure 2). In addition, natural resource wealth tends to place government and its role in distributing wealth at the center of economic policy instead of the private sector, worsening the environment for wealth creation.

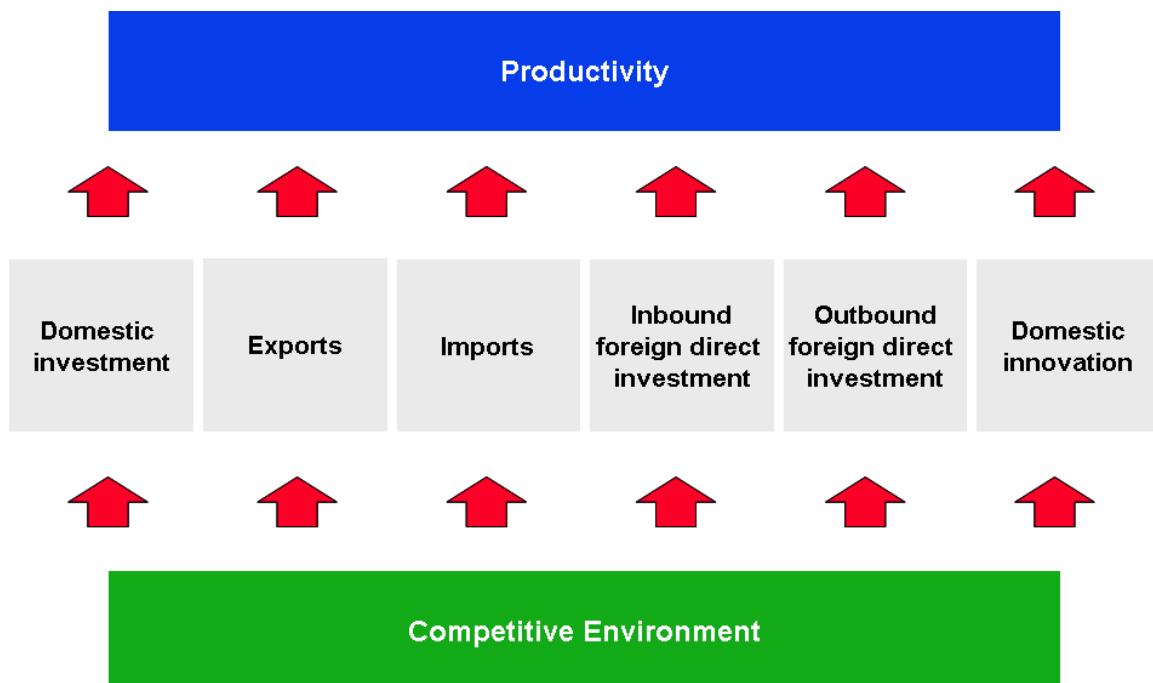
*Figure 2: Inherited versus created prosperity*



2.1.2. *Indicators and enablers of competitiveness*

The process by which productivity grows and an economy upgrades works through a series of enablers, which also serve as intermediate indicators of competitiveness. Exports allow a country to grow its most productive activities beyond the demand in the local market. Imports allow a country to access goods that it cannot produce productively, provide access to foreign technology embedded in capital goods, and increase the level of rivalry on domestic markets. Domestic investment is critical to improving the productivity of companies and infrastructure. Inward FDI brings added capital as well as technology, skills, management, market access, and competitive pressure. Outward FDI fuels the international growth of local companies while tapping external capabilities. Innovative output fuels productivity growth.

Figure 3: *Indicators and Enablers of Competitiveness*





Each of these enablers depends, in turn, on underlying competitiveness. Investors will not invest unless the country offers an attractive value proposition compared to local wages, for example, while exports cannot grow unless products are of high quality and can be produced efficiently. Moreover, if exports, investments, or patenting rates are the result of direct subsidies, they do little to improve productivity and might actually undermine it.

## ***2.2. Determinant of Competitiveness***

Competitiveness arises from the interaction of three broad levels of influence: endowments, context, and microeconomic competitiveness (See Figure 4).

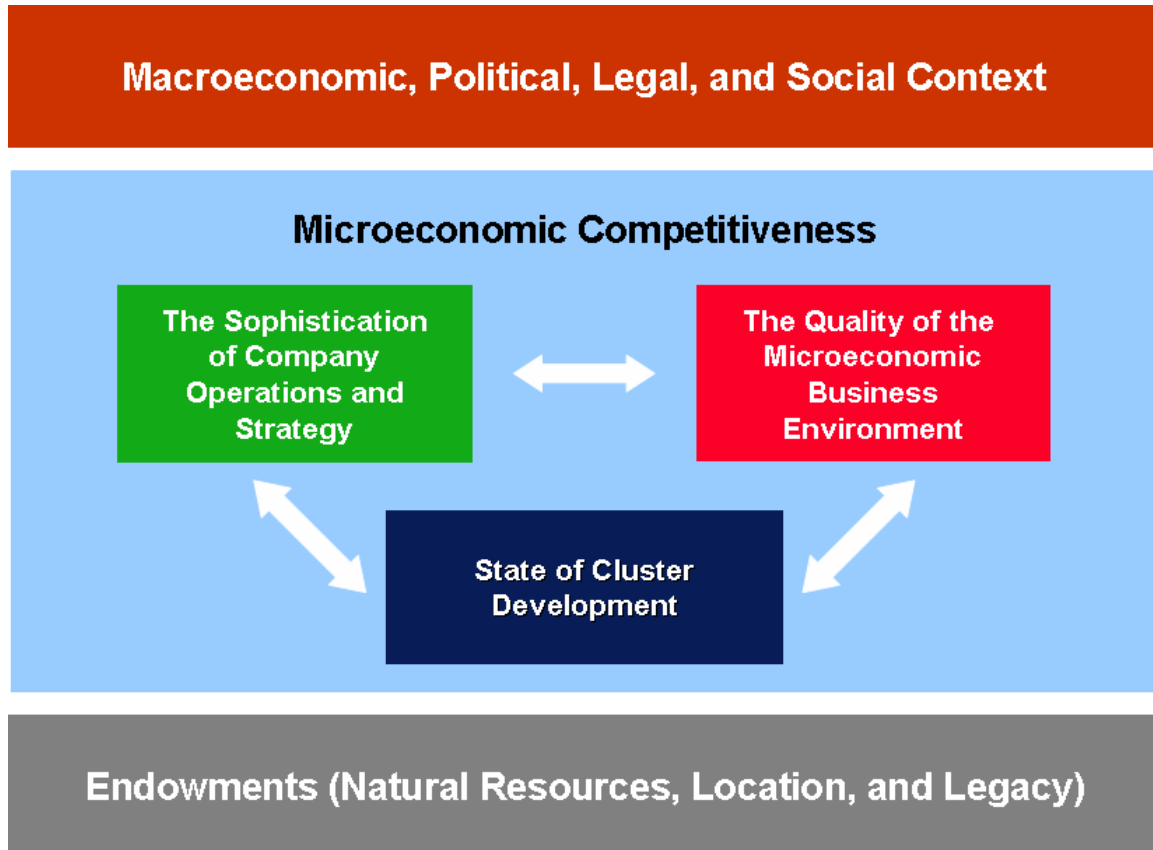
*Endowments* including natural resources, geographic location, and historical legacy can have a major influence on overall competitiveness. They are essentially ‘given’ and not the result of current policy choices. However, their influence on prosperity can be heavily influenced by countries’ underlying competitiveness, and whether the country pursues policies that realize their potential.

Natural resources in the form of favorable mineral deposits, growing conditions, etc. can offer exports and productivity directly. However, natural resources can also create risks of retarding competitiveness improvements, a challenge that especially emerging economies like Russia are struggling with.

Location can be divided into two areas. Location bears on logistical costs, for example through proximity to the ocean and navigable waters. Location also sets the neighborhood, or the bordering countries. The wealth and size of neighbors can be a major impact on competitiveness because neighbors are the most natural trade and investment partners.

The historical legacy of a country is embedded in the structure of companies, government agencies, and beliefs about competitiveness. Russia’s inefficient company structures and poor experience with privatization in the early stages of transition, now inhibits further reforms towards competitive markets.

Figure 4: Determinants of Competitiveness



The *macroeconomic, political, legal, and social context* is the second important determinant of a nation’s overall competitiveness. This array of policies and institutions creates the overall setting in which companies, citizens, and government operate.

A sound overall context creates the *potential* for prosperity, but does not itself create prosperity. Policies in terms of overall context, especially in the areas of macroeconomic policy and governance, have dominated the literature on economic development. However, sound policies in these areas are necessary but not sufficient. Wealth is actually created at the microeconomic level—in the ability of firms to create valuable goods and services using efficient methods. Government or other societal institutions cannot create wealth; only firms can.

The most important level of influences on productivity is the *microeconomic competitiveness* of the economy. This is contained in three areas: the *quality of the business environment*, the *state of cluster development*, and the *sophistication of company operations*. The business environment includes the myriad of inputs, rules, incentives, and supporting entities that directly influence productivity and innovativeness of company competition. The state of cluster development captures the powerful linkages and externalities that occur across co-located firms, supporting industries, service providers, and associated institutions in a particular field.

The sophistication of company operations captures the capabilities, operating practices, and management choices within companies themselves. No matter how good the business environment or the strength of the cluster, it is companies that actually achieve or fail to achieve productivity.

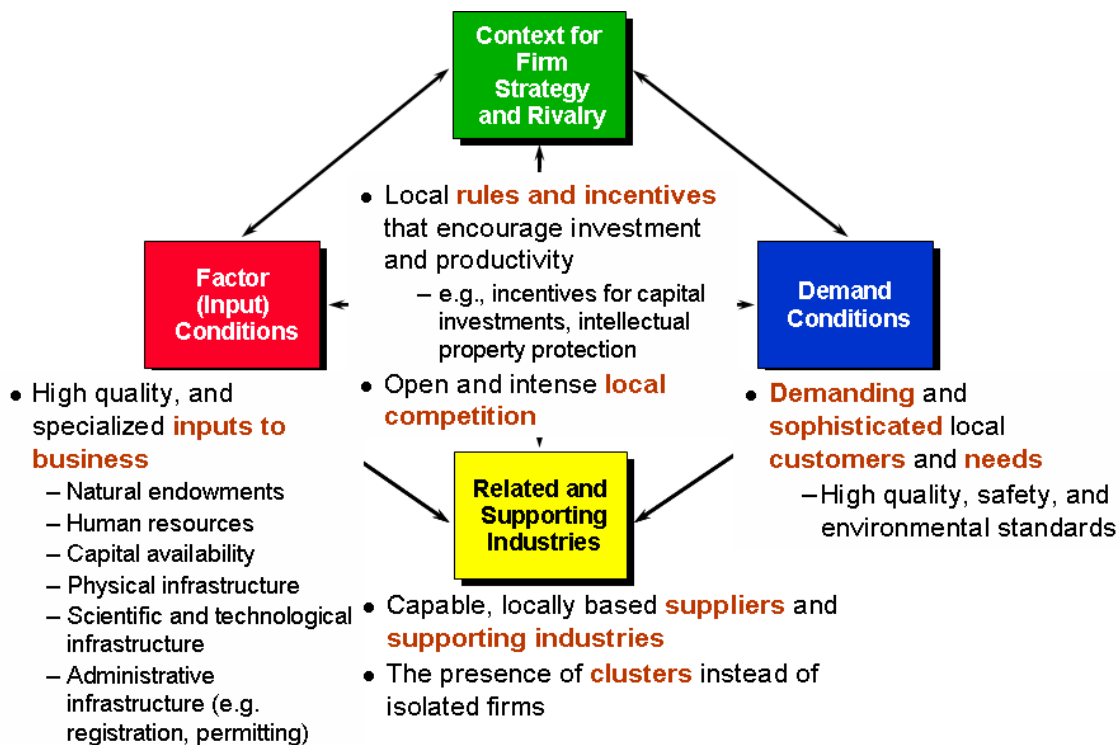
There are important differences between context and microeconomic competitiveness. Context is shaped largely by the government, through a limited number of policy decisions. There is widespread agreement about what constitutes ‘good policy’ in areas such as monetary policy and legal reform. Choices in terms of context can in many cases be made and implemented relatively quickly, like the adoption of a flexible exchange rate or, in the case of Russia, the creation of the Stabilization Fund to collect and invest the government’s share of oil revenues.

Microeconomic competitiveness, in contrast, results from the complex interplay of circumstances and choices of companies, government entities, and many other institutions at multiple levels of geography. Microeconomic progress arises in hundreds and even thousands of discrete areas, from the types of workers trained, to specific regulations, to infrastructure, to the presence of supporting companies. Priorities and appropriate choices vary across clusters and regions. Progress often takes a long time to implement, making priorities and sequencing essential. Countries that try to change everything at once inevitably fail. Microeconomic upgrading cannot be solely top down, but requires the engagement of the private sector and numerous other parts of society.

2.2.1. The Microeconomic Business Environment

The microeconomic business environment consists of four interrelated areas collectively known as the *diamond*.<sup>5</sup> The diamond framework (see Figure 5) provides an analytical tool to analyze the strengths and weaknesses in the business environment and set action priorities.

Figure 5: Quality of the Business Environment: The Diamond Framework



Factor conditions relate to the quality and availability of factor inputs, including government services and public infrastructure. The context for firm strategy and rivalry encompasses the rules and incentives governing the nature of competition in the country. Related and supporting industries capture the presence of suppliers, services providers, and collaboration partners that create opportunities to specialize activities. Demand conditions are the needs and pressures emanating from domestic customers to design

products, improve productivity, and innovate. Demand conditions can be influenced by government standards and consumer protection laws.

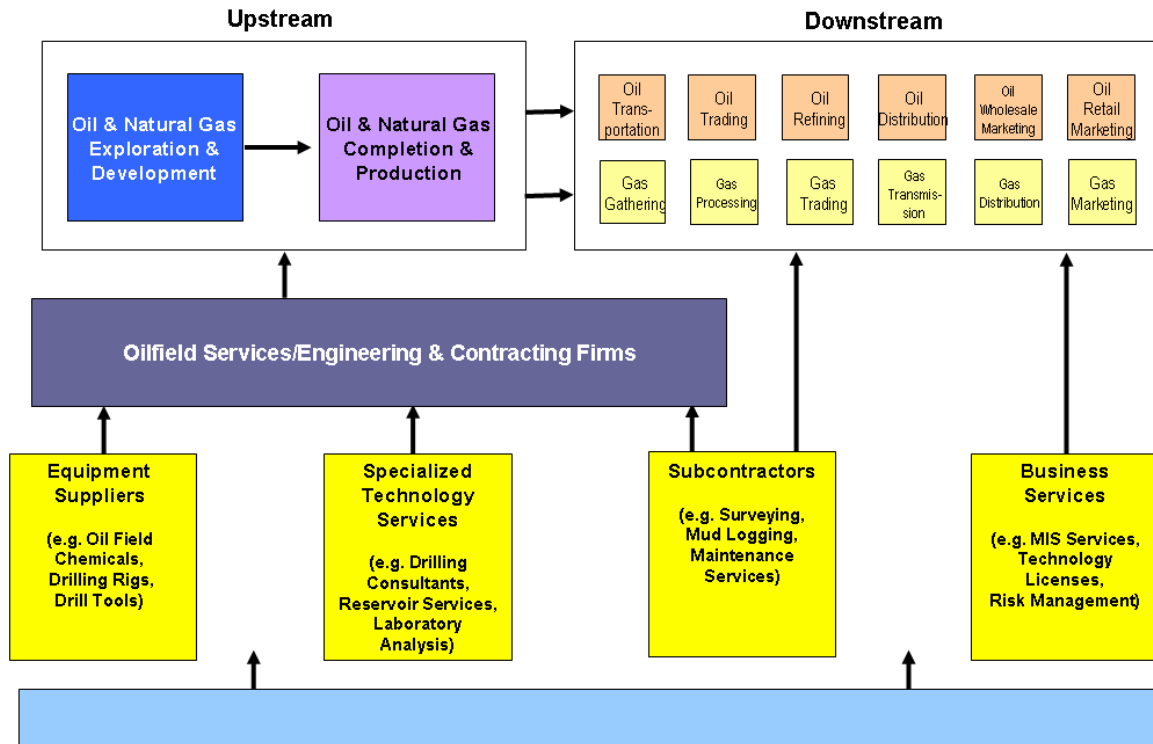
Strengths and weaknesses in each part of the diamond interact in systemic ways; they do not just add up cumulatively. For example, access to a well educated labor force provides more advantages if local competition is intense and domestic customers demand new and differentiated products and services.

### *2.2.2. State of Cluster Development*

A manifestation of the diamond framework is the widespread existence of clusters, which are geographic agglomerations of companies, suppliers, service providers, and associated institutions in a particular field. Figure 6 on the next page provides the example of the oil and gas cluster in Houston, Texas. Clusters cross the divide between manufacturing and services, a distinction that is becoming increasingly meaningless in the modern economy. Cluster formation is driven by externalities and spillovers of various types, such as knowledge spillovers, supplier relationships, the use of common skills, and transactional efficiencies. Some externalities apply to co-located companies within a single industry, though most are amplified or created by co-location with suppliers, related industries, and specialized institutions.

Clusters are a natural manifestation of the role of specialized knowledge, skills, infrastructure, and supporting industries at a particular location in enhancing productivity, innovation, and new business formation. They reflect modern approaches to company operation, which focus on core activities while outsourcing to suppliers and other partners. Also, the increasing importance to innovation of open networks<sup>6</sup> of companies and research institutions has raised the importance of clusters. Clusters support “local” outsourcing, rather than vertical integration or reliance on distant suppliers involving transaction costs and delays.

Figure 6: The Houston Oil and Gas Cluster



Clusters reflect the *location paradox* that has emerged in global competition. Anything accessible from a distance is no longer a competitive advantage because it is available to competitors anywhere. Unique local assets and relationships, then, become more important to competitive advantage in a more globalized economy.

Clusters can emerge under many different circumstances, for example where business environment conditions provide cluster-specific advantages, a geographic location creates advantages, or where entrepreneurs have created an anchor firm that becomes the source of spin-offs. Clusters also often develop from related clusters already present in a region.

*All clusters are good.* A location's prosperity depends on whether it reaches high performance in those clusters in which it has significant positions, not on whether these are so-called 'high-tech' or otherwise 'strategic' clusters.

The availability of systematic data about the economic geography is growing. The Cluster Mapping Project, initiated by Professor Porter in the late 1990s, has created the first consistent and statistically derived set of cluster definitions.<sup>7</sup> Cluster mapping proceeds in two stages: First, the distribution of industry employment across geography is used to distinguish “traded” industries that are geographically concentrated and “local” industries that are spread relatively evenly across locations, using detailed industry-level employment data across regions. *Traded* industries compete across regions and countries, where different competitors have access to different business environment conditions. *Local* industries compete primarily to serve the need within their region, and regional competitors share the same business environment.

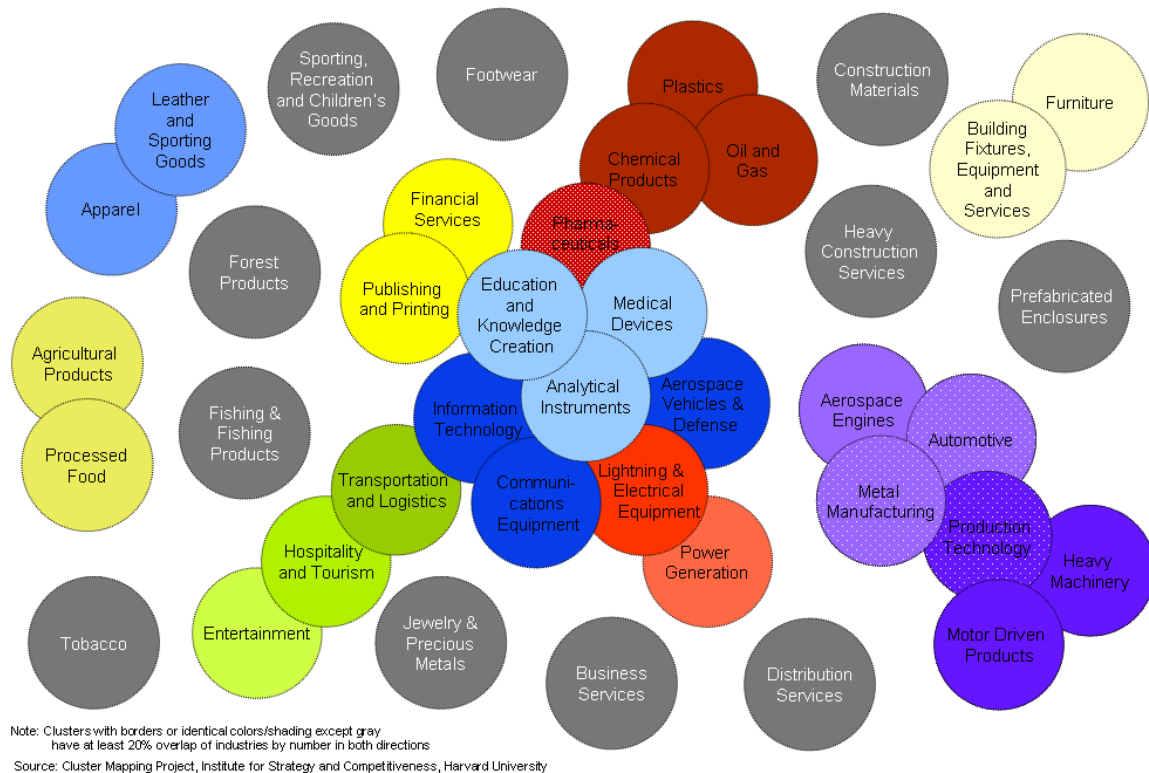
The second stage of the methodology is to group traded industries into clusters based on co-location patterns across geography, supplemented with indicators of cross-industry linkages. Applying this procedure resulted in the delineation of 41 traded clusters, each of which consists of a number of individual industries.

*Clusters overlap* when individual industries are part of more than one cluster. Such linkages occur because of common skills, technology, suppliers, and so on. Figure 7 on the next page provides a schematic representation of the relationships between the 41 clusters, with overlaps representing the most extensive relationships. Regions that have positions in overlapping clusters can harness stronger positive externalities, and tend to register better economic results. Overlaps between clusters also provide a systematic way to identify development paths for regional and national economies, because they reveal the potential for progression from established clusters into related ones.<sup>8</sup>

Clusters work more effectively if they include *institutions for collaboration (IFC)*. Such organizations—such as cluster initiatives,<sup>9</sup> trade associations, entrepreneurs networks, standard setting agencies, quality centers, technology networks, and many others—are neither conventional government agencies, educational institutions, nor private firms. They play an essential role in connecting the parts of the diamond and fostering efficient collective activities within and across clusters to upgrade competitiveness in a location. IFCs are often overlooked in analyses of economic development. However, they are particularly

important in emerging economies like Russia, in part because they enable a better dialogue between government and the business community.

Figure 7: Clusters and Cluster overlap, Schematic Representation



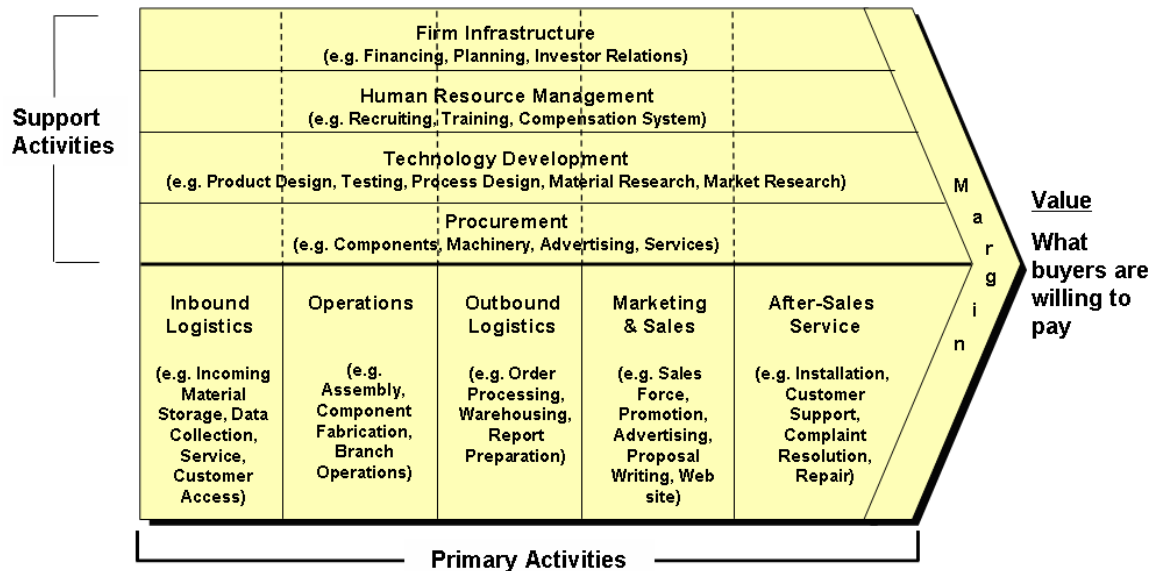
### 2.2.3. The Sophistication of Company Operations and Strategy

The competitiveness of a nation or region ultimately rests in the competitiveness of local companies and foreign subsidiaries that operate there.

Competitiveness at the company level depends on the *operational efficiency* with which the companies undertake these activities compared to best practices, and on the extent to which companies distinguish themselves in creating value for customers.<sup>10</sup> The Value Chain<sup>11</sup> provides the conceptual framework to analyze the state of company activities in any industry or location.



Figure 8: The Value Chain



Source: Porter (1985)

In emerging economies like Russia, companies suffer significant weaknesses in their value chains. Low levels of efficiency in individual activities are widespread, as companies operate far from the frontier of best practice. Often, companies are narrowly focused on a few primary activities within the industry value chain, lacking capabilities in areas such as design, marketing, or customer service. In developing economies, companies are often overly integrated into supporting activities in which they are not efficient. Most companies fail to distinguish their products and services to create competitive advantages, competing instead on low factor costs.

Also important to company competition in emerging economies is the nature of *business groups*. In advanced economies, business groups tend to contain business units in related fields that reap overall advantages through synergies. In developing economies, business groups are often unwieldy conglomerates, a reaction to business environment weaknesses.<sup>12</sup> Inefficient capital markets, shortages of managerial talent, and the importance of political access are root causes for diversification into many unrelated businesses and approaches to competing largely based on political and economic power.

Russia is an extreme example, given the flawed privatization process through which the oligarchs arose. Productivity, in such circumstances, usually suffers.

The dissolution or restructuring of conglomerate business groups is both a cause and a result of successful economic development: Groups need to restructure in order to allow individual business units to become more productive. Restructuring becomes more likely and feasible when improvements in the business environment make some of the past roles of groups obsolete, such as improving public capital markets. For a country like Russia it is important to assess the progress that has been made in restructuring business groups that have largely been a drag on competitiveness.

#### *2.2.4. The Influence of Sub-national Regions*

Competitiveness is affected by government at multiple geographic levels: national, regional, and local.<sup>13</sup> Policies and circumstances at all of these levels affect the quality of the business environment and the development of clusters.

While context is often determined largely at the national level, microeconomic competitiveness varies substantially across regions within countries. This includes numerous aspects of the business environment, cluster composition, and company sophistication. As a result, there are often striking differences in economic performance within countries, which can be as great or greater than differences across countries. This holds true for Russia as it does for many other countries.

The importance of regions creates added complexity for economic policy. National governments find it challenging to set appropriate policies that distinguish the needs of individual regions. Decentralization and the appropriate allocation of roles in economic policymaking among different geographic levels become essential, especially for large countries like Russia. Creating regional governance structures that are capable of defining regional strategies is particularly challenging if there is no strong legacy of independent regional governments, a problem Russia shares with countries like the UK.<sup>14</sup>

### *2.2.5. Economic Coordination with Neighboring Countries*

Productivity is also enhanced, or eroded, by the nature of economic relations with neighboring countries. Economic cooperation and coordination among neighbors is an important tool for expanding trade and investment, improving the business environment, and linking clusters with complementary strengths.

Neighboring countries usually provide the most natural markets in which the competitive advantages of a country can be applied, because of needs and market conditions that are often similar. This situation applies to Russia's relationships with its many neighbors, most of whom were formerly part of the Soviet Union.

Groups of neighboring countries that simplify cross-border transactions widen the market and become more attractive as investment locations for foreign companies. Linkages between clusters in neighboring countries can exploit the existence of differences in factor costs and complementary strengths in the business environment. This is an approach adopted by the Italian footwear cluster which has established a sister cluster in Romania, and by telecommunication equipment and life sciences clusters across countries in the Baltic Sea Region.<sup>15</sup>

Coordination of policies with neighbors can significantly improve many aspects of the business environment for all the involved countries, including areas such as transportation infrastructure, customs procedures, energy networks, and many others. Yet most regional initiatives focus solely on trade barrier reduction, to their detriment.

### ***2.3. Competing in a Changing Global Environment***

Globalization, with its diminution of barriers to cross border competition, has dramatically increased the importance of productivity as the central determinant of national prosperity in the medium and long run.

One of the most visible reflections of these changes is the growth of the *emerging economies*.<sup>16</sup> China and India, in particular, have opened to the world economy by opening markets, upgrading infrastructure, and inviting foreign companies to invest. In the past, China, India, and other emerging economies were relegated to compete solely on low-skill activities, slowly working their way up towards products of higher skill-intensity. In the new competitive environment, these nations can quickly enter international markets by integrating themselves in the global value chains of multinationals—assimilating management and technology from around the world while taking advantage of low-cost labor and improving infrastructure at home.

With large and growing populations and a more business-friendly economic policy environment, emerging economies offer significant new markets for global enterprises and launch pads for globally competitive products, processes, and services to serve both emerging economy customers and more advanced markets.

A key driving force behind globalization is the emergence of the global enterprise and the *globalization of value chains*. Activities along the global value chain have become increasingly disintegrated and allocated to those locations and companies best suited for each individual activity. Multinational corporations play a critical role in this process by investing abroad, by engaging new foreign suppliers, and by specializing in activities in which they have specific competitive advantages. They have created vast networks in which small and medium-sized companies that provide specialized inputs and services are integrated globally.

In the changing global competition, *services and intangibles* become prominent drivers of value creation. In disintegrated value chains, innovation is increasingly the source of value and competitive advantage, as is managing processes and partners represents a

growing part of value creation. Manufacturing remains an essential component of global trade, but many manufacturers can be located in low wage locations access to every competitor. Value increasingly comes from the ‘service wrap’ and the ideas bound up in products. Critical investments are not only those made in new fixed assets, like machinery and real estate, but investment in logistical systems, after sale support networks, knowledge development, branding, and other softer assets.

The changes in global competition have a profound impact on the strengths and weaknesses of countries. On the supply side, the increasing intensity of competition between locations creates pressure to provide business environments that can support high productivity, unique positions, and strong regional clusters. This favors small countries with an institutional structure to pursue such strategies, while large countries like Russia often find it challenging because of the complexity of dealing with multiple regions with varying circumstances.

The integration of large emerging countries has created an abundance of low-skill labor, making it increasingly harder for countries like Russia to copy the Asian models of growing non-natural resource exports based on low labor costs. At the same time, rapid technological change and growing skill intensity in many activities has increased the returns to knowledge and education. Locations that provide access to skills and strong clusters conducive to knowledge development and innovation can capture increasing value, while locations that provide only low-cost labor may generate employment but only little prosperity.

On the demand side, quickly growing populations and income catch-up—a consequence of internal policy reforms—have made emerging economies significantly more important drivers of global economic growth. The profile of their demand, consisting of lower income populations and more biased towards needs for inputs and capital goods to support investment-driven development, has fueled growth in these product categories. Russia and other natural resource-rich economies have benefited, as well as traditional suppliers of capital goods like Germany.

*Competition* in the new global economic environment is getting increasingly intense; this process has been under way for some time and is continuing. Only a productive business environment with strong clusters can deliver competitiveness and prosperity; artificial distortions like preferential market access, protection, and subsidies no longer suffice. Regional clusters are getting increasingly important to productivity. Clusters appear to becoming more specialized, concentrating on specific segments and roles within the global value chain and trading with complementary clusters in other locations. Many locations today offer the same generic business environment conditions. Increasingly, it is a location's unique cluster profile that has more to do with success.

### **3. Assessing Russian Competitiveness**

Russia's generally good overall economic performance can be a source of confusion, given the special circumstances that have driven it. An objective and realistic assessment of Russia's current position has become particularly urgent since the past drivers of success may well not persist.

Our assessment of Russian competitiveness consists of several stages. First, we review Russia's *economic performance*, focusing in particular at the standard of living and indicators/enablers of productivity. Second, we discuss Russia's *endowments*, the set of historical factors, natural resource assets, and geographic conditions that have a strong effect on its current economic situation. Third, we examine Russia's macroeconomic, political, legal, and social *context* which provides the broader environment for companies. Fourth, we examine Russia's *microeconomic competitiveness*, on which its future prosperity will depend. Finally, we examine the relationship between Russia's position and its aspirations, and the resulting implications.

Russia is currently entering a stage where the central challenges for economic policy are increasingly microeconomic. While some success has been achieved on context, especially in macroeconomic policy, the greatest barriers to further progress are now microeconomic.

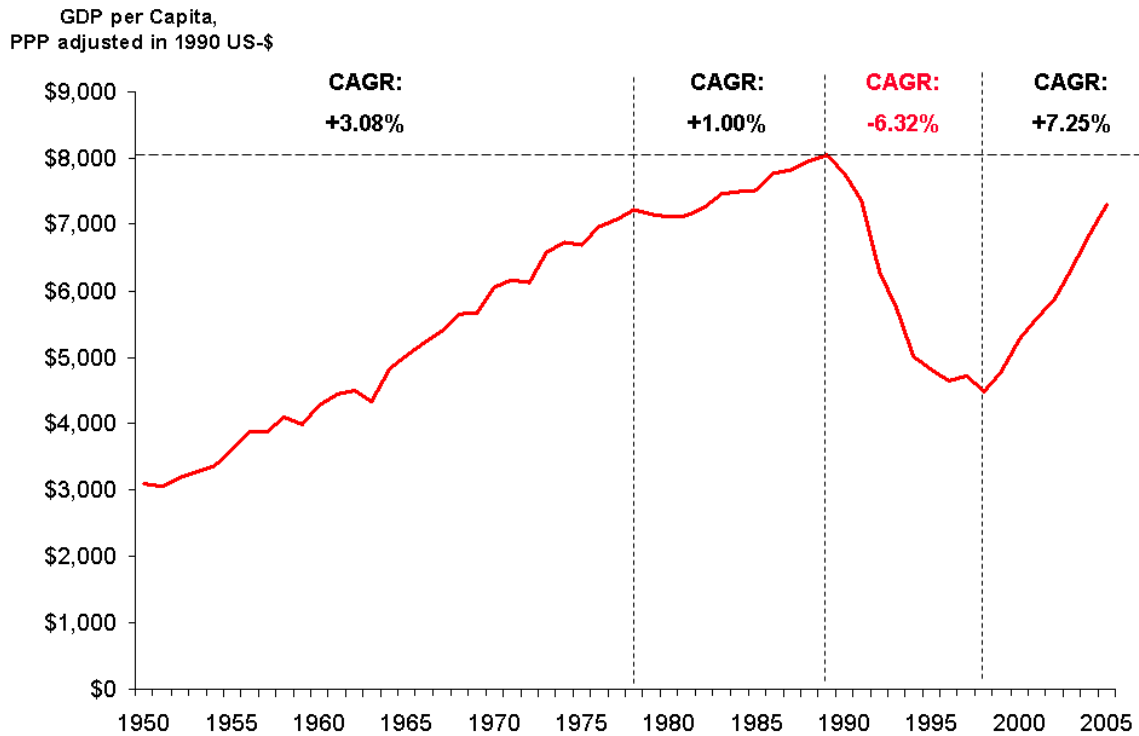
Appropriate policy choices must be grounded in an analysis of the actual microeconomic conditions present in Russia. A theoretical debate about the appropriateness of policies such as special economic zones or government ownership of firms, is a popular Russian pastime beyond the point of serving a useful purpose.

### 3.1. Russia's Economic Performance

#### 3.1.1. Standard of Living

Prosperity, measured by GDP per capita adjusted for purchasing power parity, has experienced a dramatic turn-around since the crisis of 1998 and is now approaching pre-transition levels. Overall GDP growth has been strong, despite a modest slowdown from 7.3% in 2003 to an estimated 6.4% in 2007.<sup>17</sup>

Figure 9: Long-Term Trends in Russian Prosperity



Source: Groningen Growth and Development Centre and The Conference Board (2007)

Prosperity in Russia has grown even more strongly than GDP growth as a result of a shrinking population (See Figure 9). Since 2000, Russia's population has shrunk by about 780,000 inhabitants per year, falling to 140m in 2007.



Despite this progress, Russia's GDP per capita growth has been no higher than in comparable countries. Kazakhstan and Azerbaijan, for example, two former Soviet republics, achieved higher growth rates, also based heavily on oil and gas exports. Within Russia, differences in prosperity across regions are greater than in Europe and the United States and show few signs of diminishing.<sup>18</sup>

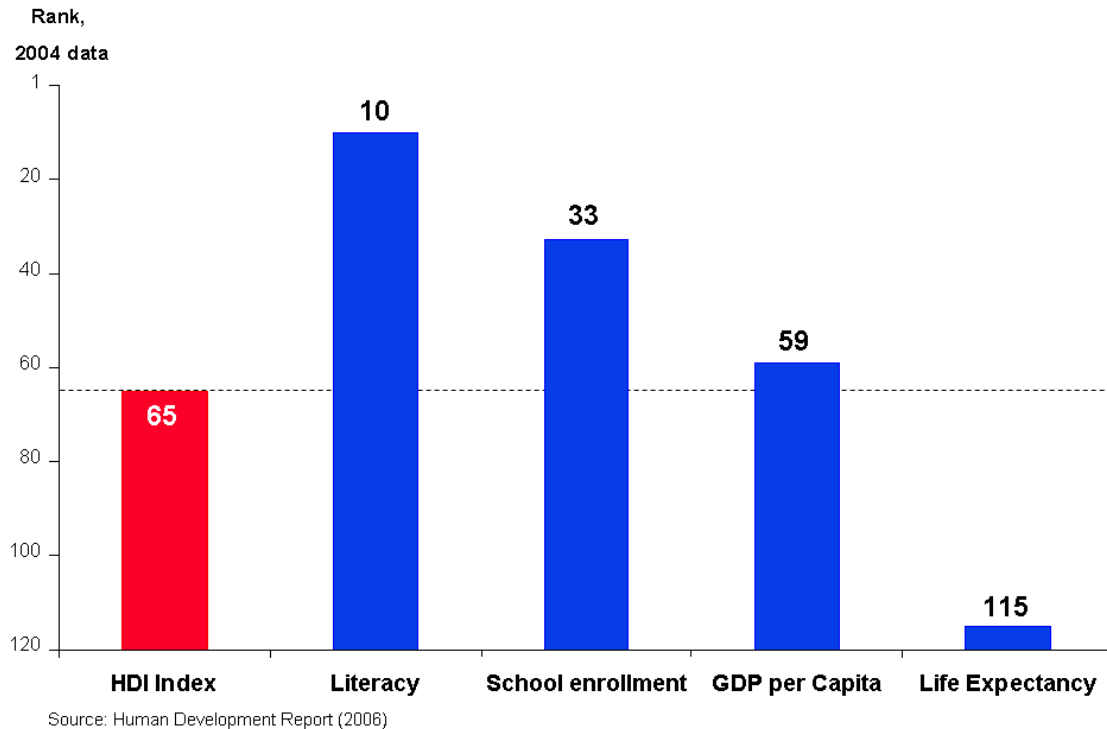
Inequality of prosperity has risen rapidly in the early phase of transition and remains high. Inequality in Russia is higher than in most other transition and western European economies, and roughly comparable to the United States, the United Kingdom, and Australia.<sup>19</sup> Income improvements have been most pronounced in the highest income groups:<sup>20</sup> for example, the top 10% of the population by income registered 21% income growth in 2005, versus an overall growth rate of 14.3%.

Some other economic and social indicators show significant improvement across large segments of the Russian population. Poverty levels are dramatically lower, for example, although groups like migrant workers from other parts of the former Soviet Union face legal uncertainties and social deprivation.<sup>21</sup>

However, many key social indicators, especially in terms of health and safety, *continue to be low relative to peers*.<sup>22</sup> Life expectancy, especially of men, is lagging with potentially severe economic consequences. The country also registers a very low level of births; many younger Russians seem wary about the future despite the recent economic improvements. A particular challenge is the financial situation of pensioners. The real value of pensions remains low compared to other countries and is only now approaching the level of before the 1998 crisis.<sup>23</sup>

In the Human Development Index calculated by UNDP, Russia ranks 65 out of 177 countries; six ranks *below* its GDP per capita rank. Russia has improved in the Human Development Index since 1995 but remains below its 1990 level. Progress on human development has been *slower* than in the average rate of country progress in all world regions except Sub-Saharan Africa.<sup>24</sup>

Figure 10: Russia's Position in the Human Development Index



### 3.1.2. Decomposing Prosperity

GDP per capita in an economy is made up of three main elements: (1) the productivity of employees, i.e., the real GDP produced in an hour of work; (2) the mobilization of the labor force, i.e., the share of the population working and working hours; and (3) domestic price levels, i.e., the amount of consumption that can be sustained for the income level achieved.

Russia's growth in GDP per capita continues to rely on high labor force mobilization and low local prices—two factors that are certain to erode. Russia has *weaknesses in labor productivity*, the core measure of competitiveness and a major cause for concern.

### *3.1.2.1. Labor Participation*

As in many other formerly communist countries and some Nordic countries, Russia has a *high share of labor market participation*, driven by high female participation rates. Russia's current demographic profile of few children and low life expectancy leads to a high share of working-age people in the overall population. Russia also enjoys a moderate unemployment rate, which has fallen as the economy has grown.

However, Russia's demographic profile will become *dramatically less favorable* in the coming years, as the share of older citizens will grow rapidly. After reaching a low point in 2006, the dependency ratio, i.e., the ratio of people that are not of working age relative to those that are of age, will increase rapidly.<sup>25</sup>

### *3.1.2.2. Productivity Measures*

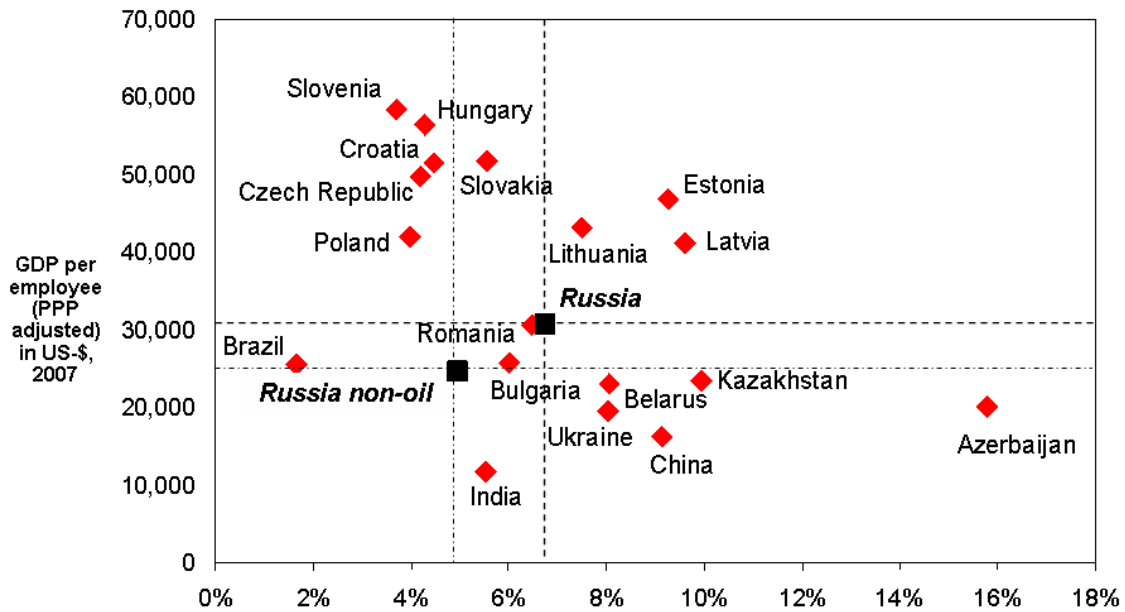
Russian labor productivity is a serious concern, only achieving the level of the weaker Central European countries and just slightly ahead of Russia's neighbors in the Commonwealth of Independent States (CIS). Russia's ranking on total factor productivity, the share of productivity not directly explained by the quantity of labor or capital used, also ranks only in the middle of transition economies, and much lower than the advanced economies that Russia aspires to become.

Russian productivity growth has been at 6.8% per year between 2000 and 2007, but this is *below* the rate achieved by other countries at similar productivity levels.<sup>26</sup> Both labor and total factor productivity growth have been positively affected by increasing capacity utilization as the economy rebounded after the 1998 crisis. This type of improvement is unsustainable. Consistent with this, productivity growth has been highest in manufacturing and lowest in market services, where little capacity existed and new labor had to be hired to meet demand.<sup>27</sup>

Controlling for capacity utilization, total factor productivity has been an important driver of Russian productivity growth.<sup>28</sup> But while this indicates that real improvements are

occurring in business practices of Russian companies, the current rate of improvement is likely to be unsustainable: Research from other transition countries suggests that productivity growth tends to be strong during an adjustment period where entry and exit rates are high and where market shares are dramatically shifting in the favor of more productive companies.<sup>29</sup> These effects weaken over time, making changes within companies relatively more important drivers of productivity growth. Russia's entry and exit rates and rates of restructuring show signs of being lower than in other transition countries due to policy failures and governance issues.<sup>30</sup>

Figure 11: Labor Productivity, Russia and Selected Peer Countries, 2000-2007



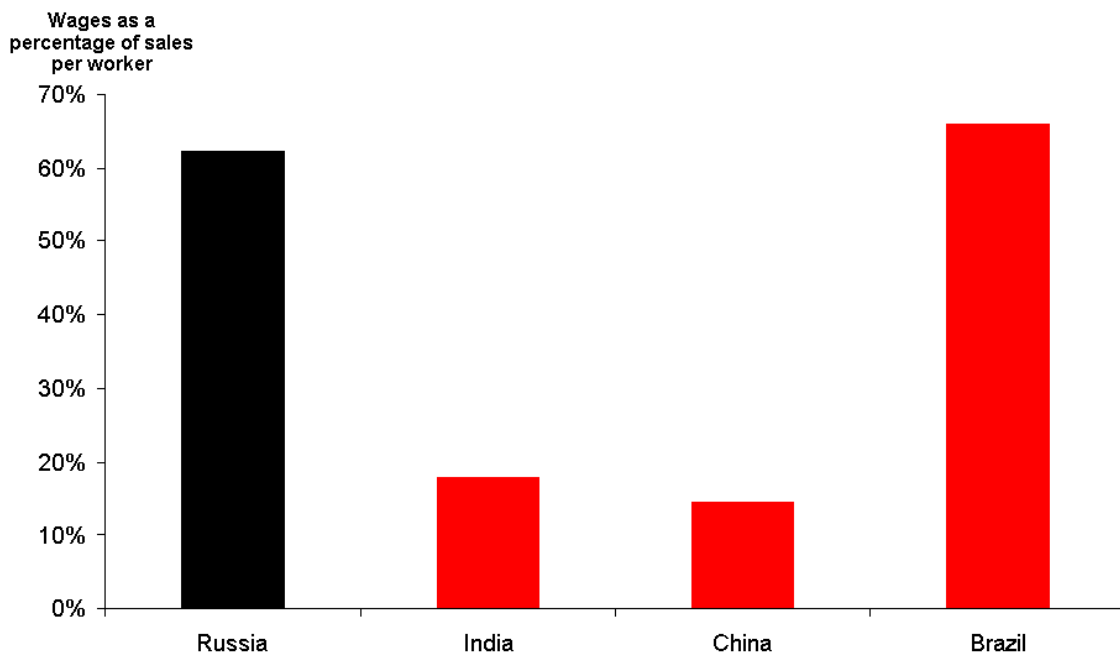
Source: WEO (2007), GGDC (2007) Compound annual growth rate (CAGR) of real GDP per employee, 2000-2007

Measured aggregate Russian labor productivity is significantly increased by the inclusion of the oil and gas sector, which accounted for roughly 20% of GDP<sup>31</sup> in 2007 but less than 1% of employment.<sup>32</sup> Labor productivity in the oil and gas sector is close to 30 times higher than the rest of industry. Interestingly, labor productivity growth has been *slower* in the oil and gas sector than elsewhere because the sector has added employment at a

much higher rate than production. There are also indications that publicly owned companies in the oil and gas sector register *significantly lower productivity* than privately owned companies, raising serious issues about Russia's current policy direction.<sup>33</sup>

Detailed analyses at the industry level in Russia have revealed large divergences of productivity levels across companies.<sup>34</sup> This is a sign that *competition is weak*, because underperforming companies are not forced to improve or exit. The exit of less productive firms tends to be among the most powerful drivers of overall productivity growth in an economy together with entry of new firms and migration of output towards more productive sectors of the economy.

Figure 12: Wages relative to Sales per Employee, Russia and Selected Peer Countries



Source: World Bank (2006)

Russian wages are higher relative to its level of productivity than other large emerging economies, notably China or India, a danger sign.<sup>35</sup> This is likely due to the influence of the natural resource sector in buoying economic activity.

Productivity growth in Russia has *not been sufficient to keep pace with wage increases*: Unit labor costs—the wage costs per one unit of output—have risen, and grown faster than in comparable economies like the Ukraine.<sup>36</sup>

### *3.1.2.3. Local Prices*

Price levels in Russia remain relatively low in terms of national averages, but there are significant regional differences that make average prices increasingly less meaningful. The large differences in prices across regions point towards a lack of mobility and competition across geographies.

Prices for energy and public utilities remain below comparable world market prices due to subsidies. This is entrenching inefficiencies in the Russian business environment and company practices. Increasing levels of competition in most consumer markets, together with real exchange rate appreciation, have moderated local prices and benefited Russian consumers. However, in the large cities, particularly Moscow and St. Petersburg, prices are much higher.<sup>37</sup> Real estate prices have risen dramatically. Moscow has been ranked as the most expensive city in the world for expatriate employees.<sup>38</sup> In these metropolitan regions, the growth of standards of living will be increasingly offset by the declining purchasing power of income.

### *3.1.3. Indicators and Enablers of Productivity*

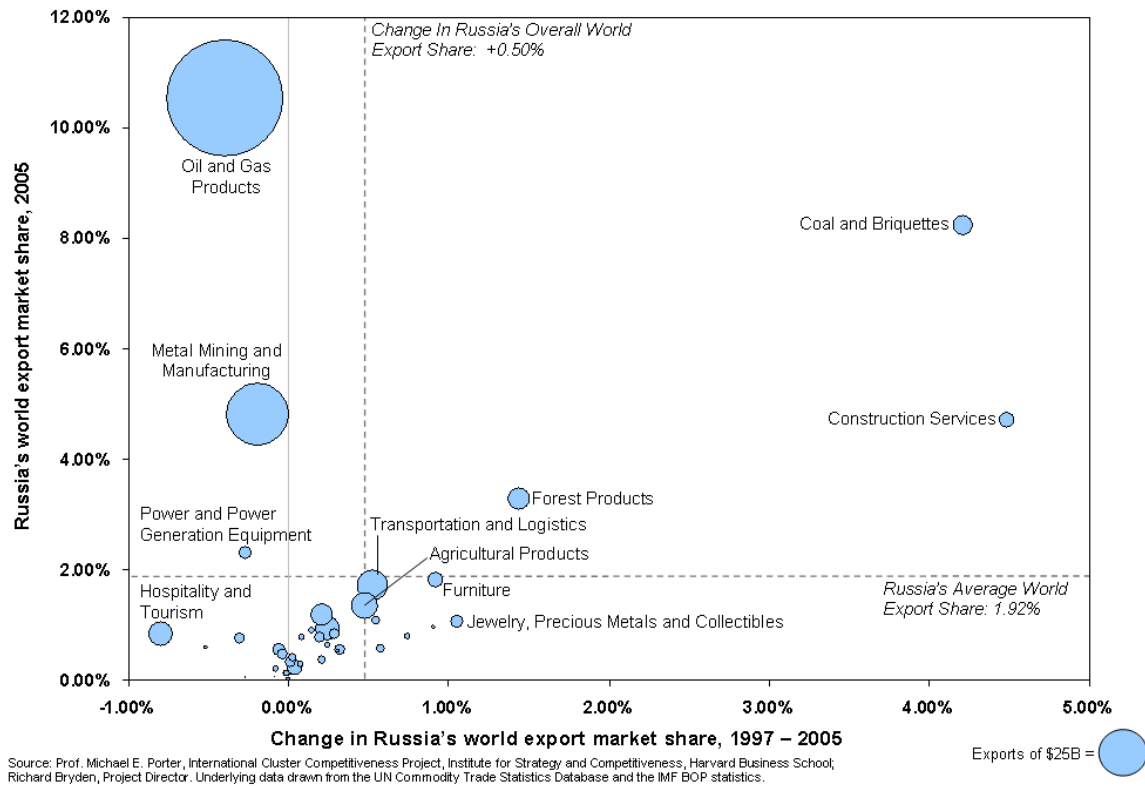
#### *3.1.3.1. Exports*

Russia's overall world export share of 1.8% has only recently surpassed the pre-crisis level. Russia's export share is four times higher than its average share in unprocessed natural resources and two times higher in semi-processed natural resources, while only about half the average in processed goods and services.<sup>39</sup> Oil and gas exports alone account for 52% of total exports.

The recent growth in Russia’s export share was *entirely driven* by unprocessed natural resources. Within natural resources, export *quantities* have remained roughly stable while export *prices* have gone up significantly.<sup>40</sup>

Further insights into Russian export performance can be gleaned from examining the cluster composition of exports. Using data developed at the Institute for Strategy and Competitiveness,<sup>41</sup> we profile the exports of 163 nations in 42 clusters (36 covering goods exports and 6 covering service exports). Unfortunately, service export data is more aggregated than in goods, and prevents the integration of goods and services within clusters than is possible with U.S. data. The 42 international trade clusters can be subdivided into 212 subclusters, or subgroups of closely linked industries within a cluster. The data set also provides information about the natural resource-content and destination of exports.

*Figure 13: Russia’s World Export Market Shares by Cluster Category*



The cluster specialization of Russia's exports revealed in Figure 12 is worrisome to say the least. Russia has lost market share in many clusters inside and outside of natural resources, including some of its most important clusters. The exceptions are coal and briquettes, construction services, forest products, furniture, and transport and logistics. Overall, Russia has only maintained its overall world export market share despite rapid economic growth because its few resource-intensive clusters have grown, largely because of rising commodity prices.

Russia registers a revealed comparative advantage ( $RCA > 1$ )<sup>42</sup> in six cluster categories—oil and gas products, coal and briquettes, metal mining, forest products, construction services, and electricity and electricity generation equipment. In four of them—oil and gas products, coal and briquettes, metal mining, and forest products—Russia ranks among the top 20 countries in the world by RCA.

At the subcluster level, Russia has additional strengths outside of these four cluster categories: In agricultural products (fertilizers, crude fertilizers), chemicals (inorganic chemicals), jewelry (diamonds), plastics (rubber), power generation equipment (nuclear reactors), heavy machinery (railroad equipment), analytical instruments (search and navigation equipment), and production technology (fabricated plate work) comparative advantages exist in a narrower range of products. These are competitive positions that potentially can be built upon.

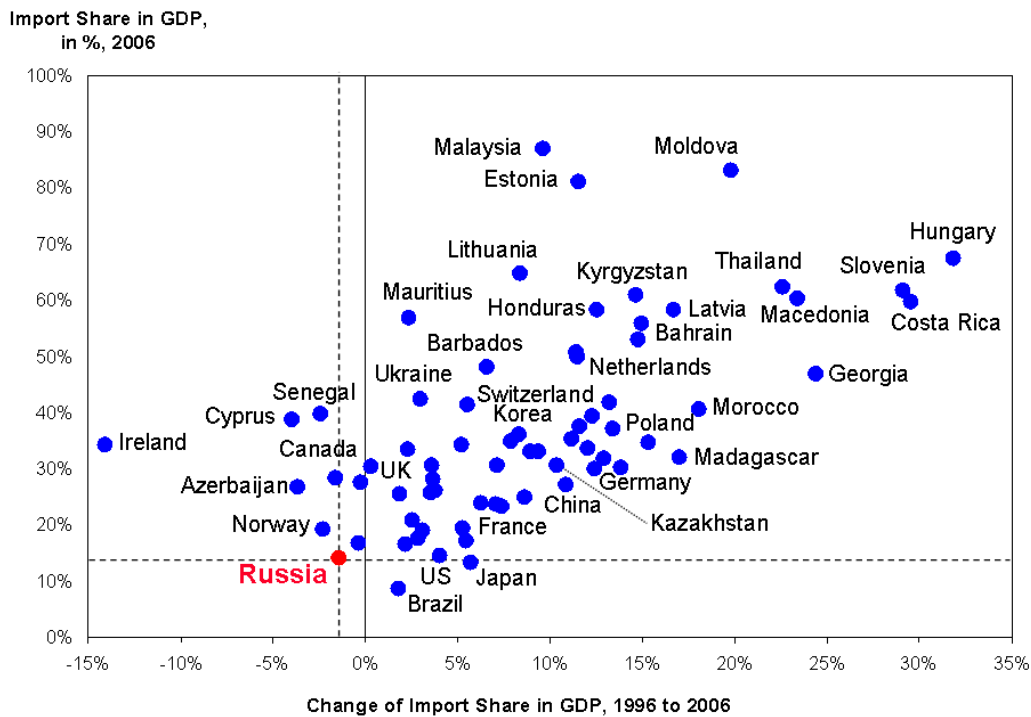
Russia's export portfolio exhibits two crucial challenges: First, the cluster overlap map (see Figure 7) reveals that there are few linkages between the four clusters in which Russia is strong. This limits the ability to leverage complementarities across these clusters and makes it harder to create truly unique market positions within them. Second, the four clusters have relatively weak linkages with other clusters;<sup>43</sup> metal mining has significant linkages to three other clusters (aerospace engines, automotive, and production technology), oil and gas to two (chemical products and plastics), and forest products to none. This limits the ability to broaden Russia's export positions by growing into related clusters where existing skills and competencies could be applied.



### 3.1.3.2.Imports

At 14.1% of GDP in 2006, Russia's import share is small compared to most other countries (see Figure 14); only Brazil and Japan, both of which have productivity challenges, report lower levels. Over the last decade, Russia was one of the few countries that saw its import share in GDP fall. The statistical analysis reveals that economies of larger absolute size and of higher levels of GDP per capita import more. Given its size and prosperity level, Russia should register an import share of GDP of about 25%, 10% of GDP higher than the actual value.<sup>44</sup> This suggests that significant barriers to imports remain in the Russian economy.

Figure 14: Imports as a Share of GDP, Russia and Selected Countries, 1996-2006

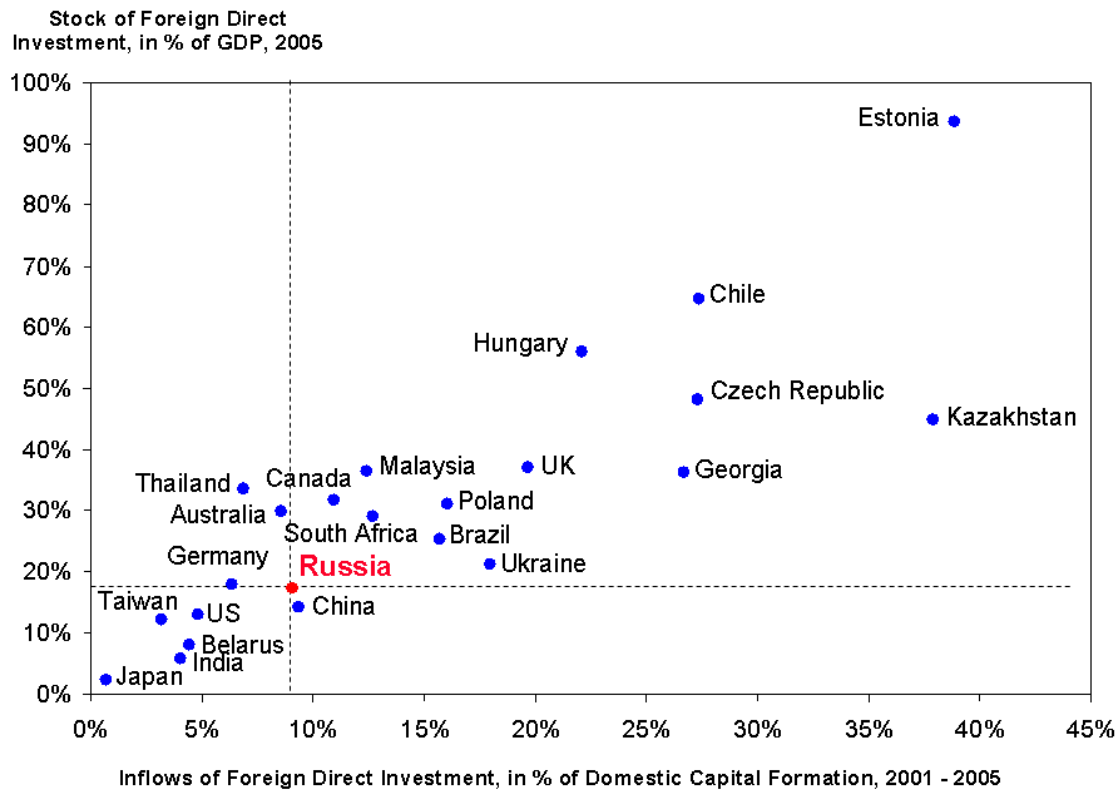


which comparable data is available, was accounted for by higher automotive imports (17% of all import growth between 1996 and 2006). The import pattern has shifted towards consumption goods, while imports of investment goods that add to the country's capital stock and drive prosperity have developed less dynamically.

### 3.1.3.3. Inward Foreign Direct Investment (FDI)

Inward FDI accounts for a relatively modest share of Russian GDP and total investment, especially compared to other Eastern European countries with similar circumstances (see Figure 15).

Figure 15: Inward FDI, Russia and Selected Peer Countries, 2002-2005



Source: World Investment Report (2006), author's analysis.

Of recent FDI inflows into Russia, 55% went into the oil and gas sector alone. Foreign oil companies have increasingly been required to reduce their stakes in Russian oil projects, most recently BP in the Shakalin-2 project, or been motivated to keep Russian partners involved in order to reduce political risks.<sup>45</sup> It remains to be seen how recent policy steps will affect future FDI inflows in natural resources. An important emerging area for inward FDI has become the electricity sector.

Given the growing domestic market and large untapped natural resource positions, FDI inflows fall short of Russia's potential, despite the significant recent improvements.<sup>46</sup>

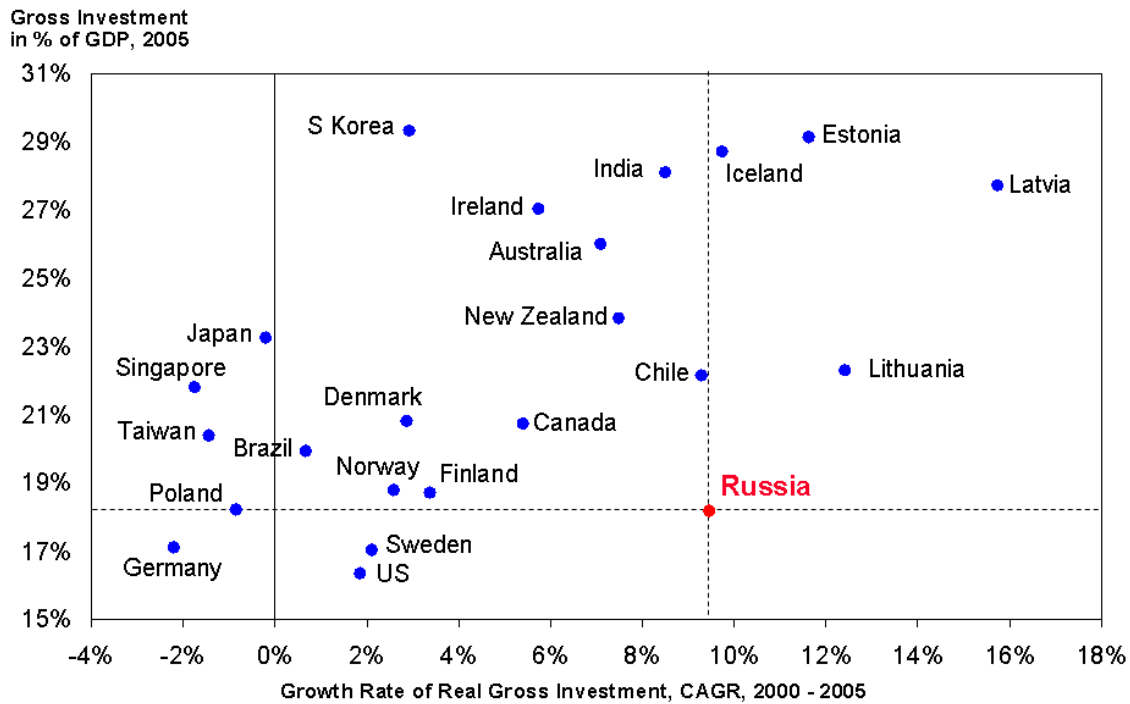
#### *3.1.3.4. Domestic Investments*

Russia has a low domestic capital investment rate (see Figure 16 on the next page), which makes FDI inflows even more important. Low investment rates are a major concern for the Russian economy. Capital investment has not been sufficient to offset the aging of the largely obsolete capital stock.<sup>47</sup> Some research indicates that due to relatively high prices for investment goods in Russia, even these low investment numbers overestimate that effective build up of the capital stock relative to other countries.<sup>48</sup>

Other countries with similar shares of gross capital investment to GDP have a far higher accumulated capital stock from past investments. In such economies, investment patterns have shifted towards investments in innovation and intangibles (branding, etc.) that are not captured in gross investment figures.

Strikingly, Russia's investment rate is low despite real interest rates that are close to zero for those companies that have access to domestic credit. The recent upswing in domestic investment is positive, but it remains to be seen whether it is a reaction of companies making incremental investments as they hit capacity constraints or a sign of true upgrading to modern capacity.

Figure 16: Investment Intensity, Russia and Selected Peer Countries, 2000-2005



Source: EIU (2006), author's analysis.

### 3.1.3.5. Outward Foreign Direct Investment (FDI)

Russian companies have recently become more active in outbound FDI.<sup>49</sup> Companies like Gazprom, Lukoil, NorilskNickel, and Severstal are among the largest owners of foreign assets from emerging economies.<sup>50</sup> Compared to other countries at a similar stage of development, Russia has a significantly higher ratio of outward to inward FDI.<sup>51</sup> The vast majority of these investments have been related to Russia's traditional strengths in resource-intensive industries, which is understandable. The objective has been to better access foreign markets, increase control over downstream activities in the value chain, or gain control over additional resources. There is also speculation that some outward FDI is a reaction to uncertainty about property rights in Russia.

Russian outbound investments are to a large extent in neighboring countries that were part of the Soviet Union. In a much more limited number of cases, Russian companies are actively looking to acquire new technologies and skills abroad. In some of these cases,

the government has played a significant role, politicizing corporate decisions. State-owned Vneshtorgbank acquired 5% of EADS (the European aerospace group that owns Airbus), for example, raising speculations about possible links to the government-driven consolidation of the Russian aerospace market.<sup>52</sup>

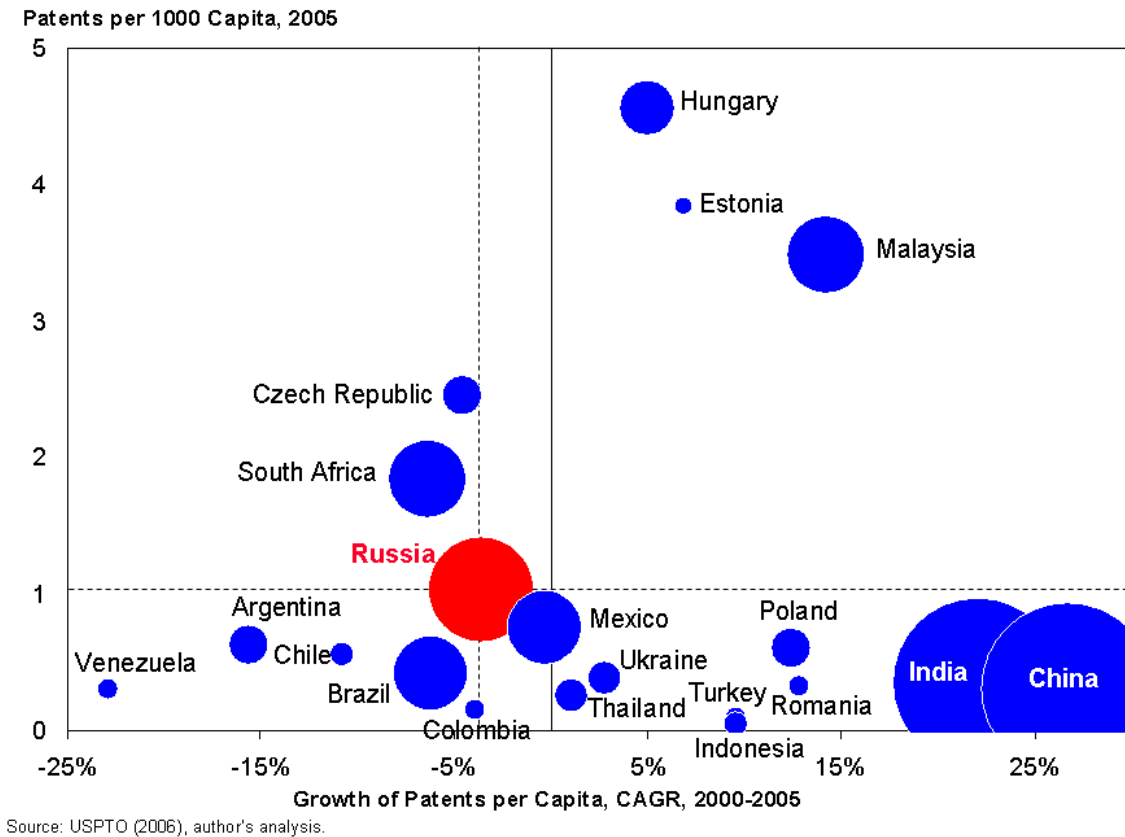
### *3.1.3.6. Innovation*

Innovative activity is a crucial driver of productivity growth, especially for countries that have already reached moderate prosperity levels. Russia ranks *low* on most indicators of innovation output, especially in relation to the human and financial resources devoted to science and technology.<sup>53</sup>

Russian patenting intensity remains relatively high compared to other emerging economies but is eroding, especially versus Asian and Eastern European EU countries (see Figure 17 on the next page). Large research institutions connected to the Academy of Science or universities are not among the top Russian U.S. patentors, a missed opportunity and a danger sign. These institutions remain important to the Russian innovation system but have yet to create linkages with the international scientific community or with the private sector.

Interestingly, a number of *foreign* companies feature among the top Russian-based patentors, suggesting that Russia is an attractive place to conduct research even if local companies and research institutions lack the ability to capitalize this potential. *Unlocking this scientific and technological potential must become a central part of Russia's economic strategy.*

Figure 17: U.S. Patenting Rates, Russia and Selected Peers, 2000-2005



### 3.1.4. Overall Performance Assessment

Russia's good economic performance since the 1998 has been driven by a succession of factors that are mostly *temporary*.<sup>54</sup> In the initial aftermath of the 1998 crisis, the collapse of the Rouble created opportunities for exports and growth in import competing sectors. The fall in GDP created unused production capacity that could later be brought into production at low marginal costs.

As these early benefits began to be offset by an increasing real exchange rate and rising production, Russia started to enjoy dramatic improvements in its terms of trade (since 2004), notably the oil price. With natural resource prices now stabilizing, most observers

expect a slow down in the Russian growth rate. Some expect a more painful correction, especially in Russia's financial markets.<sup>55</sup>

Russia has registered improvements largely from improving macroeconomic conditions and growing oil revenues. Performance indicators measuring underlying improvements in productivity or productivity growth are far weaker. Hence it may not be surprising that various observers arrive at very different views on the strength of the Russian economy.

Russia's significant natural resources, combined with prudent macroeconomic management, offer the country the prospect of reasonable prosperity for the immediate future. But these factors alone will not be sufficient if the country has ambitions to be a serious player in the global economy. Moreover, if Russia truly wants to overcome the significant political and economic costs of natural resource dependence, it will need major economic and political transformation. Russia urgently needs to upgrade its microeconomic competitiveness if it wants to fully leverage the potential of its natural resources and develop a more diversified and more dynamic economy.

### ***3.2. Russia's Endowments: Legacy, geography, and natural resources***

Russia faces complex endowments that create unusual challenges for competitiveness. These challenges—some of them unique to Russia given its recent history while others which are typical for many countries at this stage of development—must be confronted head on in economic strategy. Otherwise the performance of the country will remain below its potential and the political sustainability of economic reforms will suffer.

#### *3.2.1. Legacy*

Russia's history as a *planned economy* left the country with an *economic legacy* that still reflects political decisions instead of economic efficiency.<sup>56</sup> Companies grew up at locations determined by political and security considerations, rather than the efficient economic geography. Company units were often too large in terms of productive capacities at a given stage of the value chain, but too small in terms of presence and capability across the value chain. Also, competition has been difficult to introduce into a system built on monopolies.

Population and with it demand patterns also reflected political decisions, not individual choices. With citizens strongly influenced to live in the far north and east as well as in rural regions and smaller cities, a substantial population reallocation was inevitable.<sup>57</sup> Greater urbanization has important potential economic and social benefits for Russia, but the transition will be painful.

Russia's Soviet past, however, left the country with important assets that it can build upon. The general skill level of the population is high, and education is held in high esteem. The science system consists of a large number of research institutions employing a significant number of highly educated scientists and engineers, especially in natural sciences and technologies related to military uses. The basic physical infrastructure of the country also provided a good base to build upon, though it is now increasing inadequate.



Russia's history as a communist system left the country with a *governance legacy* that includes a highly politicized public service and legal institutions that have been tools of political leadership. In the communist system, party decisions could overrule decisions based on government rules or laws. This legacy persists, and shapes attitudes and expectations within Russia. It has made it hard for transparent regulations and due process to take hold.

Unfortunately, Russia's early steps towards economic reforms, especially the privatizations of the mid-1990s,<sup>58</sup> has left the population with a *deeply cynical and biased view of the market economy*. In Russia, the market economy has become associated with private monopoly, not competition. Private ownership and wealth are seen as the result of political connections and criminal behavior, not entrepreneurship and value creation. This is one of the reasons why the population is strongly in favor of government actions that intervene and reign into the power of business. Unfortunately, there is little public support or pressure for the government to create more room for private entrepreneurship or ensure equal treatment of all companies.

The economic crisis and instability of the 1990s undermined the political standing of Russia in the global community and was a blow to many Russians suddenly facing economic hardship. The crisis has had continuing repercussions for economic policy.<sup>59</sup> The economic growth since 2000 is now accompanied by public demand for a strong government role in the economy and a more nationalistic stance towards foreign governments and companies in economic relations.

### 3.2.2. *Geography*

Russia's huge *geographic area* creates the need for effective regional governance structures to improve the business environment at lower levels of geography. However, weak regional institutions and a history of highly centralized decisions have made it difficult to decentralize policies in a way that leads to effective policies and avoids widespread corruption.

Russia's *location* between Europe and Asia puts it in a potentially beneficial position alongside major trade routes. However, the inaccessibility of Russia as a transit country in the past and the weaknesses in its current business environment have left this opportunity untouched. Most global trade flows are far away from Russia. Russia is also a country with only a limited share of its population in coastal regions that could easily connect to the global economy.

Russia's *neighbors* are largely former Communist countries that share many of the same challenges Russia is facing. But Russia also borders to the European Union (through borders with Finland, the Baltics, and – through Kaliningrad - Poland) and China; countries offering interesting economic opportunities if Russia can take advantage of them. So far, relationships with neighbors have been mostly negative instead of seeking opportunities for win-win economic collaboration.

### *3.2.3. Natural Resources*

Russia's significant *natural resource wealth* has fueled rapid wealth extraction but created political and economic challenges. Russia's oil exports per capita were at \$935 in 2005, and oil production per capita at about \$1290.<sup>60</sup> Russia has proven reserves of about 74m barrels oil (6.5% of total global reserves) and 48trill m<sup>2</sup> natural gas (equivalent to 300m barrels oil; 26.7% of total global reserves),<sup>61</sup> and these reserves represent an annual value of \$3,900 per capita for the next 50 years assuming an average oil price of \$75 and a stable population.

This level of resource wealth is substantial, and has fueled a boom since 2000. However, even this level of resources will not itself make Russia a wealthy country. At the same time, economic volatility, due to unpredictable changes in world commodity prices and upward pressure on the real exchange rate, can easily undermine business investment and the emergence of a vibrant private sector outside of natural resources. Moreover, natural resource wealth of this size creates huge incentives to capture and utilize the power and

wealth that resource abundance provides, putting pressure on Russia's fragile political structures and government institutions.

### ***3.3. Russia's Macro, Political, Legal, and Social Context***

Russia's context has improved, but continues to restrain competitiveness.

*Macroeconomic management* has significantly improved and is the greatest success story of the Russian economy since the 1998 crisis. Burgeoning oil revenues have clearly been important, but much improved fiscal policy (including the tax reform of 2001<sup>62</sup>) has been a central factor as well.<sup>63</sup> Russia has registered significant budget surpluses over the last few years. The current account surplus in 2006 stands at about 9.5% of GDP, and foreign currency holdings approached \$420bn in mid-2007. Russia has been able to repay its foreign debt to the Paris Club ahead of time (summer of 2006). Inflation has been slowly receding to about 10%.

The rapidly rising revenues from Russia's oil and gas exports are clearly the key driver of these remarkable improvements. However, Russia has been able to implement a fiscal policy regime that is much more restrained than in many other resource-rich economies. While a sudden fall in oil prices would clearly hurt the Russian public sector finances, sensitivity analyses indicate that Russia is not in danger of an economic meltdown even in such a negative scenario.<sup>64</sup> The recent policy choices governing the stabilization fund commit future governments (as much as possible) to continue on the path of fiscal prudence.<sup>65</sup>

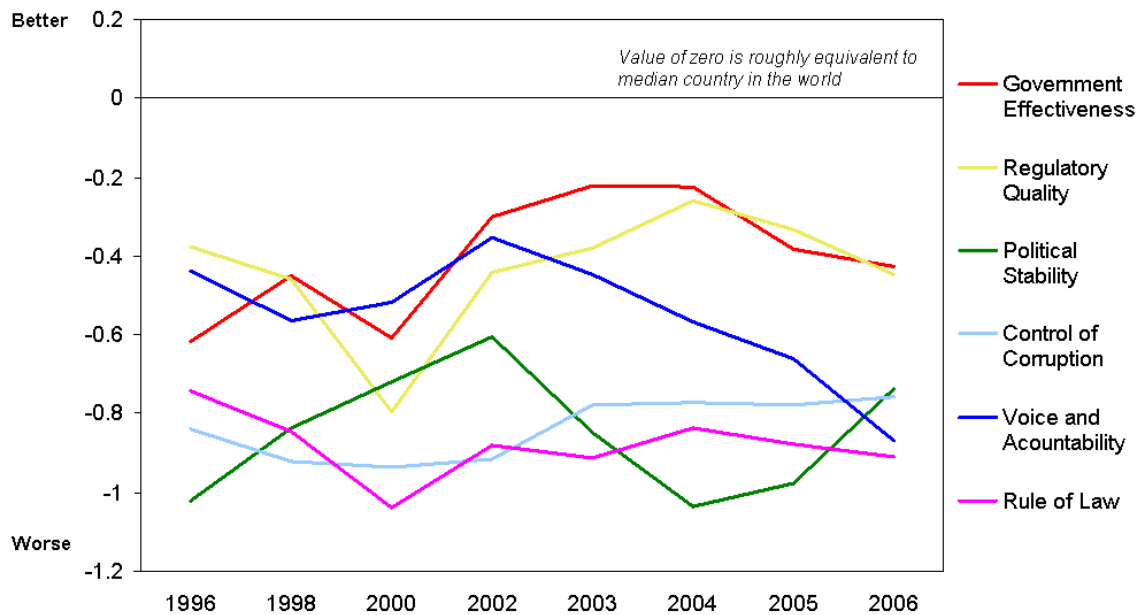
Overall, it is an impressive achievement that Russia has secured stable fiscal policy despite the oil price bonanza. The repayment of foreign debt and build-up of foreign exchange reserves have created a cushion that, according to several analyses, can shelter Russia from a new crisis, even if the oil price should drop or another external shock should occur.

The pace of overall growth is now widely expected to slow down. With oil prices stabilizing on a high level, export growth has fallen behind import growth and the current

account surplus is shrinking. This will test the ability of Russian policy makers to sustain stable public finances in the face of less benign macroeconomic trends.

Russia's *political system* has achieved short-term stability, but its long-term stability and the efficiency of the policy process remain problematic. The President has created a level of stability yearned for by citizens after the volatile Yeltsin era. However, this has been achieved through concentrating powers in the Presidency while limiting dissent in the political process and in the media.<sup>66</sup> While these changes have had their benefits in the short-term, their medium- to long-term implications are more uncertain. Russia still lacks the stabilizing effect of independent and professional political institutions, and uncertainty remains about the process of political transition itself. There are significant uncertainties about future direction as the Presidential term approaches its end.

Figure 18: Political and Legal Context, Russia, 1996-2006



Source: World Bank (2007)

The government also faces structural challenges to sound economic policy. Decisions taken by different parts of governments—different ministries or different government levels—are often inconsistent. Rivalry between different parts of the government was a tool used in the past to secure overall control by weakening rivals and keeping them unclear about their ability to count on Presidential support. This unhelpful legacy seems to linger on.

The Russian government is also burdened by the view that it is solely responsible, and can fix everything. The current mindset in the general public, and within much of government itself, overburdens the government with unrealistic expectations that it may never be able to meet. Microeconomic competitiveness relies not just on the central government but on independent decisions by many institutions—companies, universities, government agencies at different levels, etc. As Russia's main challenges are increasingly microeconomic, the weakness of many of these institutions, their low level of effective collaboration, and the government-centric mindset of the public at large become ever more important barriers to success.

Russia's *legal system* remains a profound weakness (See Figure 18 above). The quality of laws is improving in some cases but implementation is often ineffective. The legacy of a judicial system that was a tool for the executive branch, not an independent part of government, still impedes legal effectiveness.

*Social conditions* in Russia have improved, but the country is facing a number of complicated challenges that will need to be addressed over time. While strong economic growth has led to significant reduction in poverty, inequality in Russia has risen over time, especially in the early phase of the transformation process.<sup>67</sup> Significant divergence across regions and income groups remains a serious problem for achieving consensus on sound economic policies.

Access to basic health care and education, a hallmark of the Soviet Union, suffers from severe issues of quality. Russia ranks low on many health and accident indicators. More recently, concerns about the treatment of ethnic minorities have grown, a key concern given the significant number of non-Russians that live in Russia.

In 2004-05, government took steps towards a social system based on monetary instead of in-kind benefits to improve the efficiency of social policies, though public protests reduced the scope of changes that were ultimately implemented.<sup>68</sup> In 2006, the government also launched four national projects (education, health care, agricultural development, and affordable housing) overseen by a new national body chaired by the President.<sup>69</sup> These projects have received significant funding, equivalent to 10% of the funds allocated in the regular government budget to these policy areas.<sup>70</sup> The projects are an interesting and important step in the right direction, especially the creation of a new institutional structure that has the potential to by-pass the inefficiencies of existing government structures.

### ***3.4. Russia's Microeconomic Competitiveness***

Microeconomic competitiveness will be the single most important long-term driver of Russia's prosperity. Weaknesses in microeconomic competitiveness remain the country's central challenge. While there have been some improvements in the last few years, we have concerns, shared by others, that Russia lacks a coherent competitiveness strategy to guide its policies. Nor is Russia successfully tackling the most pressing problems.

Demands on the business environment are increasing, but Russia's investments in infrastructure, skills, and other dimensions of microeconomic competitiveness are not keeping up. Government policies and agencies frequently work at cross-purposes to each other in micro reform, blunting effectiveness and creating significant uncertainty about the course that government policy will take. Company investments and upgrading is stunted.

#### *3.4.1. The Russian Business Environment*

Russia's overall business environment quality is ranked 71 out of the 127 countries covered by the 2007 Global Competitiveness Report, significantly worse than Russia's rank of 52 on GDP per capita adjusted by purchasing power. Russia ranks below

countries like Croatia, Mexico, and the Philippines and ranks at about the same level as Egypt, Kazakhstan and Romania. Clearly, Russian prosperity has depended heavily on its natural resources, not true competitiveness.

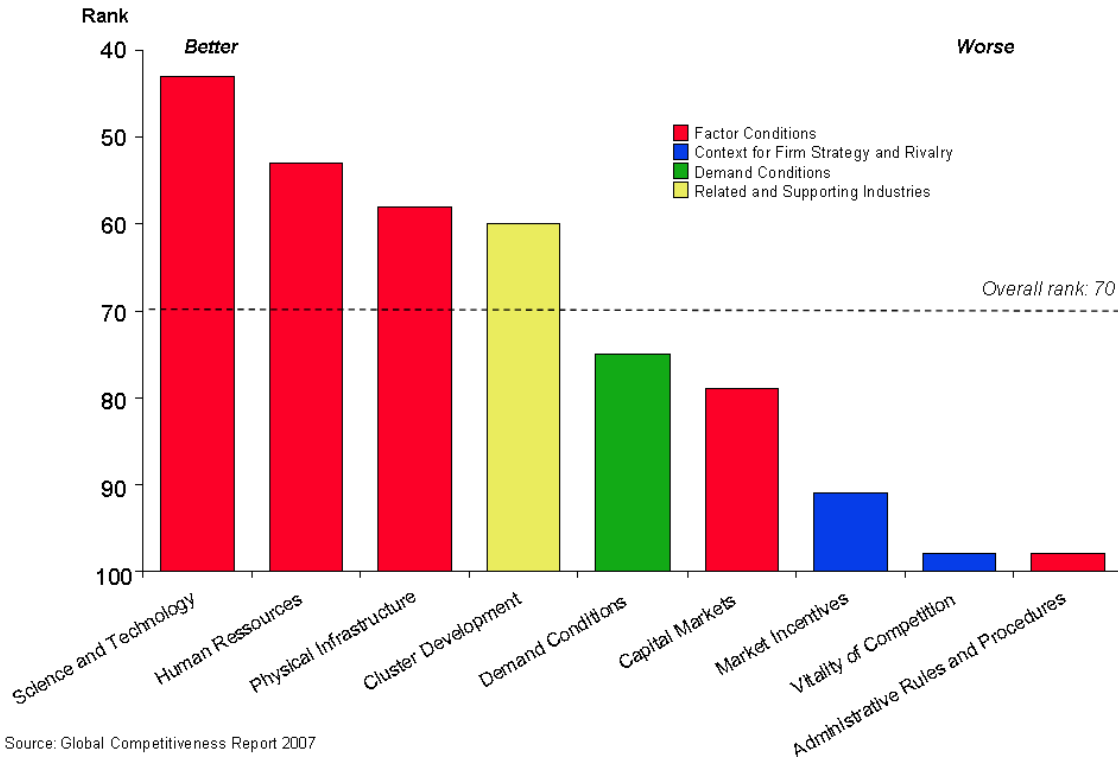
The **Global Competitiveness Report (GCR)**, co-chaired by Professor Michael Porter and Professor Klaus Schwab, is an important source of information about the drivers of competitiveness across countries. Based on an annual survey of 11,000 company executives from more than 120 countries, the GCR provides the best available systematic data on the relative levels of business environment quality and company sophistication. While survey data is inherently subjective, it represents the opinions of business leaders that base their on decisions on these perceptions. Validity tests indicate that the survey responses are a meaningful indicator of actual conditions in companies and the business environment. The Business Competitiveness Index<sup>71</sup> aggregates countries' individual results for 59 individual indicators into an overall ranking of microeconomic competitiveness, and component rankings for different dimensions of the business environment. We employ this data extensively in the discussion that follows.

Russia has significant strengths in factor conditions, especially its science and technology assets, human resources, and physical infrastructure (see Figure 19 on the next page). Russia also enjoys the extensive presence of related and supporting industries, a legacy of the planned economy. This creates the potential for cluster development.

The most significant Russian weaknesses are in extent of competition and administrative rules and procedures. In these areas, Russia ranks among the bottom 25 countries in the world.

Relative to 2001, related and supporting industries (cluster development), market incentives, and human resources have become relatively weaker, while capital markets have improved. Administrative complexity, Russia's greatest weakness as of 2001, has deteriorated further relative to other dimensions of the business environment.

Figure 19: Russia's Relative Business Environment Strengths and Weaknesses



### 3.4.1.1. Factor Conditions

Factor conditions in Russia remain relatively strong, but are eroding with the exception of financial markets.

*Physical infrastructure* is inefficient and not keeping pace with demands of a growing economy, particularly in high-growth regions like Moscow. Weak infrastructure also reduces the degree of effective local competition and cross-regional specialization within the Russian economy. Even where physical infrastructure is present, a lack of specialized service providers and efficient government services reduces productivity. This is evident in areas like logistics, where Russia has solid physical assets but much weaker service providers such as trade forwarders and other logistics companies.<sup>72</sup>

To address the emerging infrastructure problems, government introduced the National Investment Fund in the 2006 budget that was designed to solicit competitive bids for large infrastructure projects for which the Fund would provide co-financing.<sup>73</sup> President



Putin announced major plans to invest in energy, roads, and ports in his 2007 address to the Parliament. Over the last few years, however, the main challenge in upgrading Russia's infrastructure has not been the lack of available capital or plans, but weaknesses in administrative procedures and implementation.

*Figure 20: Factor (Input) Conditions, Russia's Relative Position Based on the Business Competitive Index, 2007*

Competitive Advantages Relative to GDP per Capita		Competitive Disadvantages Relative to GDP per Capita	
Quality of primary education	48	Reliability of police services	106
Railroad infrastructure	26 ↓	Efficiency of legal framework	105
Availability of scientists and engineers	34	Judicial independence	101
Cellular Telephones per 100 inhabitants	35 ↑	Business costs of corruption	94 ↓
Quality of scientific research institutions	39	Quality of telephone/fax infrastructure	91
Quality of math and science education	42 ↓	Laws relating to ICT	85
Patents per capita	43	Quality of management schools	85 ↓
		Financial market sophistication	85
		Ease of access to loans	83
		Overall infrastructure quality	78
		Local equity market access	78
		Air transport infrastructure quality	74
		Quality of electricity supply	73 ↑
		Cooperation in labor-employer relations	70
		Venture capital availability	63 ↑
		Internet users per 10,000 inhabitants	61 ↑
		Quality of port infrastructure	60 ↓
		University/industry research collaboration	56

↑ Up 5 or more ranks  
↓ Down 5 or more ranks

Note: Rank versus 127 countries; overall, Russia ranks 52<sup>nd</sup> in 2007 PPP adjusted GDP per capita and 70<sup>th</sup> in Business Competitiveness. Changes in rank from 2001 to 2007 for stable sample of countries. Source: Global Competitiveness Report 2007.

Russia also faces significant weaknesses in the availability of *electricity supply*. The state-owned monopoly, RAO United Energy System of Russia (UES), is responsible for both electricity production and transmission. It has in the past failed to invest enough to keep pace with the electricity demands of the growing economy. Recently, aggressive plans for new investments have been announced, but implementation remains a question.

Legislation in 2003 initiated a process of restructuring and eventual privatization of UES. The company was restructured in 2005, and a number of power plants were listed on the

stock exchange in 2006. Plans for the further liberalization of the sector have been approved.<sup>74</sup> The government will remain the owner of the power grid and control nuclear generation and most hydroenergy capacity, representing about 70% of the total energy generation capacity.<sup>75</sup> Whether these steps will encourage sufficient investment and lead to competitive prices remains to be seen.<sup>76</sup> The initial experience with the sale of power plants to foreign investors is encouraging. The reform of the electricity sector is an example of how Russia's competitiveness could be accelerated by strengthening connections with companies from abroad rather than pursuing government led solutions. This approach should be spread to other policy areas.

*Administrative efficiency* remains perhaps the major weakness and a fundamental challenge to Russian competitiveness. Legendary bureaucracy, corruption and favoritism by public officials inflict huge direct and indirect costs on Russian businesses and citizens.<sup>77</sup> Administrative failures also block competition and industry restructuring, further reducing productivity.

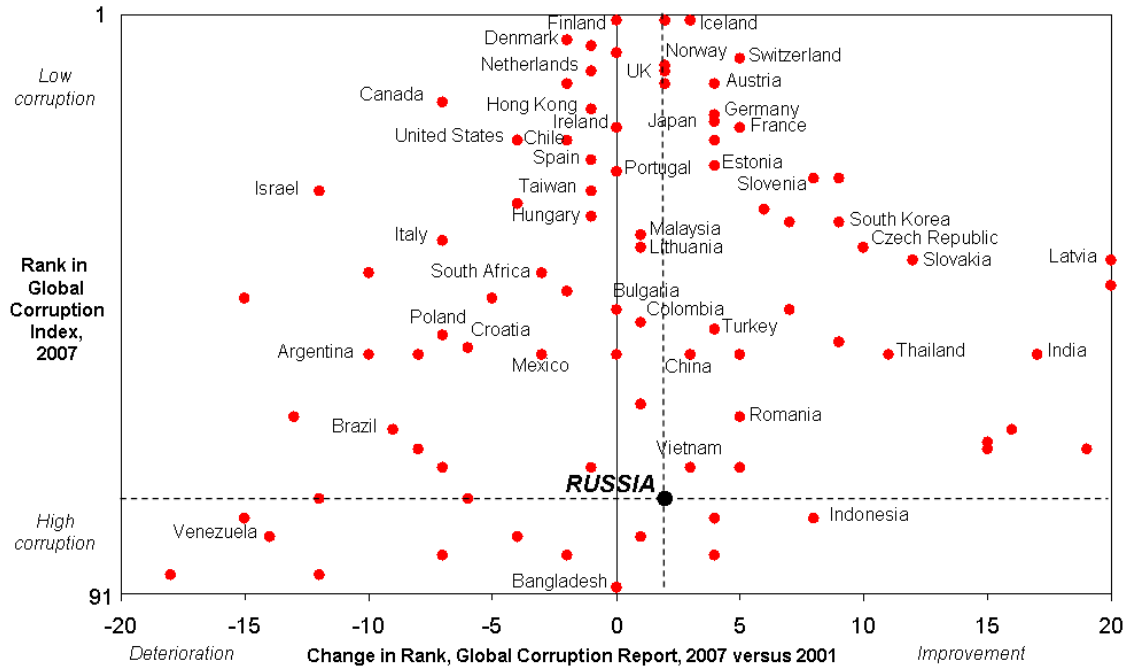
Russia remains at the bottom of the international corruption perception index, even after slight improvements between 2001 and 2007 (see Figure 21 on the next page). Indeed, the president of the American Chamber of Commerce in Russia noted that there is rising 'boldness in trying to extort money'.<sup>78</sup>

The cost of doing business is unnecessarily increased by the unpredictable behavior of government agencies: In his 2005 State of the Nation address, President Putin urged government's agencies to stop terrorizing companies on taxes.<sup>79</sup> Some studies report slight improvements in the administrative burden for small companies, but serious problems remain.<sup>80</sup> Russia has failed miserably in making government effective and professionalizing the bureaucracy.

In Russia, the application of rules, regulations, and permitting processes is perceived as having more to do with political objectives than with due process. This has been widely noted in the context of the Yukos affair, but also in the application of environmental regulations faced by foreign investors in the Russian oil sector and, most recently, in tax evasion charges against a U.S. bank.<sup>81</sup>

Russian agencies are regularly acting at cross purposes to make the Russian economy world class, and putting other goals ahead of the well-being of citizens.

*Figure 21: Corruption Perception Index, 2007*



Note: Ranks only countries available in both years (91 countries total)  
Source: Global Corruption Report, 2007

To be fair, administrative reform has been on the government agenda since the beginning of the Putin administration in 2000.<sup>82</sup> The presidential decree of July 2003 sought to reduce the number of rules and regulations affecting businesses, and rationalize the federal executive bodies. While there has been some progress, however, the overall improvement in administrative capacity has been disappointing to say the least. The number of government employees has actually increased.<sup>83</sup> Civil service reform, and equipping civil servants to meet the needs of a democratic market economy, has been progressing slowly since 2000. The extent of real change, however, has been limited.

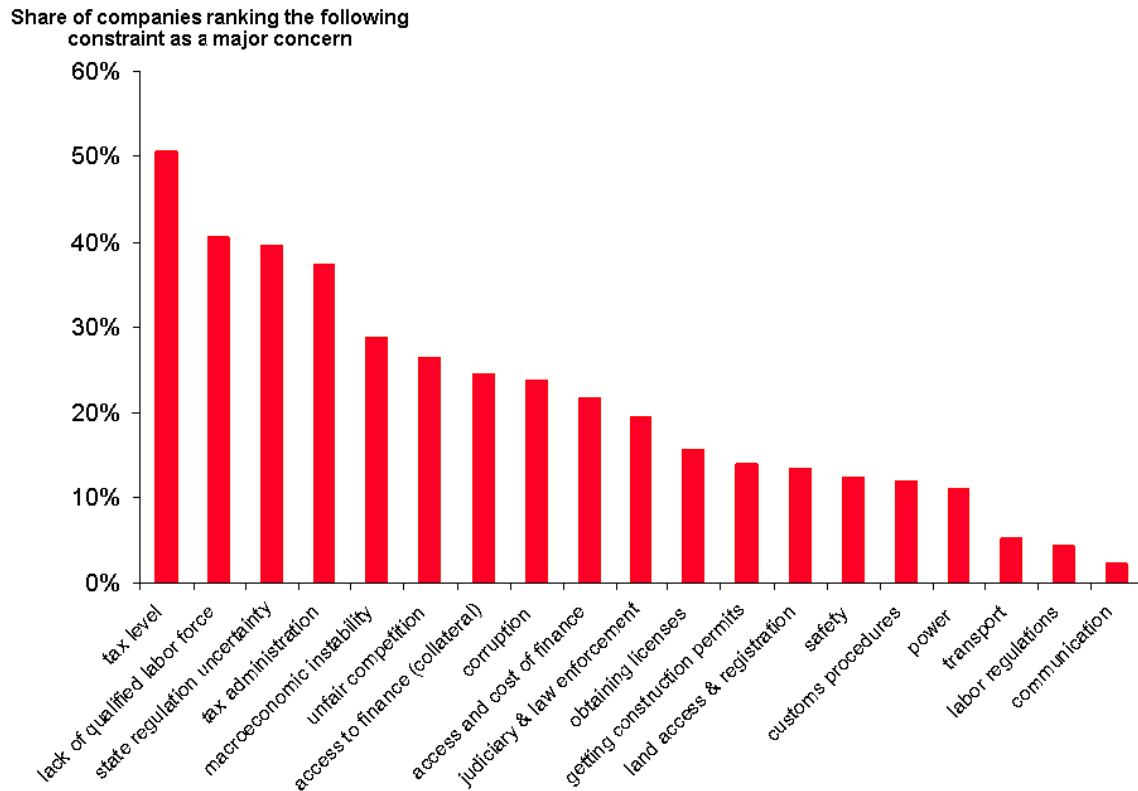
In late 2005, the government approved an ambitious new *Concept for Administrative Reform for 2006–08*. The plan introduces performance-based management and budgeting, the development of formal standards for the quality of public services, and measures to increase the transparency of actions taken by government agencies. While this new plan has many positive aspects, we do not believe it is sufficiently radical to achieve meaningful change. It essentially tries to improve how the public administration is doing the things it is already doing. It is not reassessing whether it is doing the right things, nor tackling the structural reasons for the existence of the current problems. Administrative reform will not be truly effective, for example, when the judicial system remains weak and eroding and civil society institutions are impotent.<sup>84</sup> This is why past reforms failed, and why current reforms will fail if they do not become more ambitious.

In the area of *human resources*, skill shortages are emerging throughout the economy despite the high level of formal education of the Russian labor force.<sup>85</sup> The growth of the Russian economy has far outpaced the ability to provide employees with the needed skills, and problems in recruiting and retaining employees with the appropriate skills have become one of the major growth constraints for companies operating in Russia (see Figure 22 on the next page). The labor hoarding of the past has transitioned to poaching of workers. High staff turnover is endemic.<sup>86</sup>

Yet government spending on education is low, as are training expenditures by companies. There is no evidence that Russia has a clear strategy to fundamentally reform its educational system and align it with the needs of a modern economy.

Skill shortages have led a number of private sector initiatives to start new Russian business schools. However, there is insufficient focus on reforming the educational and training system overall, whether by government or through public-private collaboration.

Figure 22: Major Constraints to Competitiveness for Russian Companies, 2006



Source: Russia Investment Climate Survey, World Bank/HSE (2006)

Russia's *financial sector* is growing rapidly based on improved regulations and the increasing presence of foreign companies.<sup>87</sup> This is an area of policy success. However, the size of the financial sector remains limited for an economy in Russia's position. While large companies and recently consumers have access to loans and other sources of capital, small and medium size companies still find it hard to get financing. The financial sector also remains dominated by government-owned banks that have a virtually monopoly especially outside of Moscow and St. Petersburg. Foreign banks have increased their position in the Russian market and have not viewed government policies or the behavior of the state-owned banks as a problem.<sup>88</sup> This is a positive sign. Nevertheless, Russia will need to develop a clear strategy for how to transition from a financial system dominated by few state-owned banks to a competitive, private sector system.

Government is taking steps to develop the Russian equity market by requiring Russian companies that list on foreign exchanges to also list on the Russian stock market. To attract growing interest from foreign and domestic investors, however, fiat will not be enough. It will be increasingly essential to continue the path towards strong and transparent regulation. This will put the Russian market in a better position to deal with the inevitable volatility of financial markets in an emerging economy.

The government is also trying to improve the availability of risk capital through launching public venture funds. There is little evidence that a public dominated model will be successful, and public investment is rarely effective unless it is invested jointly with private managers. The bulk of risk capital in Russia will need to come from private sources. Private risk capital funds are still small in Russia not because of lack of interest by the private sector, but because of inexperience and weaknesses in the business environment, especially regulation and bureaucracy. This is another area where attracting foreign expertise will provide immediate benefits to Russian competitiveness.

Finally, the *science and technology system* in Russia has significant legacy strengths, but there is a real danger that these strengths will erode over time.<sup>89</sup> Overall, Russia has solid innovation inputs but weak outputs. Russia's research and development (R&D) spending as a share of GDP is high relative to its level of economic development, a legacy of past policies. A major share of this spending, however, is government spending on a large number of public research institutions with little connections to education and business.<sup>90</sup> Government spending is biased toward personnel instead of modern research infrastructure. Companies still spend relatively little on R&D, content to grow with the domestic market.

Academic research is not well integrated with Russian companies and with research internationally. Low levels of academic publications and patenting indicate that Russian researchers have not yet integrated into international science and technology networks. There are also problems with intellectual property protection, where science and technology suffers from the broader weaknesses in Russia's legal context and administrative systems.

The list of current top Russia-based U.S. patentors indicates that foreign companies are already an important user of Russian science resources, while Russian companies are less active with only two of them among the top 25 (see Figure 23 on the next page). Boeing, for example, has 1,000 Russian engineers employed at its Moscow Design Centre where a significant share of the development work for the recently launched Boeing 787 and a cargo version of its Boeing 747 were done. Samsung's research center in Moscow has been an important source of technology used in the company's mobile phones.

*Figure 23: U.S. Patents by Russia-based Inventors, 2000-2004*

<b>Patentor</b>	<b>Number of patents, 2000-04</b>
SAMSUNG ELECTRONICS CO., LTD.	28
<b><i>ELBRUS INTERNATIONAL LTD.</i></b>	<b>26</b>
LSI LOGIC CORPORATION	23
GENERAL ELECTRIC COMPANY	20
<b><i>OAO "NAUCHNO-PROIZVODSTVENNOE OBIEDINENIE "ENERGOMA</i></b>	<b>20</b>
RENAL TECH INTERNATIONAL LLC	14
ALM DEVELOPMENT, INC.	13
AJINOMOTO COMPANY INCORPORATED	12
R-AMTECH INTERNATIONAL, INC.	12
UNITED STATES OF AMERICA, DEPARTMENT OF ENERGY	9
TECHNOLOGIES AND DEVICES INTERNATIONAL, INC.	9
EXXONMOBIL RESEARCH AND ENGINEERING COMPANY	8
ACUID CORPORATION LIMITED	8
MOTOROLA, INC.	7
UNIVERSITY OF CHICAGO	7
THE FOX GROUP, INC.	7
ADVANCED ION TECHNOLOGY, INC.	6
OPTIVA, INC.	6
TOPCON GPS LLC	6
PROCTER + GAMBLE COMPANY	5
SAWTEK, INC.	5
AMERICAN SCIENTIFIC MATERIALS TECHNOLOGIES L.P.	5
BIP TECHNOLOGY, LTD.	5
BAYER AKTIENGESELLSCHAFT	4
And seven more institutions with 4 patents	

Source: USPTO (2006), author's analysis

Note: Russian companies in bold italics

The Russian government has launched a number of initiatives to strengthen innovation, particularly in companies. One policy thrust has been the creation of special geographic zones in which innovative activities are encouraged. Four technical-innovation zones, each focused on a specific cluster or technology, have been created since 2005.<sup>91</sup> In these zones, investors have access to tax advantages, streamlined administrative procedures, and special infrastructure. The government also plans to create eight technoparks (smaller than special economic zones and without tax advantages) and a number of so-called science towns, both with a strong presence of local research and educational institutions. These areas will benefit from investments in specific infrastructure but not from tax incentives.<sup>92</sup> These efforts are welcome and can provide real benefits. But their effects will be limited to the companies located in the designated areas. Russia needs a broader-based effort to make innovation more attractive for all Russian companies, wherever they are located.

Three separate ministries have launched venture funds that will invest about 4bn Rouble (about \$160m)—largely through other funds—in small innovative companies. About half of the funds are earmarked for the information and communication technology sector. There are also discussions to review the tax treatment of R&D expenditures that currently is unfavorable compared to other countries. These initiatives are a start but deeper reforms will be needed in institutions and rules if Russia is to be able to translate its scientific potential into higher competitiveness and prosperity.

The Innovative Capacity Index provides some additional perspective on the challenges facing current policy initiatives.<sup>93</sup> The Index explains a country's rate of innovation, measured by patenting intensity, through a combination of indicators including factor inputs (scientists and engineers), innovation policy (intellectual property rights, R&D incentives, trade barriers, and administrative burden for start-ups), cluster development (availability of specialized research facilities), university-industry interaction, and the demand for innovation from companies (based on their strategic positioning).



Figure 24: Innovative Capacity Index, Russia's Relative Position, 2004

Rank	Scientists & Engineers Index	Innovation Policy Index	Cluster Environment Index	University Linkages Index	Company Operations and Strategy Index
...	<b>Russia (9)</b>	...	...	...	...
40	Italy	Greece	Morocco	Indonesia	South Africa
41	Latvia	Czech Republic	<b>Russia</b>	Portugal	Lithuania
42	Romania	Lithuania	Nigeria	Egypt	Mauritius
43	Argentina	Slovak Republic	Cyprus	Uganda	Egypt
44	Mozambique	Botswana	Bahrain	Turkey	India
45	China	Namibia	Turkey	<b>Russia</b>	Poland
46	Costa Rica	Bahrain	Estonia	Hungary	Jordan
47	Egypt	Italy	Ukraine	Jordan	Hungary
48	Trinidad & Tobago	Malta	Mexico	Jamaica	Mexico
49	Chile	Jordan	Slovenia	Bahrain	Tunisia
50	Cyprus	Chile	Lithuania	Costa Rica	Estonia
51	Macedonia	Morocco	Costa Rica	Greece	Portugal
52	Indonesia	Croatia	Philippines	Trinidad & Tobago	Pakistan
53	Mauritius	Serbia	Kenya	Panama	Panama
54	Tunisia	Tanzania	Panama	Namibia	Botswana
55	Morocco	Uganda	Greece	Madagascar	Morocco
56	Brazil	Egypt	Mauritius	Mali	Thailand
57	Turkey	Gambia	Czech Republic	Mauritius	Namibia
58	Uruguay	<b>Russia</b>	Colombia	Vietnam	Trinidad & Tobago
59	Malaysia	Trinidad & Tobago	Namibia	Botswana	El Salvador
60	Vietnam	Mali	Jordan	Tanzania	China
...	...	...	...	...	<b>Russia (63)</b>

Source: Unpublished data using the methodology described in "Ranking National Innovative Capacity: Findings from the National Innovative Capacity Index" by Michael E. Porter and Scott Stern (part of The Global Competitiveness Report 2003-2004).

Russia's position in the Innovative Capacity Index is 35 and suffers from serious imbalances across different aspects of innovative capacity that undermine overall performance.<sup>94</sup> Moreover, Russia registers 7.5% fewer patents than predicted by the model based on the independent variables, one of the worst results among the 74 countries analyzed. The current initiatives do little to address the underlying weaknesses in company behavior, i.e., the way in which Russian companies compete. Most companies are not willing or able to focus on innovation. Improvements in efficiency are currently dominating their attention, especially given the rapidly growing domestic market that puts a premium on expanding capacity.

Weak protection of intellectual property rights (IPR) is cited by companies as a critical obstacle towards commercializing R&D outputs. A survey by the Russian Interdepartmental Analytical Center found 50% of companies citing weak IPR as a major

problem for innovation.<sup>95</sup> Russia ranks 113 among 120 countries on IPR protection in the Global Competitiveness Report. The WTO accession process has led to improvements, but these were focused on trademarks and copyright issues rather than patents. Infringement of IPR has been common and it will take time for companies to build trust in a more robust Russian IPR system.

Russian innovation policy draws on policy tools and initiatives that have worked well in western countries where the overall business environment for companies is very different. These policy tools do, however, little so far to address the circumstances of Russian companies.

#### *3.4.1.2. Context for Strategy and Rivalry*

The rules and incentives governing competition are a key weakness in the Russian business environment. Government rules and regulations *significantly raise the costs of doing business* in Russia relative to peer countries, while *limiting* the intensity of competition. Overall, Russia ranks 106 among 178 countries in the World Bank's 2007 Doing Business report versus a 54<sup>th</sup> rank in GDP per capita.<sup>96</sup> Not only are costs high, but there is uncertainty about the predictability and application of rules and regulations.<sup>97</sup> While there have been some policy improvements, implementation of reforms is often weak.<sup>98</sup> There are also significant differences across Russian regions in the implementation of regulatory reforms.<sup>99</sup>

Russia's average tariff level is comparable to other countries at similar stages of development.<sup>100</sup> However, the *effective openness to foreign trade and investment* is reduced by the complexity of tariff classes and the way they are interpreted by government authorities, both of which create uncertainty. This adds to the costs of conducting cross-border business.<sup>101</sup> Companies from the Baltic Sea Region report that technical rules create high barriers to trade with Russia that have slightly worsened over the last five years.<sup>102</sup> As a result of such administrative barriers and inadequate logistical

services, Russia is less open to the global economy than, for example, China.<sup>103</sup> Russia pays a high price in terms of domestic efficiency.

Figure 25: *Doing Business Index, Russia's Relative Position, 2007*

Category	Rank
Enforcing Contracts	19
Registering Property	45
Starting a Business	50
Protecting Investors	83
Closing a Business	80
Getting Credit	84
Employing Workers	101
<b>OVERALL</b>	<b>106</b>
Paying Taxes	130
Trading Across Borders	155
Dealing with Licenses	177

Ranking compares to 178 countries

Source: World Bank – Doing Business (2007), author's analysis.

The intensity of *internal competition* is low in large parts of the Russian economy, which is holding back restructuring, entrepreneurship, and innovation.<sup>104</sup> In many industries, there are dominant market positions in narrow regional and product markets. Regional concentration levels are high, and there is insufficient competition across regions.<sup>105</sup>

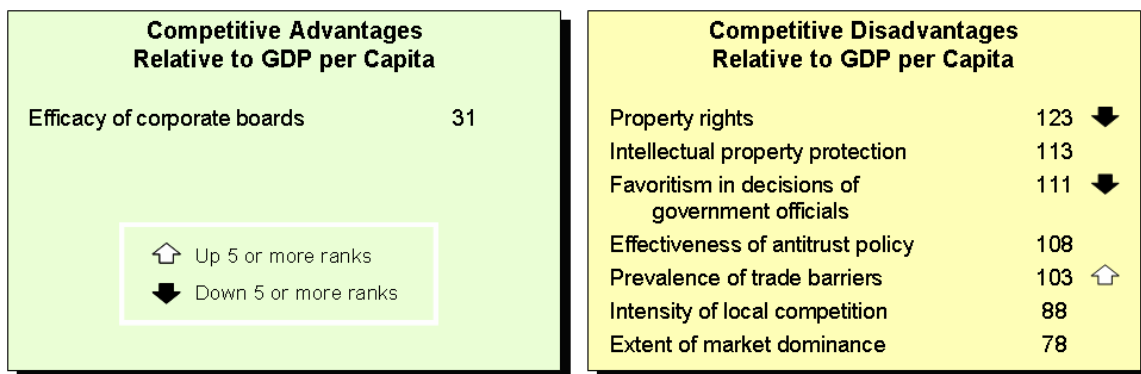
One reason for limited rivalry is artificial barriers to entry created by government, especially regional governments. Regional governments have been willing to protect or subsidize large employers in order to keep them afloat.<sup>106</sup> New, more efficient companies find it hard to enter, and face competitors who set uneconomic prices based on marginal costs and fully written-off assets.

Russian companies have higher prices and margins than in peer countries,<sup>107</sup> despite some moderation in recent years.<sup>108</sup> Higher margins reflect less contested market

structures. While the surge in local demand led to some new entry, competition is often me-too competition based on price. Russian companies have been slow to develop differentiated products and services.

Public policy towards competition has moved in the wrong direction. The Russian government has in the last two years taken a significantly more active and direct role in the economy. It has designated strategic sectors in which foreign ownership is limited. Government-owned companies like Gazprom and Rosneft have taken over the assets of private rivals, notably Yukos,<sup>109</sup> and gained a dominant position in their industries. The Russian government has facilitated the creation of national champions in areas like aerospace, where it has consolidated the industry in a single company under government control. Government has taken majority stakes in the dominant domestic players in sectors like the automotive industry. Proposals currently under discussion in the lower house of the Russian parliament, the Duma, could restrict the openness of a significant number of other industries to foreign investors. There is no evidence, in Russia or elsewhere, that national champions succeed and that these policies will enhance competitiveness or encourage new business formation or innovation.

*Figure 26: Context for Strategy and Rivalry, Russia's Relative Position, 2007*



Note: Rank versus 127 countries; overall, Russia ranks 52<sup>nd</sup> in 2007 PPP adjusted GDP per capita and 70<sup>th</sup> in Business Competitiveness. Changes in rank from 2001 to 2007 for stable sample of countries. Source: Global Competitiveness Report 2007.

There is a need for structural change in many industries, but state ownership solutions have failed time and time again to produce real restructuring. While increasing the public ownership stake in natural resource industries may redress past exploitation to private domestic and foreign interests, the solution chosen by the Russian government has been, and will be, detrimental to the country's competitiveness. The government has mixed the roles of resource owner, regulator, and market participant, with predictable negative consequences.

The path of Russian policy towards competition will limit Russia's participation in the global economy. Russia will find it increasingly hard to export outside of resources and commodities.

#### *3.4.1.3. Domestic Demand Conditions*

Demand sophistication and domestic segmentation are not yet important influences on Russian competitiveness. The recent increase of purchasing power has led to rising sophistication of Russian consumer demand. This is an important strength. It is likely that many Russian-based companies and subsidiaries are also starting to become more advanced in their purchasing activities.

However, government procurement is not encouraging quality, and consumer-protection standards are weak. Government has also failed to set demanding regulations in environmental impact, safety, energy efficiency, and other areas as a tool to drive productivity and innovation.

#### *3.4.1.4. Related and Supporting Industries*

As a large country that historically was not well integrated into the world economy, Russia has a high presence of local suppliers and supporting industries. The evidence

suggests, however, that such industries have rarely developed into functioning regional clusters that drive productivity and innovation.

### *3.4.2. Cluster Development in Russia*

Russia faces weaknesses in cluster development, even for a country at its income level. Historical location patterns worked against clustering, rather than encouraged it. Russia's economy is still paying the price.

We utilize a new data set that applies the cluster definitions developed by Professor Porter to Russian data on employment and other indicators by Russian region. The cluster definitions reflect the actual co-location patterns of industries that exist in the United States, an integrated economy in which companies have long been able to choose their location based on economic considerations, including the presence of cluster effects.<sup>110</sup>

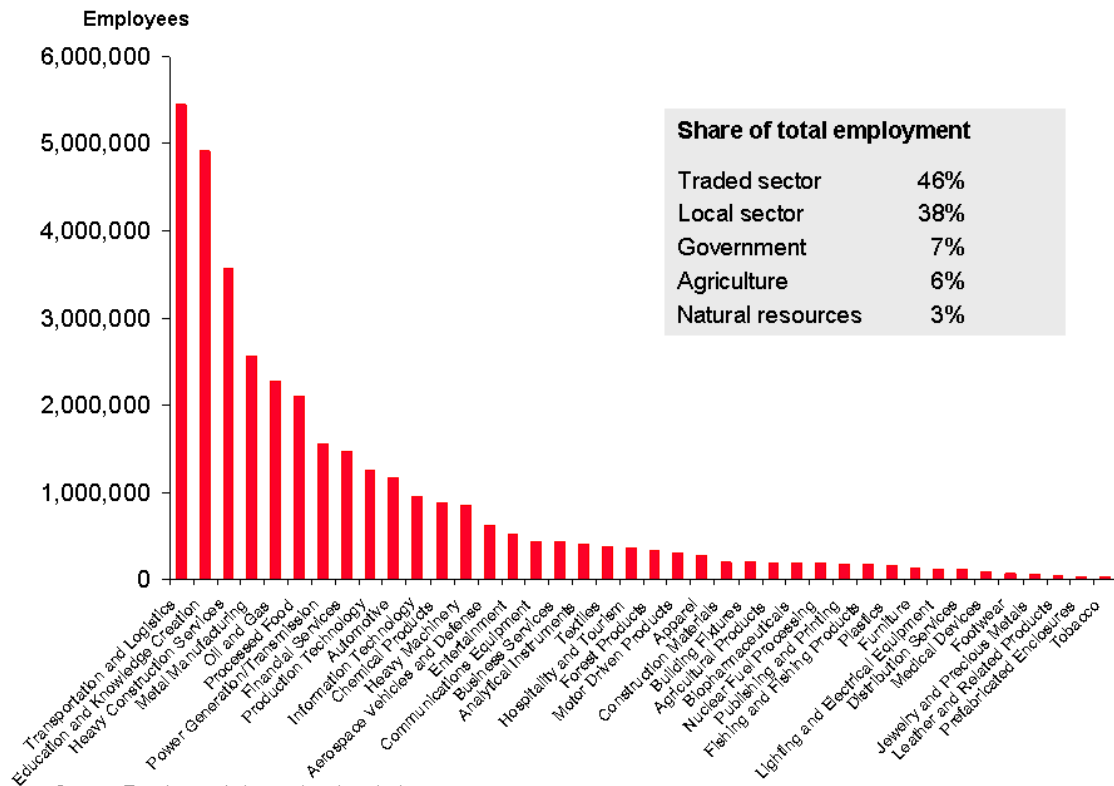
Russia has a larger share of its overall employment in the traded sector than in developed OECD countries. This is probably due to the limited local personal and business support services available in Russia. Within the traded sector, Russia is relatively specialized in capital- and resource-intensive clusters as well as in education and knowledge creation. Compared to more advanced economies, Russia is weak in business services and financial services. Russia's legacy is the main reason for this economic structure: The planned economy focused on manufacturing, regarding service activities as less important or contained within large vertical integrated firms.

Russia's employment profile in 2007 (see Figure 27 on the next page) is a consequence of its history, geography, stage of development and relative factor endowment. Political choices in the past have favored heavy industry but also education and science relative to other services. The limited outsourcing of non-core activities by many large companies sustains this bias. The large physical size of the country is important to explaining the significant employment in transportation and logistics. As in other countries at a similar stage of development, clusters such as processed food and areas of manufacturing are

important. The presence of natural resources, including metals, drives the size of affected clusters as well as related activities, for example in transportation equipment.

Given the structure of Russian economy versus more advanced economies, it is clear that restructuring still has a long way to go, both across sectors, within sectors, across geography, and within companies.

Figure 27: Russian Employment by Cluster, 2005



The June 2005 law on Special Economic Zones (SEZ) is intended to support the emergence of clusters. Four zones are designated as technical-innovation zones,<sup>111</sup> two as industrial-production zones, and others might be designated as tourism-oriented zones. This approach is a welcome step towards organizing investment investments and

government administrative capacities around the needs of a specific regional cluster. But a small number of SEZs are not sufficient to spur meaningful cluster development across the Russian economy. And SEZs are not a substitute for cluster initiatives in which companies and government agencies cooperate in the strengthening of cluster dynamics in a specific region.

**Oil and Gas Cluster.** The oil and gas cluster has become an increasingly dominant part of the Russian economy. While a detailed analysis of individual clusters is beyond the scope of this report, the increasingly important role of the oil and gas cluster for the Russian economy demands a few summary observations.

The unit output of the Russian oil and gas cluster has remained more or less stagnant since 2004. The significant growth in revenues has come entirely from the increase in world oil prices.<sup>112</sup> Yet employment has grown significantly, reducing oil production per employee. There are few signs of any progress in broadening the value generation of the cluster beyond the sale of unprocessed natural resources. Government's policy of state ownership is thus far failing to enhance competitiveness. Instead, it seems to be reducing competitiveness as is typical in other countries.

Competition in oil and gas is highly distorted. Prices in the domestic market are heavily subsidized. Export prices differ significantly across export markets, with Commonwealth of Independent States (CIS) countries paying prices below the world market level. Prices are gradually adjusting towards world levels, but the process has become politicized through government intervention in all affected countries. Price increases have been more dramatic for countries like Georgia with which Russia had foreign policy disagreements. In countries like the Ukraine and Belarus, the pricing of oil and gas exports has been tied to Russian control over the oil and gas pipeline infrastructure. Ultimately, this whole approach has increased the level of political interference in the cluster and delayed progress toward true competitiveness.

The re-nationalization of large parts of the cluster has set back competitiveness improvement even further. The initial privatization of the cluster—with the important exception of the transportation network<sup>113</sup>—has been reversed during the last two years.



Government-linked companies, in particular Gazprom and Rosneft, have taken over the interests of foreign and private companies.<sup>114</sup> Government-linked companies have focused on controlling markets through acquisitions and long-term contracts, not on investing into new capacity or achieving higher productivity. Private domestic and foreign companies now have little incentive to make risky long-term investments in exploration or innovation, so Russia's cluster is likely to stagnate. Also, the specific tax structure applied to the oil sector has further dampened investment incentives.<sup>115</sup>

### *3.4.3. Company Sophistication*

Companies are the ultimate sources of value creation in any economy. National productivity depends on the sophistication of company operating practices and strategy. The productivity of the country depends on the collective productivity of companies operating in the country. A strong business environment and dynamic clusters allows companies to compete in more sophisticated ways and increase their productivity, but ultimately it is companies that must transform themselves.

Many Russian companies have a complex legacy that continues to hamper their policies, organizational structures, and market behavior more than 15 years after the end of the planned economy.<sup>116</sup>

In the planned economy, the capacity of a plant was set to serve a captive market, often with an exaggerated view of the available economies of scale. Indeed, economies of scale were the dominant tool for improving efficiency, with the rate of product and technological innovation all but halted by monopoly control. Elsewhere in the value chain, such as in marketing or services, companies were often weak or not present at all. Companies were vertically integrated into supporting activities, rather than outsourcing to specialists or collaborative local corporate networks.

The process of privatization in Russia did not eliminate these structural distortions, but in some ways actually accentuated them. Individual plants were privatized, which broke up the value chains that they were part of. This created companies that were too large in the

product area in which they were active, but small or not participating in related activities. Companies continued to be overly vertically integrated.

The Russian privatization process also led to the emergence of business groups with many unrelated businesses. Acquisitions were made opportunistically, where there were opportunities to buy assets at low prices. Conglomerate groups failed to reinforce competitiveness, but concentrated instead on amassing political influence.

In 2007, there is a painfully slow process underway in which these fundamental structural misalignments are starting to change. While there is yet little systematic data, the available evidence suggests the following: Company capabilities in core products have often become either technically obsolete or superseded by the changing needs of the economy. Weak corporate presence in the value chain remains a significant problem. While some companies have extended their activities along the value chain, for example in the steel industry, this improvement in capabilities remains the exception. A low level of outsourcing in non-core activities is pervasive. There are still too few external providers offering support services, a significant challenge for foreign companies who need local suppliers in order to grow in the Russian market.<sup>117</sup> Finally, while business groups are beginning to try to improve efficiency and sell non-core businesses, too many groups are mainly the result of the past dealmaking, and not justified by genuine competitive advantages.

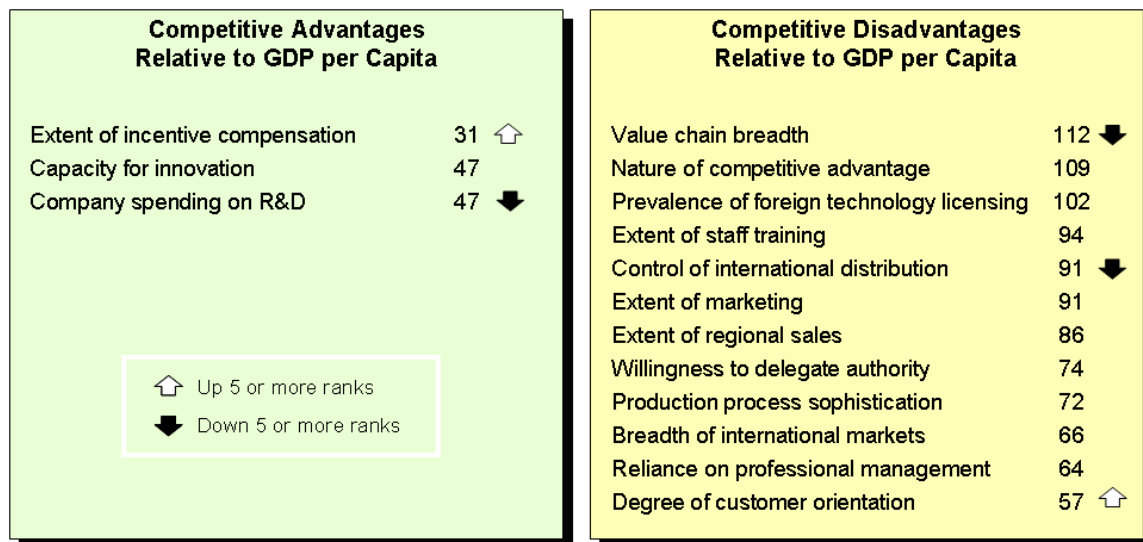
Such misaligned corporate structures have important consequences: Companies find it harder to develop competitive advantages because they cannot draw on the appropriate network of activities to sustain them. And markets are less competitive because of captive supplier relationships. There are encouraging examples of Russian companies successfully outsourcing support functions.<sup>118</sup> But the overall evidence suggests that old legacies persist and that unwinding them remains a key constraint to Russian competitiveness.

**Company Strategy.** Many Russian companies still compete on price and cost, based on large scale plants, written-off assets, or preferential access to cheap energy or natural resources. Russian companies tend to utilize less advanced management

approaches and make fewer investments in skills and technology, notably foreign technology, than companies in comparable countries (see Figure 28). Capital spending is focused on acquisitions to increase market power. An outdated view of competition as a one-dimensional race to win is common.

In the last few years, Russian companies have become more aggressive, seeking to participate in rapidly growing markets.<sup>119</sup> Operational effectiveness has improved, investments in foreign machinery have risen, and financial structures have improved.<sup>120</sup> Corporate governance has improved as well, relying more on outside board members and separating ownership from management.<sup>121</sup>

*Figure 28: Company Sophistication, Russia's Relative Position, 2007*



Note: Rank versus 127 countries; overall, Russia ranks 52<sup>nd</sup> in 2007 PPP adjusted GDP per capita and 77<sup>th</sup> in Company Sophistication. Changes in rank from 2001 to 2007 for stable sample of countries. Source: Global Competitiveness Report 2007.

Overall, Russian companies have gotten better at traditional ways of competing, but are yet to adopt the more sophisticated ways of leading competitors. There is little focus on unique products and services, little innovation, and little true restructuring. In many companies, the transparency of governance remains low.<sup>122</sup> An important reason for the

lack of corporate progress is the weaknesses in context and the Russian business environment that we have described.

**Challenges Facing Russian Companies.** There are four broad types of companies operating in Russia with different competitive challenges. *Large private groups* (sometimes referred to as ‘oligarchs’), which developed during the Yeltsin era, are still a large part of the Russian economy. A significant number have listed on foreign exchanges, particularly in London. Their productivity performance puts them ahead of government-linked and smaller Russian companies, but well below foreign companies.<sup>123</sup> These companies have taken the basic steps to improve management sophistication, including some improvements in governance.<sup>124</sup> Large groups are attentive to government, and have gotten increasingly careful to minimize conflicts with the government. Many have responded to government pressure to invest in social programs and other efforts to benefit the regions in which they operate.

*Large government-linked groups*, the second category, are currently growing rapidly.<sup>125</sup> The available evidence suggests that these companies are driven to achieve size and market power rather than improve productivity.

*Small- and medium- sized companies* are growing in number but are still underrepresented relative to comparable economies. They tend to compete using low cost strategies, and are facing greater rivalry.

*Foreign companies* have historically seen Russia mainly as a source of natural resources. In recent years, however, rapid Russian market growth has led to a significant increase in the foreign companies who serve the Russian market. Foreign companies have brought advanced operating practices and strategies to Russia, raising the sophistication of competition in sectors in which they play a significant role, such as financial services, consumer goods, and retailing. Especially given its legacy, Russia will benefit greatly from entry by foreign companies. However, foreign companies are facing growing challenges, especially in sectors with strong government involvement.

The current Russian business environment, ironically, is relatively favorable for many foreign companies outside of natural resources based on our interviews and analysis. These companies enjoy a growing local market but unsophisticated rivals. Infrastructure weaknesses, corruption, and cumbersome rules and regulations are burdens that are more easily overcome by large foreign companies that have clout and experience from other countries with similar circumstances. Russian companies, in contrast, are more disadvantaged by Russia's failure to improve rules, regulations, and transparency.

State-linked Russian companies have grown in size and market power but are uncompetitive. Private groups have improved but are not yet truly competitive internationally. Russian SMEs, the key to Russia's future competitiveness, find themselves the most disadvantaged by the current Russian business environment. They are exposed to all its weaknesses but lack the capacity, connections, or financial access to grow, upgrade, and cope with corruption and administrative complexity. Ironically, then, the development of Russian companies is the opposite of what should be desired by policymakers.

#### *3.4.4. The Role of Sub-national Regions*

As in other countries, there are significant differences in competitiveness across Russian regions.<sup>126</sup> A recent analysis of eleven Russian regions using the methodology drawn from the Business Competitiveness Index (BCI) found that the most competitive Russian region was at a level comparable to BCI country rank 70 (Russia's comparable overall rank is 79) and the bottom region at rank 82.<sup>127</sup> Interestingly, Moscow, the region with the highest GDP per capita, did not have the most competitive business environment. Moscow benefits hugely from government presence and faces serious bottlenecks in terms of infrastructure and the availability of skilled employees.

Russian regions are more specialized by cluster, in terms of employment, than regions in North America or Europe.<sup>128</sup> In our analysis, specialization is measured using the inverse of the Herfindahl Herschman Index (HHI); higher values indicate higher levels of

specialization. Large Russian regions are more specialized than large European regions and large U.S. regions. Small Russian regions are as specialized as small U.S. regions and more specialized than small European regions. The U.S. has had a fully integrated economy for many years which encouraged specialization. Europe's economic geography is still shaped by its legacy of barriers to cross-border trade and investment. Russia's economy was specialized by fiat, not market forces, an equally bad structure.

*Figure 29: Regional Specialization Levels, Inverse of HH index*

	<b>Average</b>	<b>Large Regions (top 10%)</b>	<b>Small regions (bottom 50%)</b>
<b>Russia</b>	0.55	0.54	0.65
<b>United States</b>	0.47	0.40	0.67
<b>European Union</b>	0.50	0.48	0.51

Source: Institute for Strategy and Competitiveness, Harvard University (2007)

Russian regions often have high dependence on a small number of clusters. In many regions, a few companies account for most of the employment within the leading clusters, a danger sign. Vibrant clusters require competition and collaboration across companies and institutions, and current Russian regional structures are not conducive to capturing such externalities and spillovers.

Russian regions differ in the relative strength of their cluster portfolio, with implications for regional performance.<sup>129</sup> As in many other countries, Russian regions with stronger clusters tend to perform better in terms of prosperity, despite the many distortions that exist.<sup>130</sup> Further research will be necessary to deepen the understanding of whether this reflects true benefits in terms of productivity or is just a reflection of the dominant market positions that individual Russian companies hold in regional product and labor markets.

Russian regions have begun to diverge more in performance. Since 1997 regional administrations have been headed by elected governors.<sup>131</sup> There is case based evidence that some regions have improved their competitiveness, while others suffered from

corruption, institutional weaknesses, and policies that favor large incumbent employers.<sup>132</sup> In Russia's North-West, for example, regions like Leningrad oblast and Novgorod, traditionally ranked highest on economic reform efforts, have lost their leading position. The cities of St. Petersburg and Kaliningrad have in the meantime improved their reform efforts.<sup>133</sup>

In 2000, President Putin created seven federal districts as a new governmental level between the regions and the federal government. However, the influence of districts appears, so far, to be limited. An analysis covering the period up to the end of 2003 indicated that districts and other regional measures by the Putin government, such as tax legislation to reduce regional tax rebates for individual companies and to limit the capture of regional governments by local interests, had not been effective.<sup>134</sup>

In 2003, the Russian government proposed a significant revision of the fiscal relations between the federal government and regions. These proposals were designed to give the regions a much larger stake in their own affairs, consistent with notions of efficient fiscal federalism and potentially beneficial to competitiveness. In 2005, however, the implementation of these efforts was interrupted as part of the reforms—the monetization of social benefits—was creating serious unrest.<sup>135</sup>

In 2004, the Russian parliament adopted a new law that gave President Putin the right to appoint regional governors. The appointment of governors less likely to be captured by local interest groups is a positive step,<sup>136</sup> and regional policy will benefit from a more productive relationship with the federal government. However, the danger of this new structure is the lack of local accountability. It can also limit the ability to mobilize regional institutions and lead to overdependence on the federal level. There is no political mechanism to ensure that governors focus on the interests of their regions if there is no pressure from the President to do so.

#### *3.4.5. Economic Integration with Neighboring Countries*

An important driver of national economic and productivity growth is economic integration with neighbors. Historically, the Soviet Union was an integrated economic system, but one based on an ineffective economic model. Cross national linkages between Russia and its neighbors have grown weaker over time, which is understandable.<sup>137</sup> Russian exports, dominated by natural resources, are largely directed to global markets. Neighboring countries remain an important destination for Russian foreign direct investment outflows.<sup>138</sup> However, a political overlay to Russia's trade relations, and the increasing use of oil and gas for political reasons, is hurting the ability to force productive economic linkages with neighboring countries.

There have been controversies between Russian energy companies, in particular state-owned Gazprom, and the Ukraine and Belarus about energy prices and ownership of pipeline infrastructure. Controversies with Poland have led to a Russian embargo to Polish meat exports, triggering a Polish resistance to some elements of EU-Russian collaboration. Relations between the Baltic countries and Russia remain problematic and have hampered the use of trade links between Russia and Western Europe through the Baltics, traditionally one of the main logistical corridors for Russia. Georgia was subject to economic sanctions.

These controversies may be good politics, but they are bad economics. Russia has employed policies that are not in its economic self interest.<sup>139</sup> Productivity enhancing opportunities have suffered.

Russia is not leveraging the potential of economic ties with its neighbors. Such ties would have significant benefits, especially for the diversification of the Russian economy. The experience of the Baltic Sea Region suggests lost opportunities in closer cooperation with neighbors.<sup>140</sup>



#### *3.4.6. Public-Private Collaboration in Economic Policy*

The nature of interaction between the Russian government and the private sector has changed for the worse in the last few years, especially since 2004.<sup>141</sup> As economic policy has become more centralized and government-driven, the private sector has reduced its direct engagement. Industry associations are active in operational issues, but stayed away from participation in economic policy. In the process, Russia has lost a crucial tool for economic development.

Russian business associations represent the main categories of Russian companies; the Russian Union of Entrepreneurs and Industrialists (RSPP) represents the large private groups but also the state-linked companies. Opora represents small companies. Business Russia represents the new medium-sized companies. These groups have played some role in the design of specific policies—RSPP, for example, was active in the discussion of the new competition law. However, the private sector is not prominent in overall policy. Foreign companies have associations that tackle on-going operational issues with the government, but collaboration to improve the Russian business environment is limited. Ministries are not accountable to the private sector in considering policies.

Business leaders have become reluctant to speak out about economic policy. There is a National Competitiveness Council under the Prime Minister in which private sector leaders participate, but this group seems to have limited influence in setting policy direction. Business leaders have been supportive through philanthropic activities in the provision of public services, often substituting for regional or local governments incapable of providing these services.<sup>142</sup> Russian companies have been willing to get engaged in some areas that are important for competitiveness, like the creation of new business schools. However, there are few if any initiatives like Russia 2015, a project under way in 2000/2001 where private sector leaders aimed to develop a strategic vision for Russia's economic future. Changes in the regulations surrounding non-governmental institutions have created the perception that independent assessment of policy is not welcome.<sup>143</sup>

Ineffective dialogue between government, companies, and other institutions relevant for competitiveness in Russia has its roots in the country's legacy. In the Soviet Union, there was no role for independent institutions to participate in the policy dialogue. Informal networks protected the interests of specific groups rather than focusing on building a more productive economy. In the first decade of economic transition, private business interests threatened to control the political process.<sup>144</sup> In the last few years, the government has re-established its supremacy over policy and is now taking decisions without much effective dialogue with the private sector. Government has clearly gone too far in this direction.

Russia needs to overcome these historical barriers to collaboration between government and businesses in defining and implementing economic policy. Government is responsible for making decisions, but must be ultimately accountable to the private sector. This is particularly critical for the success of microeconomic reforms that address areas in which the government neither has sufficient knowledge nor the capacity to implement all the needed changes alone.

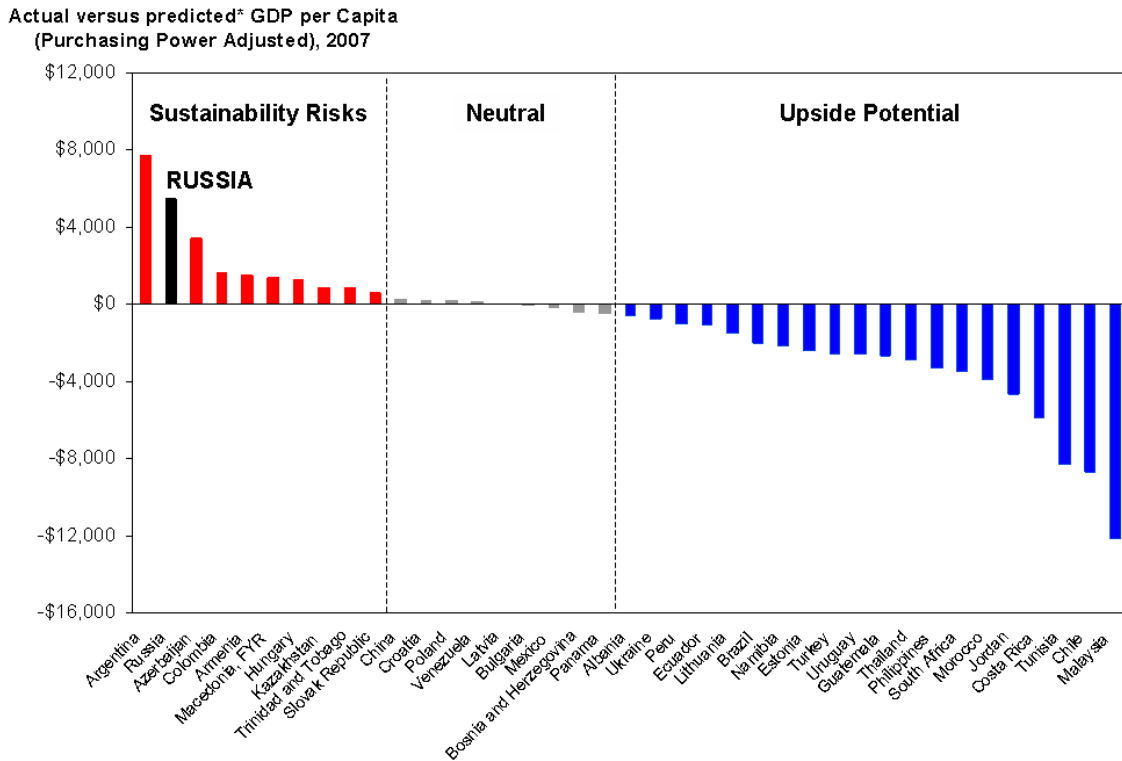
### ***3.5. Russia's Inconsistent Aspirations***

Russia has serious competitiveness weaknesses. Some of these—like poor administrative efficiency and the lack of effective competition—have been enduring. Others—like the growing inadequacy of skills and available physical infrastructure—have emerged as the economy has grown, the demands on the country's business environment have risen to support more sophisticated competition, and government has proven not to be up to the task.

Russia's competitive deterioration relative to the needs of the economy has been masked by various factors. A combination of external—the rise in global prices for oil, gas, and other natural resources—and internal—improved macroeconomic policy, excess capacity, and some company catch-up—have allowed Russia to achieve high rates of economic growth.

Russia's current prosperity is not sustainable given its level of competitiveness, nor is Russia yet equipped to play a truly greater role in the world economy. Ambivalence about future direction is reducing Russia's fundamental economic position compared to countries such as China and India.

Figure 30: Business Competitiveness, Context, and Prosperity, 2007



Note: Predicted GDP per capita based on competitiveness, natural resources, political context, and location  
Source: Global Competitiveness Report 2007, authors analysis

Russia's competitiveness is not high enough to support the level of prosperity that Russians are currently enjoying and have come to expect. Russia's natural resources enable a higher prosperity level than would be possible given the country's competitiveness alone. But a significant gap remains even when controlling for Russia's endowments and other context (see Figure 30). And the reliance on natural resources, without improvements in competitiveness, is inhibiting any real progress towards significant improvements in prosperity and evolution to a more diversified economy.

Russia's immediate concern must be the ability to manage the almost inevitable slowing of the economy; the one-time gains of available slack capacity are largely past. Oil and gas prices are likely to stay high, but their rate of growth is likely to slow. The improvements in fiscal policy—if they can be sustained—will allow companies to stay on a higher productivity growth path. However, the significant gains from the improvement of fiscal policy are past. Without fundamental improvements in competitiveness, the rate of improvement in companies will not be high enough to drive growth.

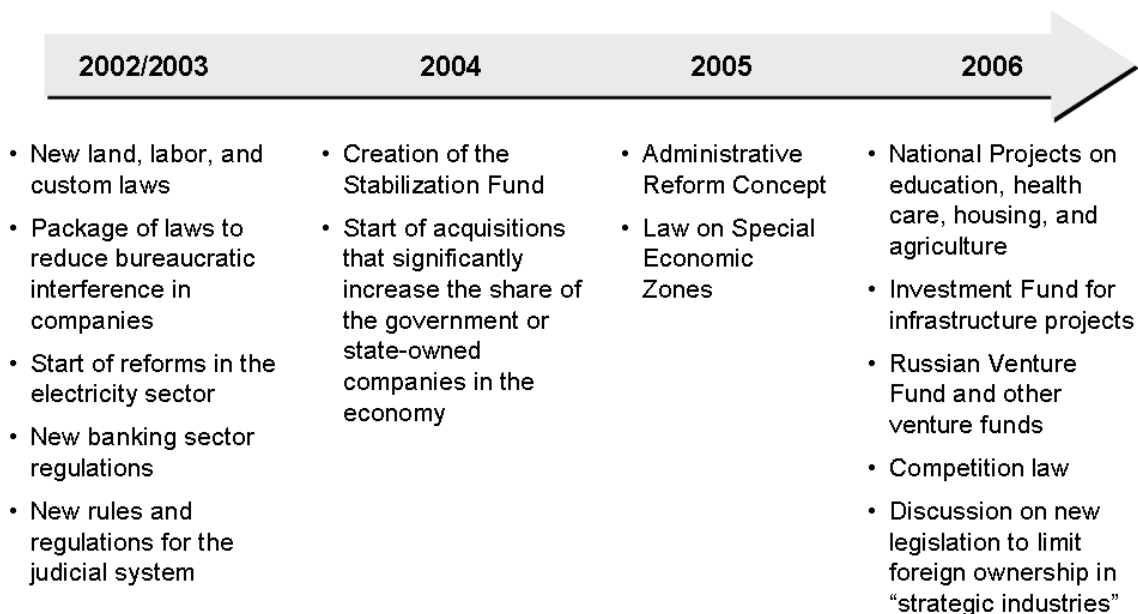
The mismatch between high prosperity and weak competitiveness that was sustainable in the past period of high economic growth will become a burden as the growth rate slows down and trade-offs between various political objectives become more binding.

#### 4. Recommendations

Russia’s economic policy has evolved to address the changing priorities for economic development, but Russia has not moved boldly enough to significantly increase competitiveness. The period between 1998 and 2004 was characterized by the need to achieve stability after the preceding economic and political volatility, a task at which the government has been very successful through a combination of its own policies and favorable external circumstances.

After 2004, however, it became increasingly clear that further progress could only be achieved with deeper structural changes. The government decided that these changes would require a more active role of the government, because existing institutions were too distorted or ineffective for a productive economy to emerge naturally, a view also shared by foreign analysts.<sup>145</sup> *Our analysis suggests that this policy shift has failed to produce the changes necessary to significantly enhance Russian competitiveness.*

*Figure 31: Major Recent Russian Economic Policy Initiatives*



We see three root causes for the disappointing policy results: First, Russia has not made any real progress in addressing weaknesses in its political and legal context and in crucial areas of the business environment. These weaknesses continue to be a burden on the economy. Even more importantly, they seriously undermine the potential of otherwise sensible policies like investment funds, special economic zones, and cluster efforts to succeed. Policies will remain largely ineffective as long as context and business environment weaknesses remain, even with policies that apply best practices from other countries. Recent policies, such as the newly announced Mid-Term Program<sup>146</sup> that includes many sensible initiatives, are in danger of also being ineffective unless serious reforms of context take place.

Second, Russia has recently made a number of policy choices that are actually *harmful* to competitiveness. The government has reacted to existing structural problems in the economy in ways that exacerbate these problems, rather than providing effective solutions.

- In its relations with the oligarchs—private economic interests that achieved enormous wealth through uneconomic transactions in early transition—the government has taken steps to reduce their role and bring their activities in line with national economic interests. Establishing the authority of the government versus strong private interests was a logical step.<sup>147</sup> But the Russian government applied a mix of non-transparent measures through different institutions with unclear authority. The threat to prosecute companies for alleged tax evasion has been a frequent tool to put pressure on companies. This undermined the credibility of the effort and further eroded the legal and political context for all firms.
- In a number of industries—automotive, aerospace, and metals—the government has taken an active role to facilitate restructuring to enhance competitiveness. A strong government role in this process seems inevitable in the Russian context because the financial sector is not mature enough to manage such a transformation alone. But the Russian government has mistakenly tried to exert strong influence on the way companies are actually run, and placed individuals with strong political links in

leading positions, rather than to open competition and put in place a transparent governance process. This threatens to seriously harm competition and productivity by making the government both a regulator and a market participant.

- In the oil and gas sector, the government has taken steps to increase the government's share of oil and gas revenues. Previous contracts had arguably been negotiated when the Russian government was in a very weak position. Similar steps to increase the government stake have been taken in other natural-resource rich economies. But the Russian government has used methods such as the threat to withhold environmental licenses and the auctioning of former Yukos property in processes that were perceived to favor government-owned companies. This approach further erodes trust in due process and the Russian legal and administrative system. In other countries, governments often maintained private participation while increasing their share of revenues.

Third, policies set by different Russian government ministries continue to work at cross-purposes. While some in government want to create a more competitive business environment, others want government to micromanage through regulation and create powerful companies with political as well as economic missions.

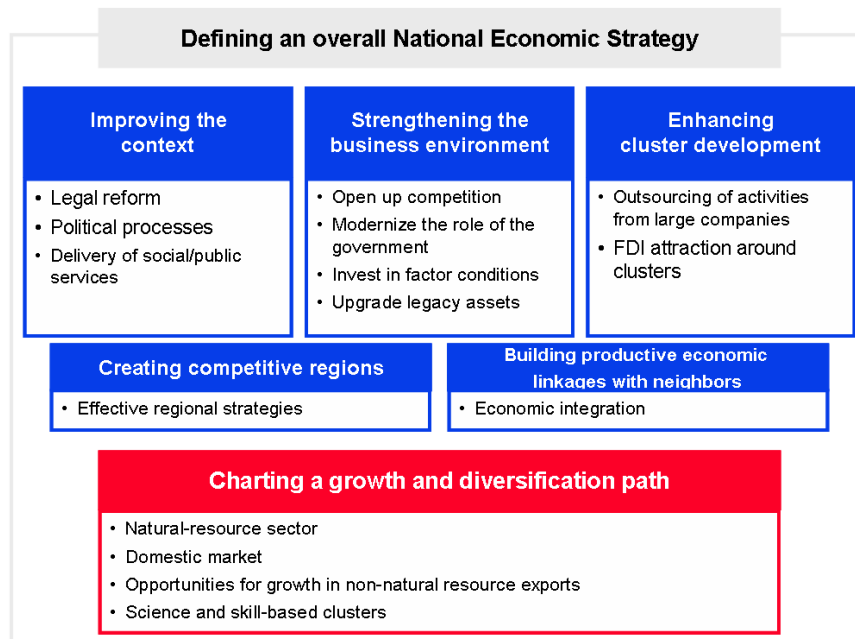
Finally, Russian leaders clearly have very different views of what drives competitiveness and national prosperity. These differences in opinion go beyond the usual policy disagreements that are present in many governments, and strike to the heart of the *goals of the nation itself*. Is the goal politics or prosperity for citizens? There is no clear mechanism to resolve these incompatible aspirations. Instead, conflicting signals threaten to cancel each other out and, even worse, create a high level of uncertainty about future policies. This is a climate in which even good policies have little chance of achieving their full positive impact.

### **4.1. Priorities for Russian Economic Policy**

While detailed advice on individual policy areas is beyond the scope of this report, we offer an overall strategic direction as well as highlight policies that are particularly salient at this time in Russia’s economic history. We also suggest priorities for research in order to build consensus around needed directions. In our recommendations, we focus on what is practical and realistic given today’s circumstances, not on what is theoretically indicated in ideal circumstances. The Russian policy debate is full of debates about abstract theory which have done little to advance economic policy in practice.

We have organized our discussion of priorities for Russian economic policy around three broad themes: First, Russia needs an overall national economic strategy for the economic direction it wants to take. Second, Russia must upgrade the foundations of competitiveness through concerted efforts in strengthening context, improving the general business environment, supporting cluster development, creating competitive regions, and developing productive economic linkages with neighboring countries. Third, Russia needs to define a growth path which is based on its strengths and which will diversify the economy from its extreme natural resource dependence.

*Figure 32: Priorities for Russian Economic Policy*





*4.1.1. Defining an Overall Economic Strategy*

**Define an overall economic strategy that sets goals, establishes an overall direction, and recognizes the priorities among policy areas.** Currently, there is uncertainty about the overall direction of economic policy, and no clear guidance on how to make trade-offs between competing objectives and policies. The result is government policies that work at cross-purposes, and companies—both domestic and foreign—that are confused about future direction in Russia and thus react only cautiously even to well-meaning government initiatives.

A national economic strategy describes the overall position of a nation in the global economy. It defines the value it seeks to provide as a business location, the strengths it will nurture, the path of growth it aims to achieve, and the roles of government at various levels. An economic strategy identifies those dimensions of the business environment in which the country needs to excel, versus those in which it seeks parity with competing locations.

A nation will not be successful in the global economy only through limiting weaknesses. It must nurture or develop real strength for a range of business activity. A national economic strategy has nothing to do with the five-year plans of the communist past that attempted to direct the behavior of companies. Instead, it focuses on creating an environment, rules, and institutions in which businesses operating in the country can excel.

Russia has the potential to be much more than a natural resource-rich economy. The country's geographic location between Asia and Europe represents a potential asset. The high levels of education in Russia, and the deep research base, can become the basis for strong science-based clusters. The large home market offers opportunities to develop global exports in areas where Russian demand patterns mirror or foreshadow global needs. Russia needs to debate these and other ideas about its future opportunities that could form a national economic direction. Russia's competitiveness agenda needs to recognize the priorities that flow from this direction, rather than attempt to tackle everything at once.

#### 4.1.2. *Upgrading Russian Competitiveness*

##### 4.1.2.1. *Strengthening Macroeconomic, Political, Legal, and Social Context*

**Address key weaknesses in context, particularly in the legal system and processes of government.** Russia's economic development is being held back by very uneven progress on context. The effectiveness of the legal system has made little or no progress, and provides only weak protection of property rights against powerful private or public interests. Political institutions, and the checks and balances among them, need significant strengthening. The delivery of public and social services is impeding competitiveness while limiting public support for needed restructuring and modernization. These weaknesses in context are important barriers which make improvement in microeconomic competitiveness much harder.

- *Create an efficient and independent legal system.* Creating sound procedures to enforce the law and protect individual rights is necessary to increasing the credibility and impact of government policies. Crucially, the government needs to resist the temptation to interfere with the judiciary, even when decisions might not go in the direction it prefers. Given its legal system shortages, Russia should work with international organizations and agreements, such as the WTO, to ensure credibility of adherence to policies.
- *Improve the capabilities and professionalism of political institutions.* Stronger government institutions, with a system of checks and balances, are the only effective way to achieve political stability.<sup>148</sup> Political reform in this direction will be complicated but necessary. Ensuring orderly transfers of power, and continuity in policy direction, are especially crucial.
- *Use competitive principles to improve the delivery of public and social services.* Improving public and social services is needed to increase productivity and will be essential to engaging the support of the majority of Russians for further economic reforms. One priority is to reform the health care system using value-based competition principles.<sup>149</sup> Among other steps, health care provision could be opened

up to both public and private providers to drive a step-change improvement in health care delivery and open up a huge new market for entrepreneurship.

#### *4.1.2.2. Improving the General Business Environment*

Without further improvements in the business environment, Russian companies will remain stuck in low-value competition and restructuring will be limited. While there are many aspects of the business environment that need to be addressed, the near term priorities are (1) opening up real competition, (2) simplifying and modernizing the administrative roles of government, (3) addressing weaknesses and bottlenecks in factor conditions, and (4) transforming legacy assets in education and research into sustainable competitive assets.

**Increase the level of competition in the Russian economy.** Many weaknesses in the Russian economy such as low productivity, limited and slow restructuring of industries and companies, and cost-based company strategies are the result of restricted or limited competition. Russian policy today attempts to address such weaknesses through government intervention. This treats the symptoms, not the root causes. Competition—far more than private ownership per se—is at the heart of a functioning market economy. Without more competition, competitiveness upgrading will languish.<sup>150</sup>

- *Deepen opening to international trade and investment.* Russia has taken important steps through the WTO accession process to open its markets to the global economy. Russia is clearly lagging in both imports and FDI, however, further progress now needs to be made, through tariff reforms, a thorough a review of custom practices and administrative simplifications, and the active development of supporting and related industries to facilitate the entry of foreign companies into Russia.
- *Strengthen enforcement of competition laws.* Russia has taken an important first step with the approval of a new competition law. Competition policy needs to drive

structural changes, eliminate dominant market positions, and ensure that competitive practices are aligned with productivity. The law has to be applied equally to all companies, including those that are government-owned.

- *Enhance competition among regions.* Russia need to make targeted investments in logistical infrastructure and eliminating all restraints and inefficiencies of internal movement of goods and services. This will expand market size, open competition, and reduce dominant market positions.
- *Strengthen the governance, transparency, and depth of the financial markets.* Russia has made good progress in the development of its financial markets. But these markets are still small, and vulnerable to global or domestic shocks. A vibrant financial market will continue to improve the supply of capital and strengthen competition through a stronger market for corporate control. This will drive restructuring of companies and industries. More efficient financial markets would also reduce the role of business groups as internal capital markets, opening competition further.

**Streamline and limit the role of government in the economy.** Russia has failed to achieve sufficient improvement in the administrative rules and processes needed for a modern economy, while remaining too directly involved in the control of companies.

- *Improve administrative transparency, professionalism, and efficiency.* With a more reliable and efficient administration, corruption will decline, the costs of doing business will fall, uncertainties and delays that hinder investment decisions will be reduced, and competition will rise. There is an urgent need in Russia to reduce, simplify, and streamline rules and regulations at all levels of government. Past incremental approaches to administrative reform have not succeeded.

We recommend that all administrative functions and approvals related to companies be concentrated in a single new agency which operates in *one-stop business development offices* located in each region and city. These offices would have full

transparency through posting all transactions on the Internet, fixed time limits for review and approval processes, and a well compensated professional staff. This approach is already being taken in Russia's special economic zones, and supported by new dedicated courts. Such an approach would bypass the problems of existing agencies.

- *Create a new governance structure for government-linked companies (GLCs).* Without more professional management of GLCs, Russia will see not only substandard performance but also harm competitiveness of the Russian economy through uneconomic practices, monopoly power in key sectors, and distortions due to political influence. Strong independent regulators and full scrutiny of GLCs by competition authorities are needed to ensure that these companies do not distort markets and undermine Russia's productivity.

Government needs to define clear performance objectives for each GLC, provide transparency in their results, and establish governance structures independent of the political process. GLCs need to have transparent economic goals to ensure that their behavior does not get politicized. GLCs need effective boards with members selected based on their abilities. Management teams need to be hired and evaluated based on merit and be able to operate free of political interference.

GLCs have rarely succeeded in not harming national competitiveness, much less contributing to it. Countries with successful GLCs have created clear economic objectives and governance (Singapore), and ensured that companies were exposed to a high degree of competition (Singapore, South Korea, Dubai). The lack of competition and effective governance in Russian GLCs is problematic, much more so than the presence of government ownership per se.

**Address emerging factor condition constraints in the economy.** Russia's infrastructure is under strain, due to insufficient investment and ineffective management. And the lack

of structural reforms has hindered the development of supporting services to translate the potential of infrastructure assets into real value for a modern economy.

- *Invest in physical infrastructure to meet growing demand.* The Investment Fund is an important signal that Russia is addressing emerging infrastructure bottlenecks. But it is important that flagship projects will be accompanied by a more broad-based investment strategy. A few, competitively awarded large projects are insufficient to grow infrastructure capacity in line with a growing economy. In the past, concerns about inadequate administrative capacity and corruption led to hesitance in terms of making significant funds available for infrastructure upgrading. The answer to this real concern must be administrative reform, not the abandonment of needed investments. The recent announcement to aggressively use public-private partnerships (PPP) in the financing of infrastructure actually increases the need for administrative reforms in the management of public works programs.<sup>151</sup> The experience of other countries indicates that PPP concepts can deliver value, but are complex and require competent public administrators to manage.
  
- *Upgrade the education and training system.* Russia lives to a large degree on its legacy of a well educated workforce. But the demands on the available skills are rising and the legacy system itself is under pressure in a changing economic environment. Reforms will need to restructure the education and training system; its goals, incentives, and institutions. Without such reforms increasing spending on education and training will have limited effect. It is also important to work closely with companies to better understand their demand for training and mobilize them as more active buyer and providers of training services.

**Transform legacy assets into competitive advantages.** Russia has inherited a strong position in terms of highly educated citizens and scientific research institutions. However, these capabilities are in danger of eroding quickly due to inadequate investment, poor governance, and insufficient connections to economy and business.

- *Strengthen scientific research institutions and better connect them to the economy.*  
The Russian research system needs to be thoroughly reformed to become a more attractive partner for Russian companies in the adaptation and transfer of existing technologies and knowledge, not only leading theoretical research. The traditional separation of higher education and research into separate institutions is a mistake for both education and research; new integrated models will have to be found. The number of research institutions is too large, creating complexity and units that lack sufficient scale; the concentration of activities is crucial. And too much of financing is based on institutional support that is not tied to specific performance or activities; the shift towards merit-based financing of research institutions needs to be aggressively continued.
  
- *Create a policy to encourage and support spin-offs from universities and research institutions.* Existing Russian companies by and large pursue strategies that do not leverage the scientific potential of the country. New companies, based on new ideas developed in the research system, can fill that gap. A policy environment that provides incentives for spin-offs, supporting business services, and clear rules for ownership and licensing of intellectual property are essential components of such a policy. Researchers and their institutions need a stake in the commercialization of their inventions to take an active interest in building ties to business.

#### *4.1.2.3. Moving to Cluster-Based Development*

**Move towards a more effective distribution of economic activity across regions and transform co-locations of related activities into real clusters.** Improvements in the general business environment, especially efforts to increase the level of competition in the Russian economy, will be an important step in this direction. But more can be done to support the emergence of clusters and increase their effectiveness in many Russian regions.

- *Adopt a cluster-based approach to investment attraction.*<sup>152</sup> Foreign direct investment (FDI) inflows can increase and become more valuable for Russia by organizing FDI attraction around clusters. Some Russian regions already focus on specific industries in their FDI attraction efforts. These efforts can be strengthened by mobilizing local companies as partners in the marketing efforts, targeting investors that can address critical weaknesses in the cluster structure, and involving foreign investors in the ongoing discussions on how to upgrade the cluster.
- *Create a program to support the outsourcing of support activities from dominant incumbent firms.* An important practical step towards enabling the emergence of stronger clusters would be a program to support spin outs of support units from large incumbents. This would improve productivity, reduce the dominance of legacy companies as regional employers that are too large to fail, and provide entrepreneurial opportunities for current employees.

#### *4.1.2.4. Strengthen Regional Economic Development*

**Redefine the role of regions in economic development.** Given the huge geographic size of the country, Russia must encourage decentralization and responsibility for economic progress at the regional level. National policies set the overall context and define rules and incentives. Setting priorities and implementing decisions on how to upgrade competitiveness needs to occur at the regional level because of their widely differing circumstances.

- *Create incentives for regional economic strategies.* There are many encouraging examples of steps taken in regions (oblasts) to improve competitiveness. The federal government can build on these examples by encouraging regions to set their own economic strategies and provide performance-based support for implementing them. Individual programs as well as the general structure of fiscal relations between the federal and regional level have to be reviewed as to whether they meet the demands.



- *Provide benchmark data on regional economies and policy best practices.* The federal government should play a role in comparing regional performance and policies. The challenges that many Russian regions face are similar, even though the specific nature in which they are dealt with will differ. The federal government needs to provide information, and facilitate change, in addition to its other forms of involvement. The U.S. federal government and the European Commission provide useful examples on approaches that can be adapted to the Russian context.

#### *4.1.2.5. Create Productive Economic Relations with Neighbors*

**Overcome unproductive economic relations with neighbors.** Russia is a large country that can derive important benefits from productive economic ties with its many neighbors. Mixing up these economic relations with politics is a recipe for reducing competitiveness, and has led to decisions that hurt Russian productivity. Better economic relations between Russia and its neighbors will require mutual trust. Trust comes out of focused steps that create win-win solutions, such as coordinating logistics, simplifying movement, and expanding markets.

- *Encourage regions to collaborate with adjoining countries.* Given Russia's geography, neighbors will often be more important trading partners with Russian regions than other parts of Russia. Relations with neighbors need to be de-politicized, and focused on economics and productivity. The role of other ministries relative to the Ministry of Foreign Affairs should be strengthened. Regions and municipalities need to be free to enter into productive agreements without undue interference by federal authorities.
- *Embrace multilateral organizations or treaties to strengthen trade relations in ways that are more insulated from politics.* On a global scale, Russian membership in the WTO is very positive step. The opportunities for similar but more far-reaching agreements with groups of neighboring countries offer major opportunities for expanding trade, improving efficiency, and diversifying the Russian economy.

#### *4.1.3. Growth and Diversification of the Russian Economy*

Russia is unlikely to succeed through the export-led growth approach of Asian countries based on cheap labor and low production costs. The presence of China and other Asian countries, together with the upward influence of Russian natural resource endowments on local costs, have closed this path. Russia's growth and diversification will need to take a different path, building on Russia's strengths.

The *natural resource-sector* and clusters tied to growing *domestic markets* represent the most immediate opportunities for growth. Future growth will come from building *export positions outside of natural resource-intensive industries* and on capitalizing on *capabilities in science and research*.

Some of these opportunities will develop quickly while others will become economically meaningful only in the medium- or long-term. It is important that Russia adopts an economic strategy that addresses both. Politicians need to have a realistic expectation on the contribution these different sets of opportunities can make to the economy, and communicate these realities to the broader public.

Russia has the best opportunity to expand exports in fields where it already has existing strengths. These positions indicate underlying advantages of the Russian business environment and signal opportunities to draw on related strengths. We offer a new methodology to identify export potential in three areas: (a) Expanding current niche positions outside natural resources, (b) broadening exports within clusters in which Russia is already strong and (c) diversifying into clusters related to current Russian cluster positions. This approach can guide policy makers to concentrate analysis and action on areas in which a country has a significant likelihood of export success.

##### *4.1.3.1. Turn National Resources into True Clusters*

Natural resources will, for the short- and medium term, remain the most powerful driver of Russian prosperity. The huge natural resource reserves and the outlook for high energy

prices in the global economy result in an almost certain inflow of significant export revenues in years to come. Economic policy towards this sector will, however, need to change fundamentally for Russia to gain the full potential benefits of its natural resource wealth.

Russian policy towards the natural resource-sector can do much more for Russian prosperity, if it is organized around increasing the *productivity* of the sector, not just its market power. Higher productivity will only be achieved, if there is fair and open competition within the cluster, and if government policies reduce the burden of rules and regulations on business. While extensive government ownership makes these goals harder to achieve, it is important to note that the effectiveness of competition is the crucial question, not ownership per se. If it is possible to separate the role of government as an owner and market participant from its role as a regulator, competition can still be effective. For Russia, it would, however, take dramatic changes in government behavior to convince other market participants that competition is fair. It is important to be aware of the alternative: a level of investments into exploration and other productive capacity that remains insufficient and threatens the future wealth of Russia.

Russian policy can also enable much more value creation from natural resources if the focus shifts from exporting raw materials to *developing a cluster*. The oil and gas cluster in Houston, Texas, for example, achieves a very high level of productivity by selling knowledge and services related to natural resources, not just the raw materials themselves (See Figure 6 on page 14). The oil and gas cluster in Norway has developed world-leading expertise in deep-sea exploration that makes it an attractive partner for oil-rich countries with deposits in harsh conditions. Such a position is based on a strong cluster-specific business environment that provides much more than just the natural resource deposits.

Russia has the natural resources, many skills in engineering, and skills in other related areas that could—by leveraging complementary skills of foreign partners—become the platform for the development of a competitive oil and gas cluster. But Russia has created a market structure and policy environment in which such a cluster is very unlikely to emerge. Russia would need to address its weaknesses in a highly visible way. Again, it is

important to be aware of the alternative: A lost opportunity of major proportions to raise the value captured from natural resources and to start the process of diversification from commodity exports.

#### *4.1.3.2. Develop Clusters Serving the Domestic Market into Export Platforms*

Russia is a large country, and the domestic market for consumer goods and business inputs provides the other large short- and medium-term opportunity in the Russian economy. Strong GDP growth has made the Russian market an attractive target for domestic as well as foreign companies. This domestic market boom provides major opportunities for diversification. And the efficiency with which this market will be served is an important determinant of the actual standard of living Russians will be able to enjoy at a given level of oil and gas export revenues.

The pull of the Russian consumer market has already benefited Russian competitiveness. Rivalry has increased with the size of the market. Domestic companies have started to invest in additional capacity—usually by introducing modern technology and management practices, not just additional machines—and improved their efficiency to participate in the growing market. And foreign investors have significantly increased their presence, introducing global strategies and practices to the Russian market. But Russian economic policy could do more to raise the extent of these positive trends. Such efforts would not only have a positive short-term benefit on the activities serving the domestic market but also increase the medium- and long-term opportunities for export development and the diversification of the Russian economy.

Priorities to capitalize on domestic demand growth involve a number of key areas: First, determined efforts are needed to reduce the high cost of doing business in Russia through *improving administrative capacity*. Corruption, bureaucracy, and frequent changes in rules and regulations inhibit economic activity, especially the many small- and medium-sized companies that are important in serving the Russian market and growing exports.

Second, aggressive new projects should be launched in co-operation with Russian business groups and foreign investors to *spin-off and outsource non-key activities*. The high level of vertical integration in Russian companies is a drag on their productivity. And the correspondingly weak market for the external provision of supporting activities is a growth barrier for foreign companies that operate more focused business models.

Third, the *attraction of foreign investment to meet domestic market needs* should be reinforced. Targeted contact with foreign companies and specific efforts to improve the specific business environment conditions important to them will pay dividends.

Fourth, government policy should *send a clear signal about the economic importance of consumption-related services* like retailing, distribution, transportation and logistics, and wholesaling. Russia has a strong legacy of viewing such services as less important than production, missing a major opportunity.

#### *4.1.3.3. Expanding Niche Positions*

Figure 33 on the next page lists the top 25 industries by Russian 2005 export value outside of natural resources. Outside of natural-resources, Russia had 2005 exports of 58bn US-\$. About 20% of these were outside the clusters in which Russia has current export strengths.

Russia has opportunities to increase export values in niche product categories. This could happen by moving towards more advanced market segments within these product categories, by increasing the share of value-added generated in Russia, or by entering new geographic markets in which these products can be sold.

Fertilizers, nuclear conventional energy, aviation, marine equipment, and rolling stock stand out as areas of promise. They can potentially expand into clusters, not just isolated products. Russia should convene companies from these industries to discuss ways in which this process can be launched or accelerated.

*Figure 33: Leading Russian Non-Natural Resource Export Industries outside of Current Cluster Positions, 2005*

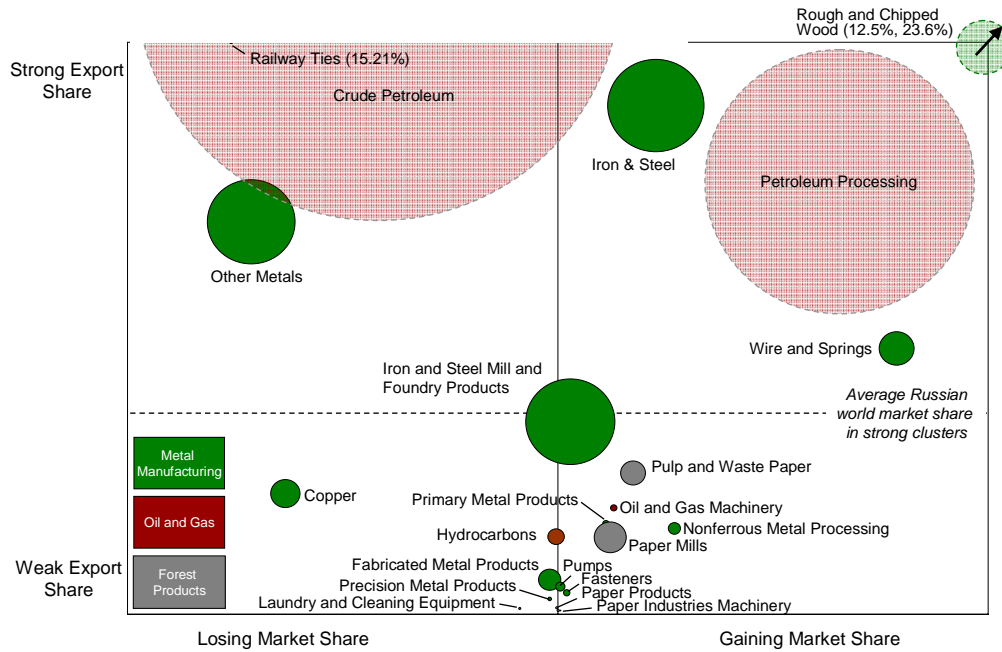
Industry	Cluster	World market share, 2005	Change of world market share, 2000-2005	Export value, in \$ 1,000, 2005
Fertilizer, except crude (group272)	Agricultural Products	16.88%	6.09%	3,878,885
Diamonds excluding industrial	Jewelry, Precious Metals and Collectibles	2.43%	Not available	1,658,125
Synthetic rubber	Plastics	9.10%	3.70%	965,105
Other inorganic bases and metallic oxides	Chemical Products	8.09%	0.83%	875,084
Nuclear reactors and parts	Power and Power Generation Equipment	26.18%	-2.67%	781,774
Passenger transport vehicles	Automotive	0.13%	0.01%	607,191
Electric current	Power and Power Generation Equipment	2.53%	1.11%	549,903
Plywood, solely of wood	Building Fixtures and Equipment	6.56%	2.52%	524,979
Railway vehicles and equipment	Heavy Machinery	3.03%	0.96%	485,231
Aircraft, ULW >15000kg	Aerospace Vehicles and Defense	0.75%		476,368
Miscellaneous goods vehicles	Automotive	0.61%	0.39%	470,949
Ships, boats and other vessels	Marine Equipment	0.99%	-2.08%	466,507
Reaction engines	Aerospace Engines	2.11%	0.73%	437,907
Rubber tires, tubes	Motor Driven Products	1.03%	0.30%	427,359
Acyclic monohydric alcohols	Chemical Products	3.50%	0.36%	389,011
Fish, fresh, chilled, or frozen	Fishing and Fishing Products	1.27%	-0.08%	387,561
Aluminum plates, sheets and strip, .2mm+thickness	Prefabricated Enclosures and Structures	1.56%	-0.20%	281,846
Other articles of precious metal	Jewelry, Precious Metals and Collectibles	14.16%		278,423
Other parts for motor vehicles	Automotive	0.22%	0.12%	269,070
Radar apparatus, radio navigational aid and remote control	Analytical Instruments	3.39%	1.98%	266,590
Aluminum bars, rods and profiles	Building Fixtures and Equipment	2.45%	-0.09%	234,446
Fertilizers, crude	Agricultural Products	10.13%	-2.01%	175,075
Printed books, maps, globes	Publishing and Printing	1.21%	-1.23%	173,097
Insulated wire, cable and conductors	Communications Equipment	0.33%	0.06%	172,348
Drawing, measuring instruments	Analytical Instruments	0.74%	-0.05%	161,679

Note: Processed products with blue background, semi-processed products with yellow background  
Source: Institute for Strategy and Competitiveness, Harvard University

**Broadening Positions in Existing Clusters.** Russia currently has its strongest export positions in four clusters: oil and gas products, coal, metal mining, and forest products. It also has meaningful positions in constructions services and power and power generation equipment, but does not rank among the leading countries in the world in these clusters.

Within oil and gas products, metal mining, and forest products there are *unexploited growth opportunities* in individual subclusters where Russia's current export position is weak. Figure 34 indicates Russia's export position in the subclusters that belong to these three clusters. There are many subclusters with below average market shares, some of which are gaining position. This signals opportunities to develop export positions in these subclusters more systematically. Russia can convene cluster participants to explore opportunities to build on existing strengths and capabilities to grow within the clusters and attract foreign investors. Russia can also make investments in training and research institutions to support these clusters.

Figure 34: Growth Opportunities within Strong Russian Export Clusters, 2005



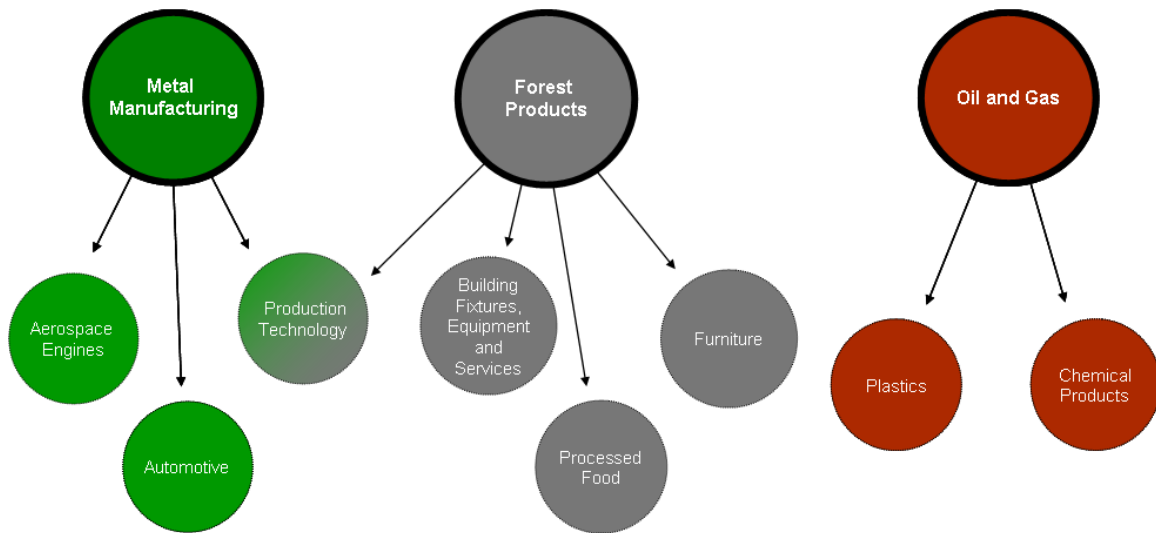
Note: Bubble size is proportional to 2005 Russian export value  
 Source: International Cluster Competitiveness Project, Institute for Strategy and Competitiveness, Harvard University

**Growth in Related Clusters.** Russia also has *opportunities in clusters related to its current cluster strength*. Many clusters have common industries with related clusters employing similar skills and technologies. Related clusters are often the natural progression path for export growth.

Figure 35 shows the clusters related to current Russian cluster strengths. Currently, Russia has weak positions in these related clusters. This is particularly striking for the clusters related to forest products and metal mining and manufacturing, where Russia's RCA is lower than .5 for all of them. Russia's position in the clusters related to oil and gas is stronger. This is where the likelihood of export growth appears to be highest. In chemicals and plastics Russia has already announced its intention to make significant investments. So far, however, very little has happened and industry observers are skeptical as to whether this will change anytime soon.<sup>153</sup>

It is revealing to look at the position in these related clusters by other countries that have the same cluster strengths as Russia. In aerospace engines and in chemical products Russia is already more specialized than the top ten countries in metal mining (for aerospace engines) and oil and gas (for chemical products). In all other related clusters, however, Russia export position is lower than that of other countries with similar cluster strength. The gap is most striking in the clusters related to forest products, where Russia's relative position is only 1/5 of other leading countries with a strong specialization on forest product exports.<sup>154</sup> The example of these other countries indicates, that Russia has large unexploited export potential in these related clusters.

*Figure 35: Growth Opportunities in Related Clusters; 2005*



Source: Institute for Strategy and Competitiveness, Harvard University, authors' calculations (2007)

Interestingly, production technology is related to *two* clusters in which Russia is currently strong. This signals opportunities to expand in production technology, and for production technology to become a reinforcing link in the Russian cluster portfolio.



#### *4.1.3.4. Build Science and Skill-Intensive Clusters*

Over the medium- to long-term, Russia's legacy offers the potential for growth in science and skill-intensive clusters. Our analysis has indicated that Russia registers a strong imbalance between existing science resources and Russian businesses' ability to leverage the specific skills provided. Russian economic policy has so far been aimed at raising the demand for science and technology by Russian companies. A focus on *attracting foreign companies looking for research capabilities* is more likely to generate demand for the existing scientific capacity in Russia in the short term. Without such demand, there is a significant danger that the existing strengths will erode as scientists will leave, capabilities will atrophy, and government spending will be redirected to other areas.

#### *4.2. Priorities for Research on the Russian Economy*

The Russian economy has been the focus of substantial economic research in recent years, by both Russian and foreign researchers. However, there remains a need for more applied research that addresses the specific challenges the economy is facing. Research concentrating on ideological positions or general theoretical arguments is of declining usefulness.

Overall, we suggest a shift towards more research on the microeconomic foundations of competitiveness. This is the area where many weaknesses and distortions exist, that can only be addressed with policies that take account of Russia's unique circumstances.

Russia's **business environment** suffers from a number of weaknesses, often related to the country's overall legacy. More research is needed in a number of areas.

- Systematic study of *industry structures and performance* across a wide array of Russian industries to document the extent of dominant firms and the vitality of competition.

- Initiate a research program on *strategies of Russian companies*. This research would provide valuable information about the strengths and weaknesses of Russian companies and their needs in terms of government policies. It would provide insights into whether company operating practices are a critical barrier to Russian prosperity, and in what areas.
- *Map Russia's scientific skills and capabilities*. This research would inform policies to understand and leverage the existing legacy assets, and take steps to develop them.
- Document the performance of Russia's *administrative structures versus peer countries*. This research will be invaluable to making further administrative reforms, moving beyond the current focus on efficiency to encompass effectiveness.

Russia's legacy creates significant opportunities for **cluster development**. So far, however, Russian clusters tend to be weak, with limited supporting institutions. While there is an increasing research interest in the economic geography of Russia, more research is needed to capture the current state of Russian clusters.

- Create a *Russian cluster mapping* data base that provides granular data on regional specialization, cluster structure, and cluster performance. Make this data widely available to policy makers at the national, regional, and local level. This data could provide a much more complete picture of Russian clusters than now exists and inform economic policy on all levels.
- Document the incidence and roles of *Institutions for Collaboration and cluster initiatives* in Russia. This research would contribute to our understanding of the level and nature of organized collaboration in Russian clusters and regions. It could inform government policies supporting collaboration rather than direct intervention.

Russia encompasses a huge geographic area including many **subnational regions**. Regions will need to devise varying regional economic strategies to address their

differing circumstances. While some aspects of regional economic development and policy in Russia have been the subject of existing research, there is a lack of systematic comparable data across all regions.

- Develop a database that systematically tracks economic policies across Russian regions, and links it to data on economic performance, specialization, and business environment quality. Such data could provide a better understanding of the impact of regional policies on competitiveness. It could also lead to a productive policy competition between regions.
- Initiate research on *large, legacy regional companies* that identifies such companies and their economic influences in their region. Such data would be useful for understanding cluster development, competition at the regional level, and the restructuring of dominant companies into more effective economic units.

Russia abuts numerous **neighboring countries**. For many Russian regions, their neighbors are closer than most parts of their own country. The legacy of the Soviet Union has complicated Russia's ties with many of its neighbors.

- Identify the *nature, impact, and obstacles to economic ties between Russian regions and neighboring regions in other countries*. Such research could improve the understanding of the actual nature of Russia's relations with its neighbors, and could inform the potential benefits that a more productive approach to such linkages could have for the Russian economy.

## **5. Conclusions**

Russian economic performance has improved since 2000, fueled by strong macroeconomic management and the oil price boom. However, while *Russian competitiveness* at the micro level made progress after 2000, it has stagnated and even deteriorated since 2004. Government has failed to tackle the country's most serious microeconomic weaknesses. Reform has slowed down and government intervention has risen in unfortunate ways that set back productivity and economic diversification. The juxtaposition of macroeconomic progress and serious microeconomic weaknesses has contributed to *divergent views about the Russian economy*.

*Current Russian policies are failing to achieve the country's goal of creating a strong, internationally competitive economy.* Russia wants to be competitive and to diversify its economy, but it fails again and again to take the clear steps necessary. For example, the emergence and growth of small- and medium-sized Russian companies, which are necessary to drive Russia's transformation into a truly advanced economy, is being severely penalized by the current policy regime. Economics and politics have come together in a way that will limit future economic performance. Similarly, there is a high degree of uncertainty about the longer-term direction of Russian economic policy, which will reduce investment in facilities, technology, and skills.

*Russia is now facing a crossroads.* Russia can proceed on the current path of intermingling politics with economics, partial reforms, and prosperity largely based on natural resources. Sound macroeconomic policies would continue, but Russia would continue to pursue government ownership and state involvement as the means to restructure the economy while continuing to tolerate the complex and glaring legal, administrative, skills, and other weaknesses in the business environment. Russia would become a place for MNCs to access natural resources and tap the local market, but not an export base in integrated global networks. Russian companies would remain domestically focused with few exceptions. The likely outcome of this path would be continued growth but limited progress towards a highly competitive economy. Skilled talent would

probably continue to migrate abroad. The level of economic, political, and social risks would likely rise.

The other path for Russia is to adopt competitiveness as the driving principal for economic policy, including in natural resource industries. Russia would maintain its commitment to sound macroeconomic policies, but commit to addressing weaknesses in its business environment. It would finally tackle bureaucratic inefficiency, corruption, and legal reform. It would achieve consensus on the role of government as focusing on the environment for competition. It would truly commit to open both domestic and international competition. And, it would base choices, including resource development, on productivity rather than near term political considerations or nationalism. With Russia's strong human resources and technological skills, this path could well produce an increasingly open, pluralistic, and diversified economy. Russia could become a center of innovation, a center of commerce, and a center of culture. Population migration would likely stabilize.

While not all observers will see the choices facing Russia in this way, there is no denying that inconsistencies and contradictions have emerged in Russia's commitment to a competitive economy. Russia's stated goals and its actual behavior are simply inconsistent.

The signs are increasing that the economic tailwind of the past several years is weakening. Long-term investments are needed in Russia that companies are still reluctant to make. The phase of easy progress is over. The current policy approach needs to change because it will fail to deliver on Russia's ambitions, not because some foreign observers disagree with it. While the Russian government seeks to build the position and importance of the Russian economy and Russian companies, for example, current policies hurt Russian companies while foreign multinationals have the experience to navigate Russia's complex business environment far better. Small- and medium sized Russian companies suffer most from business environment weaknesses that the Russian government has failed repeatedly to address.

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## Endnotes

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- <sup>1</sup> The framework was introduced in Michael Porter (1990). A seminal description of the cluster concept, a key element of the competitiveness framework, is Michael Porter (1998)
- <sup>2</sup> Preliminary results were discussed with German Gref, Minister of Economic Development and Trade of the Russian Federation, other high-level representatives of the Russian government, and the leadership of CSR in Moscow during a visit by Professor Porter and Dr. Christian Ketels in the fall of 2006.
- <sup>3</sup> See the op-ed by Klein/Kostin(2007), business leaders from the U.S. and Russia respectively, that make a similar observation.
- <sup>4</sup> See for a longer discussion Michael E. Porter with C. Ketels and M. Delgado (2006)
- <sup>5</sup> The diamond was first introduced in Michael Porter (1990)
- <sup>6</sup> Henry Chesbrough (2003)
- <sup>7</sup> See the Cluster Mapping Project (<http://www.isc.hbs.edu>) and Porter (2003) for a more detailed description of the data and methodology.
- <sup>8</sup> For a related finding see Hausmann/Klinger (2006)
- <sup>9</sup> See Lindqvist et al. (2003)
- <sup>10</sup> Porter (1996)
- <sup>11</sup> Porter (1985)
- <sup>12</sup> Khanna/Yafeh (2007)
- <sup>13</sup> See the Clusters of Innovation report (Porter, Council on Competitiveness, and Monitor Group, 2001; further reports on five U.S. regions are available at [www.compete.org](http://www.compete.org)).
- <sup>14</sup> Porter/Ketels (2003)
- <sup>15</sup> Ketels/Sölvell (2006a)
- <sup>16</sup> The following paragraphs draw heavily on work done for the U.S. Council of Competitiveness published in Council of Competitiveness (2007) where more data and background can be found.
- <sup>17</sup> IMF, World Economic Outlook, April 2007,
- <sup>18</sup> Nadezhda Mikheeva (1999); Laura Solanko (2003); Goohoon Kwon/ Antonio Spilimbergo (2005)
- <sup>19</sup> UNDP (2006). UNDP provides a number of different measures of inequality based on income or expenditure data.
- <sup>20</sup> Kiseleva/Kononova (2007)
- <sup>21</sup> Economist (2006)
- <sup>22</sup> UNDP (2005)
- <sup>23</sup> Graddy (2007)
- <sup>24</sup> UNDP (2006)
- <sup>25</sup> OECD (2006)
- <sup>26</sup> Groningen Growth and Development Center/The Conference Board, 2007 Total Economy Dataset, April 2007
- <sup>27</sup> Kuznetsov/Schaffer (2006)
- <sup>28</sup> IMF (2005)
- <sup>29</sup> See Badia/Skaarup (2007)
- <sup>30</sup> See Badia/Skaarup (2007)
- <sup>31</sup> Published figures put the share at below 8% but Kuznetsov/Schaffer (2006) calculate that taking account of transfer pricing leads to more credible estimates of about 20%
- <sup>32</sup> In our calculations of labor productivity the non-oil Russian economy, we assumed a share of the oil sector of 10% in 2000 and 20% in 2007, reflecting the share of oil production in GDP, IMF (2007)
- <sup>33</sup> See, for example, Aron (2006)
- <sup>34</sup> Kuznetsov/Schaffer (2006)
- <sup>35</sup> World Bank (2006)
- <sup>36</sup> OECD (2007) – Ahrend et al.
- <sup>37</sup> Some research suggests, however, that price dispersion across Russian regions is falling. See Konstantin Gluschenko (2004)
- <sup>38</sup> See Mercer Human Resource Consulting (2007), Cost of living press release, 18 June 2007.
- <sup>39</sup> Institute for Strategy and Competitiveness (2007), calculations based on UNCTAD/WTO data
- <sup>40</sup> OECD (2006)

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- <sup>41</sup> Institute for Strategy and Competitiveness (2007), web access at <http://data.isc.hbs.edu/iccp/index.jsp>
- <sup>42</sup> RCA is defined as the share of a country's exports in world exports in a given product category, divided by the country's total exports in total world exports. A RCA larger than one indicates a relative specialization in the measured product category.
- <sup>43</sup> Using a different methodology to identify the linkages between export categories, Hidalgo et al. (2007) present data in the website (<http://www.nd.edu/~networks/productspace/>) accompanying their article that leads to a similar conclusion.
- <sup>44</sup> This assessment is based on the authors' analysis done for this report.
- <sup>45</sup> Gregory White/Jeffrey Ball, Exxon goes with the flow in effort to maintain its Russian interests, *The Wall Street Journal*, 7 May 2007.
- <sup>46</sup> Paul Hare et al. (2004); OECD (2006)
- <sup>47</sup> Kuznetsov/Schaffer (2006)
- <sup>48</sup> See Gaddy (2007)
- <sup>49</sup> UNCTAD (2005)
- <sup>50</sup> See Kalotay (2007)
- <sup>51</sup> And the outward FDI figures for Russia might significantly underestimate actual outflows. See Vahtra (2006).
- <sup>52</sup> Nicola Clark/Andrew E. Kramer, Russian state bank buys share of EADS, *International Herald Tribune*, 11 September 2006
- <sup>53</sup> Christian Gianella/William Tompson (2007)
- <sup>54</sup> OECD (2006)
- <sup>55</sup> Stefan Wagstyl, Russian boom will end in pain, says banker, *Financial Times*, 24 April 2007.
- <sup>56</sup> World Bank (2005)
- <sup>57</sup> Fiona Hill/Clifford G. Gaddy (2003), World Bank (2005)
- <sup>58</sup> Sergei Guriev/Andrei Rachinsky (2005)
- <sup>59</sup> Munro (2006)
- <sup>60</sup> Calculated based on the estimate of the U.S. Energy Information Administration, see <http://www.eia.doe.gov/cabs/opecnon.html> accessed 23 August 2007.
- <sup>61</sup> BP Statistical Review, 2007
- <sup>62</sup> Anna Ivanova et al. (2005)
- <sup>63</sup> Antonio Spilimbergo (2005)
- <sup>64</sup> Center for Strategic Research, *Implications of Possible Decline of World Oil Prices for the Russian Economy*, April 2007
- <sup>65</sup> Neil Buckley, Russia forgets hand to mouth past as petrodollars provide for fiscal rainy day, *Financial Times*, 25 April 2007.
- <sup>66</sup> See World Bank governance indicators (2007)
- <sup>67</sup> Andrei Shleifer/Daniel Treisman (2005)
- <sup>68</sup> OECD (2006), p. 32
- <sup>69</sup> OECD (2006), *ibid.*
- <sup>70</sup> Kiseleva/Kononova (2007)
- <sup>71</sup> Michael E. Porter with C. Ketels and M. Delgado (2007)
- <sup>72</sup> Sofizade/Hrekh/Pesotsky (2006). According to industry experts, a significant share of Russian imports is shipped through non-Russian ports because of weaknesses in infrastructure, supporting services, and government inefficiency.
- <sup>73</sup> OECD (2006), p. 33
- <sup>74</sup> Craig Mellow (2007)
- <sup>75</sup> Jim Balaschack (2006)
- <sup>76</sup> Russell Pitman (2005)
- <sup>77</sup> The problem seems to be most severe at the medium level of government. But as the controversy around the alleged ownership position of the Minister of Telecommunication in a large Russian mobile phone provider shows, it also reaches the highest levels of government. See Stephen Fidler, Arkady Ostrokovsky, and Neil Buckley, "MegaFon diplomacy: a disputed stake pits and oligarch against a Putin ally," *Financial Times*, 24 April 2006.
- <sup>78</sup> Quoted in Steven Lee Myers, Business as usual, Russia-style, *International Herald Tribune*, 14 June 2006.

- <sup>79</sup> Putin's promise of propriety, *Financial Times*, 26 April 2005.
- <sup>80</sup> CEFIR (2005)
- <sup>81</sup> Russia reopens US bank tax case, *Financial Times*, 18 May 2007.
- <sup>82</sup> See for a detailed description OECD (2006), chapter 3.
- <sup>83</sup> Evgeny Gavrilenko/Anton Stroutchenevski (2006)
- <sup>84</sup> William Tompson (2007)
- <sup>85</sup> Gimpelson (2005) suggests that skill shortages were the result of companies' unwillingness to raise relative wages during 2003. While this might have played a role at that time, the skill shortages now appear real and not the result of wage inflexibility.
- <sup>86</sup> Vladimir Gimpelson et al. (2006)
- <sup>87</sup> IMF (2005)
- <sup>88</sup> Banking regulation has been one of the problems that delayed the WTO agreement between Russia and the United States. U.S. banks saw the the rules in question less as a problem than U.S. negotiators.
- <sup>89</sup> See for a detailed description OECD (2006), chapter 4.
- <sup>90</sup> See Gokhberg (2004), Dezhina (2005), and UNDP (2004).
- <sup>91</sup> The four selected zones are in Moscow districts of Zelenograd (microelectronics) and Dubna, in Tomsk, and in St. Petersburg. See Gianella/ Tompson (2007) and Lisitsyn (2007).
- <sup>92</sup> Lisitsyn (2007) provides details on the example of Peterhof close to St, Petersburg.
- <sup>93</sup> Porter/Stern (2004) provides more detail on the methodology used.
- <sup>94</sup> Unpublished research by Porter et al. (2006) based on Porter/Stern (2004).
- <sup>95</sup> Gianelli/Tompson (2007)
- <sup>96</sup> World Bank (2007)
- <sup>97</sup> OECD (2004)
- <sup>98</sup> CEFIR (2005)
- <sup>99</sup> Yakovlev/Zhuravskaya (2007)
- <sup>100</sup> Simola (2007)
- <sup>101</sup> OECD (2005)
- <sup>102</sup> Henrik Isakson (2007)
- <sup>103</sup> OECD (2005)
- <sup>104</sup> See Tshuklo (2007) for the use of survey data to track the changes in competition until 2002.
- <sup>105</sup> Christian Gianella/William Tompson (2007)
- <sup>106</sup> Irina Slinko et al. (2003)
- <sup>107</sup> Jurgen Ahrend et al. (2007)
- <sup>108</sup> IMF (2005)
- <sup>109</sup> See Goldman (2004) for an early assessment. Scores of articles have followed the auctioning off of ex-Yukos assets, a process that has been regularly described as opaque.
- <sup>110</sup> For more detail on the methodology see Porter (2003) and [http://data.isc.hbs.edu/isc/cmp\\_overview.jsp](http://data.isc.hbs.edu/isc/cmp_overview.jsp)
- <sup>111</sup> The four selected zones are in Moscow districts of Zelenograd (microelectronics) and Dubna, in Tomsk, and in St. Petersburg. See Gianella/ Tompson (2007) and Lisitsyn (2007).
- <sup>112</sup> Vladimir Milov, *Possible Future of Russian and CIS oil production*, presentation at the OECD, June 2006.
- <sup>113</sup> Daniel Berkowitz/ Yadviga Semikolenova (2006)
- <sup>114</sup> Catherine Belton, Yukos finally expires, victim of its battle with the Kremlin, *Financial Times*, 11 May 2007.
- <sup>115</sup> Krivoshchekova/Okuneva (2006)
- <sup>116</sup> World Bank (2005)
- <sup>117</sup> This is a point made to us in a number of interviews with foreign executives in Russia during our visits in late 2006.
- <sup>118</sup> We were told that SeverStal has outsourced some of its logistical functions, selling them to the managers. Within the course of one year, the new logistics company gained significant business from other companies as well.
- <sup>119</sup> See for an early account Dolgopyatova (2003)
- <sup>120</sup> IMF (2005)
- <sup>121</sup> See Lazareva et al. (2007)
- <sup>122</sup> See Kochetygova,/Shvyrkov (2006)

- <sup>123</sup> Sergei Guriev/Andrei Rachinsky (2005)
- <sup>124</sup> On the use and impact of "informal corporate governance practices" during the 1990s see Adachi (2006)
- <sup>125</sup> See the list of recent acquisitions in OECD (2006)
- <sup>126</sup> See UNDP (2007) and Liuhto et al. (2004)
- <sup>127</sup> Bauman Innovation
- <sup>128</sup> The data on Russia is drawn from our own analysis and joint work with the Bauman Innovation. The data on the U.S. is from our Institute of Strategy and Competitiveness, Harvard Business School, on Canada from our partners at the Institute for Competitiveness and Prosperity, Toronto, and on Europe from our joint work with the European Cluster Mapping project.
- <sup>129</sup> For an analysis of broader trends in sectoral changes across regions see World Bank (2004)
- <sup>130</sup> Author's analysis, Bauman Institute (2007)
- <sup>131</sup> President Jelzin had given up his right to appoint regional governors in a bid to secure regional support for his Presidential campaign
- <sup>132</sup> Slinko et al. (2003)
- <sup>133</sup> See Ketels/Sölvell (2006b) based on work done by A Alexei Prazdnitchnykh.
- <sup>134</sup> Yakovlev/Zhuravskaya (2006)
- <sup>135</sup> Thiessen (2006)
- <sup>136</sup> See a discussion on how some regions (oblasts) in the North-West District have improved their competitiveness while others have fallen behind in Ketels/Sölvell (2006)
- <sup>137</sup> Clinton R. Shiells et al. (2005)
- <sup>138</sup> Vahtra (2006)
- <sup>139</sup> Rail links to Estonia were temporarily closed during controversies about the relocation of a Russian war memorial in Tallinn, although the Russian government denied that there was a connection. The acquisition of a Lithuanian refinery by a Polish company despite competing bids from Russian rivals raised Russian criticism.
- <sup>140</sup> Ketels/Sölvell (2006b)
- <sup>141</sup> For a discussion of the years before see Yakovlev (2003)
- <sup>142</sup> See Solanko (2006)
- <sup>143</sup> Russia has introduced new rules and regulations around the registration of NGO's, especially their financing from abroad, that came into effect in April 2006.
- <sup>144</sup> Lilia Shevtsova (1999)
- <sup>145</sup> Vladimir Drebentsov (2004),
- <sup>146</sup> A. V. Sharanov (Deputy Minister in the Ministry of Economic Development and Trade, Russian Federation), *Presentation at the Conference 'Russia: Energizing the World'*, 2007.
- <sup>147</sup> See Goldman (2004) and the debate initiated by Åslund (2007) on whether or not the policies by the Russian government were justified and positive for the country.
- <sup>148</sup> There is a huge literature on the relationship between political power and economic growth. Bremmer (2006) makes an interesting argument about the u-shaped relationship between openness, i.e. control on political power, and stability, i.e. a context conducive to growth.
- <sup>149</sup> Michael E. Porter/Elisabeth Teisberg (2007)
- <sup>150</sup> See Wendy Carlin et al. (2004) on the empirical importance of competition for competitiveness in transition economies more broadly.
- <sup>151</sup> Neil Buckley, Russia set for huge public building programme, *Financial Times*, 22 September 2007.
- <sup>152</sup> See Ketels (2005)
- <sup>153</sup> Sergei Blagov, Russia faces a reality check, *ICIS Chemical Business*, 24-30 September 2007.
- <sup>154</sup> Calculations done by the authors based on data from the Institute for Strategy and Competitiveness, Harvard University.