Can Russia Break the “Resource Curse”?  

Rudiger Ahrend¹

Abstract: A noted European economist argues that the Russian economy and its post-2000 growth have been heavily dependent on natural resources, especially hydrocarbons, and are bound to remain so for some time to come. Given that many economists have come to view rich natural resource endowments as a “curse” that undermines development, the question arises as to whether Russian economic development is doomed. The author argues that while the challenges posed by resource dependence are serious, they can be overcome, or at least substantially mitigated, if accompanied by the right economic policies as the examples of Australia, Canada, and the Scandinavian countries demonstrate. He analyzes what these economic policies are for Russia, and how to set up Russian economic and political conditions to facilitate their implementation. Journal of Economic Literature; Classification Numbers: E6, O1, O52, P2, Q43. 4 figures, 2 tables, 50 references. Key words: Russia, transition, economic growth, natural resources, Dutch disease, resource curse, oil, diversification, fiscal policy, monetary policy, capital flight.

INTRODUCTION

Russia in recent years has afforded a prominent example of resource-based development, with the oil sector driving strong economic growth. Given its current economic structure, the country is also bound to remain a heavily resource dependent economy for some time to come. Whether Russia’s resource abundance is a blessing or a curse remains open for debate, though. While in the 1950s and 1960s economists generally viewed abundant natural resource endowments as facilitating a country’s rapid development,² in the last two decades many have come to see natural resources as an obstacle to successful development. A large literature has developed that econometrically investigates the existence of a so-called “resource curse”³ and speculates on its underlying causes.⁴

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²See, for example, Viner (1952), Lewis (1955), and Spengler (1960). The most ardent support for resource-based development strategies came from economists identified with the staple theory of growth, which grew out of studies of the Canadian fur and cod industries (Innis, 1956), and work on economic growth in the western United States (North, 1955). Proponents of the staple theory suggested that economic development in backward areas commonly begins with resource booms that draw in labor and capital. As the booms proceed, the profits of this core resource sector are reinvested in local infrastructure and “value-added” industries, producing a diversified pattern of growth (see also Watkins, 1963). I thank William Tompson for drawing my attention to this literature.

³For conflicting views, see, for example, Sachs/Warner (2001) and Manzano/Rigobon (2001).

⁴For an overview of competing explanations, see, for example, Ross (1999).
This paper attempts to make the case that the resource curse, at least, is no *fatalité*. If suitable economic and political framework conditions can be established, natural resource abundance does not have to prevent successful economic development as the examples of Australia, Canada, and the Scandinavian countries demonstrate. Nonetheless, resource-based development obviously presents important challenges. These include an increased vulnerability to external shocks, the risk of “Dutch disease,” and the institutional pathologies often associated with heavy reliance on natural resource sectors. These challenges are indeed serious, but they can be overcome or at least very substantially mitigated with the aid of appropriate institutions and policies. The main aim of this paper is thus to analyze in depth what the “right policies” would be for Russia to break the “resource curse.”

It is argued that Russia’s resource dependence places a priority on good macro-economic management, particularly sound fiscal policy. Turning to the institutional side, it is stressed that, for a number of reasons, the need for a non-corrupt and efficient state apparatus is particularly great in a resource-based economy like Russia’s, and that the creation of such an institutional setting is facilitated by the presence of a strong civil society. Finally, to the degree that a more diversified economy is less prone to the risks enumerated above, diversifying the economy can also solve potential problems of resource dependence. This paper therefore also explores the possibilities of accelerating the diversification of Russia’s economic structures.

Sections one to three briefly set the stage, with sections one and two looking at Russia as a resource-based economy and the factors underlying its strong growth in recent years, and section three discussing advantages and risks of being resource-based. Based on this discussion, from section four onwards the remainder of the paper investigates whether and how—going forward—Russia could break the “resource curse,” with sections five to eight dealing, respectively, with external vulnerability, Dutch disease, political economy challenges, and diversification.

**THE RUSSIAN RESOURCE-BASED ECONOMY**

Russian real GDP grew at just under 6.8 percent per annum during 1999–2004, which has been much faster and more sustained than most observers thought possible in the wake of the 1998 financial crisis.\(^5\) Given that there has been—and still is—considerable doubt about Russia’s potential for sustained fast growth, a clear understanding of the factors and policies that have underpinned Russia’s post-crisis economic performance seems crucial to any attempt to assess the conditions under which Russia could maintain high growth rates in the future, and hence be able to break the “resource curse.”

The indispensable starting point for any analysis is an understanding of Russia’s existing economic structure. Russian official data, although technically correct, present a somewhat distorted picture of the economy, because a large share of the value added generated by the natural resource sectors is reflected not in the accounts of the extraction companies, but in the accounts of their affiliated trading companies. This practice is most common where output is exported, especially if the domestic and export prices of the goods involved differ substantially. As a result, resource-oriented industries are under-represented in industrial production, and industry as a whole is under-represented in Russian national accounts. Wholesale trade, and hence the service sector, is over-represented.

\(^5\)For an exception to this view, see Ahrend (1999) and Breach (1999).
There have recently been several attempts to correct for these distortions, and this analysis relies on one of them—the recent World Bank (2004) estimates of the relative weights of different sectors in GDP. Following these estimates, the share of industry increases from 27 to 41 percent, and the oil and gas sector’s share of GDP rises from around 8 percent in the data from the Russian Federal Service for State Statistics for 2000 to just above 19 percent. This is broadly in line with the estimates produced by the Economic Expert Group attached to the Russian Ministry of Finance, which suggest that the oil and gas sector’s share of GDP was around 21 percent in 2000 and hovered at around 17 percent thereafter (Gurvich, 2004). At the same time, the services share drops from 60 to 46 percent when employing the World Bank weights, which seems far more plausible. Large differences are also obtained when looking at the share of different industrial sectors in industrial value added under the official and adjusted weights. Using the World Bank weights, the share of most industrial sectors decreases somewhat, with the most notable decline in machine building, which decreases from 16 to 9 percent. The most striking change, however, is the vast increase in the fuel sector. Using the adjusted weights, the share of industrial value added that is attributed to the fuel sector rises from 29 to 49 percent.

Using the aforementioned adjusted weights to calculate relative contributions, overall GDP growth is found to have been relatively broadly based. While immediately after the crisis it was overwhelmingly driven by industry and construction, the relative importance of service-sector growth has been increasing, especially in 2002–2004, and even on the adjusted weights services still accounted for roughly one-third of economic growth during this period. Industrial growth, however, has been highly concentrated, and the role energy has played in Russia’s expansion is striking. Natural resource sectors (fuel, nonferrous metals, and forestry) directly accounted for roughly 70 percent of the growth of industrial production in 2001–2004, with the oil sector alone accounting for just under 45 percent (Fig. 1). This implies that natural resource sectors directly contributed more than one-third of Russian GDP growth over the period, and the oil industry alone close to one quarter. It should be noted that this includes only the direct contribution of the oil sector to growth: taking into account the knock-on effects from oil-sector procurement and wages on domestic demand, the actual contribution of the oil industry to economic growth was still greater.

This contrasts somewhat with the economic developments in the immediate post-crisis period. Back then, Russian industry profited from a sharply devalued exchange rate and sharply reduced real energy prices, and these two factors were the major drivers of the industrial recovery in 1999–2000. However, as both the real exchange rate and energy prices recovered from exceptionally and unsustainably low levels, the boost to growth from the devaluation gradually disappeared.

Looking at growth from the supply side shows that it was almost certainly driven by strong increases in total factor productivity (see OECD, 2004), while the main factor driving growth from a demand perspective was rapidly increasing private-sector demand. In this

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6See also the estimated sectoral weights produced by Kuboniwa (2003), Gurvich (2004), and Kuboniwa et al. (2005).

7Industry accounted for slightly less than half of GDP growth in 2000–2004, and the oil sector for somewhat below half of industrial growth. (Calculations were made using the adjusted sectoral weights discussed above; contributions to industrial growth were calculated under the assumption that the share of value added in production has been roughly constant in the short term).

8For a discussion of the immediate post-crisis period, see Ahrend and Tompson (2005a).
respect, it is important to note that, especially in 2003–2004, fiscal restraint played a major role in preventing an unsustainable overheating of the Russian economy. Moreover, during 2001–2004, the unfolding consumption boom did not put the external balance at risk, as strong increases in imports were balanced by rapidly growing exports, mainly of oil. In other words, while Russian growth was increasingly driven by consumption, it was largely sustained by rising oil exports.

THE UNDERLYING DEVELOPMENTS AND POLICIES OF GROWTH, 1999–2004

While the commodity structure of Russian exports was already highly concentrated during the 1990s, it has become even more so since 2000. Figures 2-4, based on the author’s calculations of statistical data accumulated by the Russian Federal Service for State Statistics (Goskomstat Rossii) shows that the robust growth of export volumes in 2000–2005 was driven overwhelmingly by the oil sector. In this regard, it is striking to see the huge differences in export performance of Russia’s main export sectors: While oil export volumes grew by more than 70 percent, growth of the other major resource-based export sectors was relatively slow, with ferrous and nonferrous metals exports growing somewhere between 10–20 percent, and with gas exports even falling for a large part of the period. The performance of non–resource based sectors was even worse, with machine-building exports generally trending downward during the period (with the exception of 2003, where they were

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9 Price increases in Russia’s major export commodities also helped boost export revenues.
11 Representing a 12-month moving average.
boosted by some hefty one-time events, presumably the delivery of large weapons contracts).  

Monetary policy in 2000–2004 was dominated by the pursuit of conflicting policy goals, and defacto was very loose. The Central Bank of Russia (CBR) followed a policy aimed at gradually reducing inflation while limiting the real appreciation of the ruble in order not to endanger the competitiveness of Russian industry. Given the large current account surpluses and decreasing net capital outflows during most of the period, this determination to prevent overly rapid ruble appreciation increasingly compelled the Central Bank of Russia (CBR) to intervene on the foreign exchange market. In the absence of efficient large-scale sterilization tools, the accumulation of reserves led to very strong monetary expansion. This loose monetary stance also meant that starting mid-2000 rates for ruble lending to enterprises and individuals were very low, and real interest rates on deposits or government bonds were actually negative.

12While widely reported gas export volumes to non-CIS countries increased over the period, total gas export volumes (including to CIS countries) fell quite significantly.
13In practice, some degree of priority was given to the latter goal of preventing rapid exchange rate appreciation (see Vdovichenko, 2004).
14Net private outflows increased again from mid-2003, as the so-called “Yukos affair” unfolded.
15Fiscal sterilization was able to absorb a significant, although insufficient, amount of current account pressure, reducing the need for CBR intervention. Fiscal sterilization was mainly achieved via budget surpluses. An increasing—although still small—share of fiscal sterilization was also realized by shifting hard currency–denominated sovereign debt into ruble-denominated debt, reflecting the financial markets’ renewed interest in such instruments. It should be noted that during most of the period the CBR’s task was also made easier by significant net private capital outflows.
Prudent fiscal policy probably was the Russian government’s single most important contribution to sustaining economic growth during 2000–2004. Due to deep structural cuts in spending, general government expenditures (including all levels of government and social funds) were about 10 percentage points of GDP lower after the crisis than before it, while revenues relative to GDP remained at roughly their pre-crisis levels. As a result, following a decade of large deficits, the federal budget was in surplus from 2000. To be sure, fiscal responsibility was facilitated by growing revenues due to favorable terms of trade and strong growth. However, the government largely resisted the temptation to spend this windfall, instead using a significant part of it to repay debt. The government also accumulated reserves, part of which were used to set up a stabilization fund. Indeed, during 2000–2004 federal budgets were drafted based on such conservative oil price assumptions that the federal budget would probably have remained in rough balance even had oil prices been at long-term average levels throughout the period (see Kwon, 2003).

In part this was achieved by the 2000–2004 tax reform, which simplified the tax system while increasing its efficiency. At the same, the tax system was restructured so as to capture a larger share of natural resource rents, especially windfall profits from high oil prices. Together with a reduction in the profit tax rate and the introduction of a simplified unified

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16 For an in depth discussion of Russian fiscal and related policies during Putin’s first term, see Aslund (2004a) and Hanson (2004).

17 This reduction in the spending-to-GDP ratio has coincided with massive reductions in wage and pension arrears, and has not resulted in any substantial deterioration in the provision of public services. This suggests that the creation of a federal treasury, the reform of fiscal federal relations, and the government’s overall spending restraint have contributed to more efficient expenditure management.

18 There also was a “virtuous cycle” with regard to debt, as debt repayment from budget surpluses and ruble appreciation led to sharp declines in the ratio of debt service to GDP. Federal interest expenditures fell from 3.4 percent of GDP in 1999 to 1.2 percent in 2004. Lower levels of government expenditure gave Russia room to reduce the tax burden, which was an additional stimulus for private investment and consumption, and hence economic growth.

social tax (regrouping several social payments), this was a first step in increasing taxation of the resource sector, while using the freedom this generated to cut the rates of the main general taxes for the whole economy.

A sound fiscal position also played a key role in reviving private investment. The fact that the government turned from a net domestic borrower to a net lender helped bring domestic interest rates down, while declining sovereign foreign debt, together with improved perceptions of the Russian economy (at least until mid-2003), helped large Russian companies to borrow more—and at better terms—from foreign banks and international markets.

The perception that property rights had become sufficiently secure (even though from hindsight this perception turned out to be misguided in some cases) was one of the factors contributing to the recovery of investment in 2000 and especially 2001. This effect was particularly strong in the oil sector, where investment jumped from roughly 25 percent of industrial investment before the crisis to around 35 percent from 2000 onward.\(^{20}\) Strikingly, the growth of oil-sector investment was initially led by companies controlled by the state or by oil-industry insiders: by 2000, their investment was already 70 percent above 1998 levels. This was in sharp contrast to oil companies whose owners’ property rights were perceived as less secure, e.g., those owned by major financial groups.\(^{21}\) In these companies, investment in 2000 was only marginally above 1998 levels (Table 1). However, as perceptions of the security of property rights further improved, the latter group of companies began rapidly increasing investment in 2001, soon reaching levels comparable with the former group. This increase in investment of the private oil companies led to a sharp increase in oil production and exports in the following years.

The output and export growth of Russian oil companies was, however, very uneven during 2001–2003, as Table 2 convincingly demonstrates. Two points stand out. First, state-

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\(^{20}\)Clearly, high oil prices were another major factor.

\(^{21}\)For an analysis of the two corporate models in the Russian oil sector, see Gaddy (2004).
controlled companies barely increased output or exports. Russia’s private oil companies accounted for almost all of the growth recorded over the period. This means that private oil producers directly accounted for somewhere between one fifth and one quarter of GDP growth, as well as the bulk of the indirect contribution referred to above. Second, the private companies that did the most to drive this growth were those controlled by major financial groups (the so-called finansisty) rather than those under the control of oil-industry insiders (the neftyaniki).

As shown above, it is unlikely that Russia would have been able to grow at anywhere near the rates it experienced in 2001–2004 had it not been for the oil sector. Moreover, the examples of the state-controlled oil companies and other important state-controlled firms would not have been able to grow at anywhere near their actual rate.

Table 1. Investment in the Oil Sector, 1999–2004 (as percentage of 1998)

<table>
<thead>
<tr>
<th>Ownership/control</th>
<th>Upstream capital spending</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1999</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
</tr>
<tr>
<td>Financial group–owned</td>
<td>35</td>
</tr>
<tr>
<td>Oil-industry insider–owned</td>
<td>80</td>
</tr>
<tr>
<td>State-controlled</td>
<td>73</td>
</tr>
</tbody>
</table>

*Explanation:*
- Oil-industry insider–owned: Lukoil, Surgutneftegaz.
- State-controlled: Bashneft', Rosneft', Tatneft'.

Source: Author’s calculations based on Ministry of Energy, InfoTEK, Renaissance Capital and RIANTEC.

Table 2. Output and Exports of the Oil Sector, 2001–2004

<table>
<thead>
<tr>
<th>Ownership/control</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output of crude and condensate production</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>117</td>
<td>130</td>
<td>142</td>
</tr>
<tr>
<td>Financial group–owned</td>
<td>116</td>
<td>136</td>
<td>178</td>
<td>195</td>
</tr>
<tr>
<td>Oil-industry insider–owned</td>
<td>115</td>
<td>121</td>
<td>129</td>
<td>140</td>
</tr>
<tr>
<td>State-controlled</td>
<td>103</td>
<td>106</td>
<td>113</td>
<td>118</td>
</tr>
<tr>
<td>Non-CIS crude export</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>118</td>
<td>133</td>
<td>155</td>
</tr>
<tr>
<td>Financial group–owned</td>
<td>122</td>
<td>129</td>
<td>163</td>
<td>200</td>
</tr>
<tr>
<td>Oil-industry insider–owned</td>
<td>112</td>
<td>124</td>
<td>125</td>
<td>149</td>
</tr>
<tr>
<td>State-controlled</td>
<td>94</td>
<td>94</td>
<td>99</td>
<td>91</td>
</tr>
</tbody>
</table>

*Explanation:*
- Oil-industry insider–owned: Lukoil, Surgutneftegaz.
- State-controlled: Bashneft', Rosneft', Tatneft'.

Source: Author’s calculations based on Ministry of Energy, InfoTEK, Renaissance Capital and RIANTEC.
strongly suggest that Russia’s leading private oil companies would not have achieved the growth performance of the last few years if they had remained under state control (implying that Russian growth also would have been significantly reduced).

The above analysis, however, should not be taken to imply that there have been no positive developments outside the oil sector in recent years. Other industrial sectors have also grown, and many have recorded strong increases in labor productivity. There has also been a large amount of consolidation in the industrial sector in the aftermath of the crisis. Large industrial groups that have emerged were usually founded around some commodity exporting business, and have in recent years mainly pursued strategies of vertical integration. The privately held industrial groups—usually tightly controlled by a small number of core shareholders—have generally restructured the businesses they owned or acquired in recent years, and most of them are fairly well managed. The productivity of many private industrial groups’ enterprises has been increasing briskly, often at rates above those achieved economy-wide (see also Boone and Rodionov, 2002).

**POTENTIAL ADVANTAGES AND RISKS OF A RESOURCE-BASED ECONOMY**

Russia—as a resource-based economy—is obviously far from being an isolated case. In a large number of low- or middle-income economies, industrial production or exports, and often both, are heavily biased toward natural resources. For example, a majority of African, Latin American, and CIS countries are highly dependent on natural resource exports. Whether natural resources are an inevitable curse or whether they can be exploited for the benefit of the country and its citizens (and how) is thus a highly relevant question not only for Russia, but for a significant share of the world’s population.

Resource-based economies are often—although somewhat arbitrarily—defined as economies in which natural resources account for more than 10 percent of GDP and 40 percent of exports. As commodity prices are often particularly volatile, a situation in which export revenues depend significantly on commodity price developments implies that resource-based economies are particularly vulnerable to external shocks.

Possession of a rich natural resource base has, however, some obvious advantages. If exploited, natural resources provide a country with goods that can be traded, and hence can guarantee a certain revenue stream from exports. Especially for poor and less-developed countries, natural resource revenues allow the import of a certain volume of crucial goods (e.g., medicines) they cannot produce themselves, and therefore—at least in theory—could be used to increase significantly the welfare of the population. From a practical point of view, natural resources also provide some shelter against competition. It is a banal point—but worth stating—that in order to compete in natural resources production, a country needs to possess the relevant deposits, and neither highly advanced technology nor ultra-cheap labor will change that.

On the negative side, it has been argued that the growth potential of natural resource sectors are comparatively low. This results from two features. First, natural resources are finite. Second, it is often claimed that natural resource extraction is a low-tech undertaking, and hence the potential for productivity increases is quite limited.\(^23\) The latter is also one of the

\(^22\)For additional information, see Ahrend (2004), Ahrend and Tompson (2005b), and Tompson (2004).

\(^23\)For a theoretical model with this prediction, see Kim (1998).
most common economic explanations of why there might be a resource curse. Both of these arguments are, however, questionable, at least to some degree. Undeniably, natural resources are ultimately finite (at least when one thinks only about the planet Earth). However, the total quantity of a natural resource is not particularly relevant, at least until the decades immediately prior to its total depletion. What is important is the quantity of known natural resource deposits that can be exploited profitably at current technology levels and expected long-term average prices. Because there has been considerable technological progress in resource extraction, for most commodities the volume of exploitable deposits has not been falling in recent decades.

It is also untrue that a specialization in natural resources inevitably implies low levels of technological know-how. Resource extraction—as it gradually moves to deposits that are more difficult to exploit—has become quite intensive in the use of specific high technology (e.g. oil platforms; see Wright and Czelusta, 2002). To the degree that one of the main economic explanations for a resource curse rests on the low-tech character of resource extraction, it is therefore doubtful whether there really is an inevitable economic resource curse. Poor economic performance may actually have been caused not by resource abundance as such but by the structures of ownership and control that resource-rich countries often choose for their resource sectors. In recent decades, many countries’ resource sectors have been dominated by state-owned or -controlled enterprises. Given the ample evidence that private enterprises tend to be more efficient than state-owned ones in most sectors (Megginson and Netter, 2000), it is not unlikely that the substandard growth performance of resource-based economies could have been brought about by state ownership of large parts of those economies, rather than by natural resources per se. On this see also Ross (1999), Aslund (2004b), and Auty (2004).

In any case, regardless of the desirability of being a resource-based economy, managing a resource-based economy well is a subject that is highly important on its own. Changes in the structure of an economy are necessarily relatively slow, which means that today’s resource-based economies are bound to remain resource-based for some time to come—whatever their stance on further developing their resource sectors or their policies may be.

Moreover, resource-based development can also become a driver of modernization. Further, developing resource sectors—especially for exports—can be a strong driver for economic growth, as the Chilean example shows, and hence can significantly contribute to increasing incomes. Increasing incomes, in turn, usually lead to a strong expansion in a country’s non-tradable sector, principally in services and construction. Growing resource exports will also allow a country to import more. Higher import potential not only contributes to higher living standards, as consumer choice improves, but in principle also allows the purchase of more investment goods. Developing a country’s resource sectors, via increased import potential and an expansion in the service sector, can therefore also be helpful in modernizing a country.

Nonetheless, there are important potential risks in a resource-based economy that need to be addressed. These include vulnerability to external shocks, “Dutch disease,” and the “political economy” problems that often are associated with resource-based development.

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24 On this see also Ross (1999), Aslund (2004b), and Auty (2004).
They are addressed in turn below, in the discussion of Russia’s ability to further successfully develop its economy.

**BREAKING THE “RESOURCE CURSE”: THE WAY FORWARD**

Having briefly examined the main sources of Russian growth in recent years, I will address the question of whether, and under what conditions, Russia will be able to sustain its recent growth performance, and overcome the “resource curse.” This subject, however, necessitates another detour. First it is essential to understand that if Russia wants to sustain growth at current high rates over the medium term, it will need to be able to increase exports rapidly.

This is because imports, which consist to a large degree of consumer goods that Russian industry does not produce or produces noncompetitively, will in all likelihood tend to increase at least in line with disposable incomes (see Fig. 5), as the experience of recent years shows. Since one of the main aims and consequences of economic growth is to raise living standards, high growth rates will almost certainly imply a continuation of strongly increasing import demand. The large current account surplus for 2004 and the large projected surplus for 2005 could be interpreted as indicating that Russia has ample space for increasing imports without a corresponding increase in exports. This, however, is probably not the

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25 There may be somewhat more import substitution, but this is quite unlikely to change the general trend.

26 Moreover, the continued real appreciation of the ruble will further increase demand for imported goods, for both consumption and investment.
In 2004 and in 2005, the terms of trade were extremely favorable, but they are likely to deteriorate at some point in the future, with a corresponding large negative impact on the current account.

In short, if Russia wants to sustain high growth, it will have to be able to sustain rapid export growth. Russia’s revealed comparative advantage (RCA) in recent years has been in natural resources, especially hydrocarbons, and energy-intensive basic manufactures (steel, aluminium, nickel, fertilizer), plus some other commodities. What is more, the RCA in oil has been growing strongly in recent years, and oil, oil products, and natural gas currently account for around 55 percent of Russia’s exports (see Fig. 6). It is therefore clear that in the short and medium term these commodities will continue to dominate Russia’s export bill, regardless of whether or not policies aimed at the diversification of economic activity are successful. Even if Russia manages to increase sharply its exports of more sophisticated manufactures, their contribution to total export growth will remain modest for some years to come, simply because they start from such a low base. This implies that robust export growth in the short to medium term will probably not be possible without further increases in mineral, and especially hydrocarbon, exports.

Assuming that import volumes in dollar terms continue to increase at the average rate seen in 2000–2005, with growth in export volumes continuing at a respectable 5 percent from 2005 onward, the current account surplus would disappear in the second half of 2007 even with Urals crude at around USD40/bbl and non-hydrocarbon commodity prices staying at the high average levels seen in 2004–2005. This should be seen in the light of long-term average real Urals prices of around US$25, as well as the fact that Russia has needed roughly US$20 billion in recent years to finance estimated capital flight and pay for underreported imports. In theory, Russia might continue to enjoy a consumption boom and increase imports, even if the trade and current account balances were to swing into deficit. However, this would imply becoming structurally dependent on importing foreign capital—a highly risky strategy for a country that is as exposed to external shocks as Russia and that has thus far has had little success in attracting strong, stable FDI inflows. Such a policy would in all likelihood lead to a balance of payment crisis further down the road.

Basic manufacturing in energy-intensive sectors may also be able to make some contribution to future export growth. Recent experience suggests, though, that potential export growth in these sectors may be constrained by the threat of protectionist measures on the part of Russia’s trade partners. According to the Ministry of Economic Development and Trade, Russian exporters in early 2004 faced 93 different restrictions on access to foreign markets, including 57 anti-dumping measures of various kinds. Roughly 60 percent of these applied to steel exports, with a further 25 percent affecting the chemicals sector.
Achieving continued growth in hydrocarbon exports will necessitate investment in transport infrastructure, especially pipelines. Moreover, as Russia’s own energy consumption is likely to rise further in coming years, assuming there is significant economic growth (Milov, 2005), increasing export potential will require quite substantial production increases that at some point will necessitate the development of new fields. It will hence be important that fiscal and regulatory policies are such that they encourage the development of new oil fields to replace production from those currently in decline. A healthy business climate and especially clearly assigned and secure property rights are therefore a sine qua non for private enterprises’ willingness and capacity to finance the large projects.

Unfortunately, the investment climate has suffered serious damage as a result of arbitrary actions by the authorities, particularly the tax service, the prosecutors, and the courts. Since mid-2003, the privatized oil company Yukos has been at the center of a complex legal and political campaign directed by the state against its main shareholders. The onslaught against Yukos, which resulted in the forced sale of its main production unit Yuganskeftegas to Rosneft in a highly controversial auction at the end of 2004, has been the most visible such case, but has by no means been the only one. Similar legal campaigns have been directed at other businessmen in conflict with the authorities at both federal and regional levels. What makes the Yukos case different is the size of the company, and the fact that its main shareholder chose not to surrender his assets and leave the country as others had done before, but has instead faced the courts and prison.

The results of the negative shifts in the business climate are not hard to see. Although GDP growth was an apparently respectable 7.1 percent in 2004, growth slowed through the year as the growth of both oil extraction and general investment slowed, and capital flight rose sharply. Moreover, the growth slowdown occurred despite a quite significant fiscal stimulus and sharply improving terms of trade. Other factors contributed to the slowdown, but it clearly owed much to a policy-driven deterioration in the business climate.

Although much of the 2004–2005 slowdown in oil production growth was a consequence of the policy-induced deterioration in the business climate, oil exports would probably have slowed somewhat anyway. Oil cannot remain the chief driver of Russian export growth indefinitely in any event, as Russian oil reserves are comparatively limited. Given that world demand for gas will probably continue to increase and that Russia has the world’s largest proven gas reserves, the obvious candidate to step in as oil export growth slows would be gas. Undoubtedly, much of the gas is in areas that are difficult to develop, but Russia’s gas monopolist OAO Gazprom, as well as its smaller gas producers, have exhibited real technical excellence in extracting it.

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29 In the first nine months of 2004, the Federal Tax Service collected more than 470 billion rubles in tax claims for past years, as compared with 150 billion for the whole of 2003. This reflected a dramatic increase in the service’s propensity to reopen tax cases from past years, often penalizing taxpayers for practices that it had previously approved.


31 Mikhail Khodorkovskiy is currently serving an eight-year prison sentence.

32 For a discussion of the issue, see Diennes (2004), Gaddy (2004), and Bradshaw and Bond (2004).

33 At least those for which development is commercially viable at current technology levels. Although in the current high-price oil environment, this may appear a remote possibility, continued rapid Russian export growth could at some point also risk a price war with OPEC. There is increasing agreement that the oil price collapse of 1986 was one of the key factors in triggering the terminal crisis of the Soviet system; see Tompson (1999) and Kotkin (2001).
Unfortunately, the gas industry is arguably Russia’s least-reformed major sector and undoubtedly one of its least efficient. Put simply, the sector in its current highly monopolized and heavily regulated configuration is unlikely to deliver sustained output and export growth, as is indicated by its decidedly lackluster performance in recent years. Gas production has grown by around 1.5 percent per annum over the last five years, as against an all-industry average of over 6.7 percent, and the gas sector’s record with respect to productivity and unit labor costs since 1998 has been by far the worst of any major sector in Russia.

The oil sector has shown that with the correct incentive structures—including multiple privately owned production companies and fair access to export infrastructure—production increases on a totally unexpected scale have been possible. Milov (2005) has made the interesting observation that two of Russia’s hydrocarbon sectors were predominantly in private hands during the last decade (oil and coal), and two others were dominated by state controlled monopolists (gas and electricity). Whereas the two former sectors flourished, the two latter performed extremely poorly. Therefore, if private gas producers were given fair access to the trunk pipeline network and some access to export markets, these producers could increase investment and output very rapidly indeed. And the result would probably help stimulate better performance on the part of Gazprom itself (Ahrend and Tompson, 2005b). Unfortunately, developments in 2004–2005 have seen the Russian state moving to tighten its grip anew on key “strategic” sectors, especially on the resource ones. It seems therefore that it is more likely that the structure of the oil sector will evolve in the direction of the one prevalent in the gas sector, than the other way round. Yet, greater state control over resource-exporting industries will most likely lead to less efficiency, more rent-seeking, and slower growth in the very sectors that have been driving the Russian expansion in recent years (Bradshaw and Bond, 2004).

Another driver of long-term growth could be an increase in the service sector. With Russia becoming a richer country, demand for services (banking, insurance, restaurants, travel, hotels, etc) will increase. As the Russian service sector is still largely underdeveloped once the huge part of it that results from trading gas and oil is stripped out, there is ample scope for the sector’s growth. The service sector, however, will not develop very strongly in the absence of a general increase in living standards (i.e., Russia will need increases in industrial production and exports to some degree).

As noted above, a strategy for further developing resource-sector exports is not without risks. More precisely, three important types of potential dangers were identified as problems that policymakers need to address: (a) external vulnerability, (b) Dutch disease, and (c) specific institutional weaknesses. Fortunately, the risks related to resource-based development should remain manageable if accompanied by the right policy choices. In the following sections, these choices are outlined and it is investigated how they would translate into concrete measures in the context of the Russian economy.

Resource-based development is the course Russia has been following for several years now and—given the structure of the Russian economy—it is difficult to see how this could change in the short to medium term without causing major disruptions. Even if

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34The de facto re-nationalization of Yuganskneftegaz is a prime example, as is the intended purchase of Sibneft by Gazprom, as well as current plans to ensure that the Russian state obtains formal control over Gazprom (it de facto is the controlling shareholder already).

35Part of the increasing weight of services in GDP will also come from a shift in relative prices. Domestic prices for non-tradables will be increasing more rapidly than those for tradables with the Russian currency appreciating.
policies favoring economic diversification were highly successful, Russia’s performance would continue to depend on its resource sectors for quite some time. Therefore, if Russia wants to achieve sustainable strong growth in the short and medium terms—which is one of the major policy prerogatives of the Russian authorities—it is difficult to see how this could be achieved without further developing its resource sectors. In any case, even if Russia decided to constrain significantly development of its natural resource sectors—with the implied negative consequences for overall economic growth—Russia would still remain a resource-based economy for some time. This simply is due to the fact that Russia’s current industrial and export structure is heavily resource based, and changes in the economic structure of a country take time. Therefore, the issue of managing a resource-based economy well is a highly important topic for Russia, whatever one’s view of the desirability of further developing Russia’s resource sectors or trying to pursue economic diversification.

EXTERNAL VULNERABILITY

Crisis in emerging market economies are most commonly caused by large terms-of-trade shocks arising from sharp falls in the prices of countries’ main export commodities (see Narain et al., 2003), and resource-based economies are particularly exposed to this kind of risk. The margin of error for Russia is therefore much smaller than for economies with more diversified economic structures. Good macro-economic management thus becomes the condition sine qua non for any attempt to reduce the vulnerability of the Russian economy to external shocks, and hence for successful resource-based development. In this respect it is difficult to exaggerate the importance of fiscal discipline. Admittedly, good fiscal policy cannot eliminate the external vulnerability of a resource-based economy altogether, but it can go a very long way to mitigate it. Fiscal irresponsibility, in any case, will tend to magnify, rather than mute, the effects of commodity price movements, contributing to boom-and-bust cycles. In short, what is needed is a counter-cyclical fiscal policy with respect to commodity prices. In this regard, it is vital for Russia to keep the budget in balance across the oil-price cycle. Moreover, fiscal policy should always be based on conservative price assumptions for the major export commodities. If budgetary commodity price assumptions are above long-term averages, or if revenue assumptions implicitly take above-average prices for granted, then budgets should ideally be drafted to achieve corresponding surpluses. It is clear that a budget that balances thanks only to exceptionally high commodity prices is not in balance at all.

Given the importance of ensuring fiscal balance across the commodity-price cycle, the creation of a stabilization fund is generally a very important issue. Such a stabilization fund accumulates windfall government revenues. These revenues would preferably be managed by an entity that has no authority to spend the money (i.e., an independent special institution or the Central Bank, but not the government, the Ministry of Finance, or any other ministry). The rules for which revenues should be accumulated, and when they may be spent, should be very strict and transparent. Moreover, the accumulated revenues should be invested in fairly safe and liquid foreign currency–denominated assets. Such a stabilization fund generally serves a number of functions.

First, it helps to smooth government revenues—and thus government spending—over the commodity-price cycle. In order for the smoothing to work effectively, it is necessary that the stabilization fund be large enough to insure the budget against several years of below-average commodity prices. In theory, such smoothing could also be achieved by countries
borrowing abroad when commodity prices are low, and repaying the money when they are high. In practice, however, resource-based economies risk finding that their access to international credit is severely constrained when prices are low. When commodity prices fall, they are likely to experience current account problems and any attempt to borrow at this stage risks being viewed suspiciously by financial markets. Moreover, if they are able to borrow on a sufficient scale, they risk paying a very high price to be able to do so. Hence accumulating some money in a stabilization fund that can be used to finance government expenditure when prices are low is by far the preferred option.

Second, a stabilization fund not only serves to smooth government expenditures, but generally also helps in smoothing growth. This is because the fund accumulates money when commodity prices are high, i.e. when the terms of trade of the country have been improving. The money is spent when commodity prices have been falling, i.e., following deteriorations in the terms of trade. As economic growth is likely to be partly driven by terms-of-trade changes, a stabilization fund reduces the risk of overheating the economy when it is likely to grow very robustly. The fund also provides an additional stimulus when growth is likely to be below potential.

Third, a stabilization fund can also serve to reduce exchange-rate fluctuations. This arises from the fact that the investment and spending pattern of the fund described above contribute to capital outflows when commodity prices are high and to capital inflows when they are low. These flows can thus be an important mechanism to counteract current account pressure on the exchange rate, thus helping to shield the economy to some degree from potentially damaging sharp exchange-rate fluctuations.

The recently established stabilization fund therefore plays a crucial role in using fiscal policy to stabilize the Russian economy over the oil-price cycle, but there are some problems with its organization. To understand these problems, it is useful to first consider briefly how the stabilization fund works. The primary purpose of the fund is to shield the budget from the potential consequences of a drop in oil prices. In this, the Russian fund differs from some other oil funds, most notably that of Norway. Norway’s much larger Petroleum Fund aims not only to smooth short-term fluctuations in oil revenues but also to act as a mechanism for transferring the wealth derived from the current exploitation of a non-renewable resource to future generations.

By law, the Russian stabilization fund accumulates automatically the surplus revenues from the natural resource extraction tax and the crude oil export duty that are generated if the price of Urals crude averages more than $20 a barrel (this cut-off price will be raised to $27 at the beginning of 2006). If the federal budget ends the year with a surplus, most of the surplus may also be transferred to it in the early months of the following year. The law stipulates that the first 500 billion rubles accumulated in the fund can only be spent to cover the budget deficit that arises when the Urals price falls below the cut-off. Everything above that amount can be spent for other purposes, at the discretion of authorities.

If the stabilization fund is to fulfill its main purpose (fiscal stabilization), then it needs to be sufficiently large to insure the budget against the risk of several years of low oil prices. On that criterion, 500 billion rubles (around 2.5 percent of projected GDP for 2005) is not enough, especially given that the higher the cut-off price the greater the potential for dramatic revenue shortfalls.36 500 billion rubles would probably not be sufficient to offset the

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36It is interesting to note that the Finance Ministry’s initial proposal was to accumulate the equivalent of around 8.7 percent of GDP in the fund.
revenue losses to the federal budget for much more than a year.\(^{37}\) Worse still, the 500 billion ruble target figure is not indexed to inflation, or to the growth of either federal spending or real GDP—given current inflation and growth rates, it is falling relative to GDP by 15–20 percent per year.

There is nothing, of course, to stop successive governments from holding more than 500 billion rubles in reserve. The stabilization fund is expected to hold around 1300 billion rubles by the end of 2005, which would be a far more adequate sum than the legal minimum target of 500 billion. Hence it could be argued that the size of the legal minimum target of the fund does not really matter. However, international experience shows that it is very difficult for governments to keep a reserve if political will is the only thing that prevents them from spending it. Unless there are institutional rules to safeguard the stabilization fund, it is therefore likely that the sums accumulated above the target level enshrined in the law will almost certainly be spent—if not by the current government then by one of its successors.

The straightforward solution would be to raise the 500 billion ruble threshold very substantially. The new target level should also be set in relative terms—for example, as a percentage of GDP—rather than as an absolute sum. It could likewise make sense to adopt a cut-off price that is linked to a 10- or 15-year moving average of the Urals crude price. The government’s ability to raise spending as oil prices rose would thus increase only gradually, but the impact of falling prices would also feed through only gradually, making fiscal adjustments less painful and abrupt.

Whatever the ultimate size of the stabilization fund, it may at some point be sufficiently large that further accumulation would be unnecessary and might even become inefficient. The insurance provided by the fund comes, after all, at a price. Russia will then need to decide what to do with any further windfall revenues arising from high commodity prices. The temptation to use them to finance tax cuts or higher non-interest spending should be resisted, as this would be strongly pro-cyclical and would thus increase the risk of overheating. It would also risk jeopardizing the fiscal position when oil prices eventually fell.

The urge to spend at least some windfall revenues—or to use them to reduce taxes—is understandable, given the many urgent calls on the public purse in Russia. However, if the authorities wish to use windfall revenues to finance sustainable tax cuts or expenditure increases, the best strategy is to use surplus revenues in the first instance for early debt repayment—as has been done at times by the Russian authorities in recent years. The most important examples to date are the early repayment of debt owed to the international financial institutions, as well as a $US 15 billion early payment to the Paris Club in 2005, with prospects of an early repayment of the remainder. Anticipated debt repayments reduce the government’s future liabilities and thus allow higher spending or lower taxation in subsequent years—without betting on continued high commodity prices. Using surplus revenues for debt repayment also generally helps to reduce the risk of currency crises and to limit the impact of such crises if they occur.

Once the stabilization fund has reached a size considered sufficient for stabilization purposes, the Russian authorities might also wish to consider accumulating additional commodity windfalls in the fully funded pillar of the state pension system. Apart from being a macro-economically responsible way of distributing the windfall to the population,\(^{38}\) this

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\(^{37}\) The Economic Expert Group estimates that an oil-price drop from the new cut-off price of $27 a barrel to the old cut-off price of $20 would reduce federal revenues by around 1.6 percent of GDP. In addition, there would also be significant further losses as a result of slower economic growth.

\(^{38}\) Assuming obviously that the pension fund invests this money into foreign currency denominated assets.
would help to raise the pension rights of those who, owing to age or income, would otherwise have little or no claim to a pension from the fully funded pillar. The use of stabilization fund money for the pension fund as stipulated in the federal budget law for 2005 was unfortunately no example for such a responsible use of windfall money in building up the fully funded part of the system. This transfer was simply intended to close a hole in the pension fund, and hence was simply part of current consumption.

Having low external debt helps to reduce external vulnerability, both by decreasing the risk of currency crises and by limiting the damage from such crises if they do occur. In this respect, the need for low external debt applies equally to the public and private sectors. It is hence also important to make sure that Russia’s private sector’s external borrowing does not reach dangerous levels. Empirical work suggests that external debt above a certain level has a negative impact on growth, and that the optimal external debt level for Russia would probably be somewhere below 40 percent of GDP.\(^39\) The fact that Russia has been reducing its external sovereign debt in recent years is thus positive. To reduce a high external debt level, by the way, one need not necessarily reduce the public debt burden. A reduction in external debt may also be achieved by shifting more of it into domestic currency–denominated debt, and Russia’s shift (albeit slow) from external to internal sovereign debt issues is therefore to be welcomed.

In any case, sovereign debt should ideally be predominantly in domestic currency, or at least indexed to a relevant commodity price or commodity price basket, so that debt service would rise or fall in line with commodity prices. For Russia this would imply that there would be a rationale for issuing oil price indexed bonds. So far commodity-price-indexed bonds have mainly been issued in the context of sovereign debt restructurings or by private companies, but there is no obvious reason that would prevent them from being used more widely for sovereign issues (see UNCTAD, 1998, pp. 41-45). Such issues should be attractive to those needing a hedge against commodity price rises, especially given that possibilities for long-term hedging in commodity markets are relatively limited.

Resource-based economies also need a significant degree of exchange-rate flexibility in order to be able to accommodate shifts in their terms-of-trade. When commodity prices are rising, the problem is that currencies may become fundamentally overvalued—bringing the risk of especially large and painful exchange-rate depreciations when those prices fall. Hence there may be some scope in Russia for efforts to avoid excessive exchange-rate appreciation during periods of high oil prices that are often also characterized by major short-term capital inflows. However, Russia’s pursuit of exchange-rate goals with the monetary policy tools that were available in the past (mainly unsterilized exchange-rate intervention) incurred significant costs in terms of inflation.\(^40\) In this respect, it would have been helpful if the CBR had been given a wider range of sterilization instruments earlier in order to reduce the trade-off between inflation and ruble appreciation.\(^41\) This said, pursuing such exchange-rate goals

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\(^{39}\)Patillo et al. (2002) demonstrated that, for developing and emerging countries, the average impact of external debt on growth becomes negative at about 35–40 percent of GDP or about 160–170 percent of exports. The marginal impact of debt would start being negative at about half of these values. This would suggest that, for Russia, optimal external debt levels would be somewhere in the range of 15–40 percent of GDP.

\(^{40}\)In the aftermath of the 1998 financial crisis, monetary sterilization was difficult because of limited demand for ruble debt instruments. This is no longer the case, as witnessed by the fact that in 2004 interest rates on ruble instruments were very low and often negative in real terms. The market for Russian domestic currency–denominated fixed-income securities remains nonetheless too small.

\(^{41}\)Only in late 2004 could the CBR issue Central Bank securities for sterilization purposes.
will always remain costly in terms of inflation unless there is the political will for sufficient fiscal sterilization, and the technical capacity for a good deal of monetary sterilization. The former reinforces the need for having a stabilization fund, whereas the latter implies that Russia should aim to have a large market in domestic currency–denominated government debt.

More generally, dollarization (or euro-ization) of a resource-based economy as such should be avoided or low, with prices and contracts being in local currency as far as possible. Borrowing, saving, setting prices, or concluding contracts in an external currency may be rational and beneficial for individual households, enterprises, or banks. However, the widespread and generalized use of a non-domestic currency in economic transactions implies a large systemic risk to economic stability in the event of large exchange-rate fluctuations, and should therefore better be limited or avoided in Russia.

**DUTCH DISEASE**

If Russia continued on a resource-based development path with the mineral sector maintaining or increasing its share in exports, this would also increase the risk of “Dutch disease.” The term Dutch disease is usually used by economists to describe a situation in which a country suddenly discovers large quantities of natural resources and starts exporting them. However, Dutch disease can also become a more pressing problem for a country if the weight of an existing resource sector in exports increases relatively rapidly. For Russia, as well as for most other resource-based transition countries, the discovery of natural resources as such is not the main source of the risk of contracting Dutch disease. Natural resource extraction already loomed large in these countries even in communist times. However, the full weight in the economy made itself felt only at the start of the transition. Relative prices of primary raw materials, which had been held at artificially low levels under central planning, soared, as did resource exports. As a result, the large differences in productivity between sectors finally became visible. The export-oriented energy sectors generally turned out to be highly competitive and profitable. In contrast, many enterprises, especially in the manufacturing sector, were already barely competitive even at relatively weak exchange rates, and their situation further deteriorated when exchange rates started to appreciate as a result of surging resource exports.

A stronger equilibrium exchange rate, however, is not uniformly negative. It increases the purchasing power of the population (as imported goods become cheaper) and therefore raises living standards. The ensuing stronger consumption usually also boosts production in the non-tradable sector. The drawback, however, is that the competitiveness of the non-resource–based tradable sectors comes under threat. In order for them to continue exporting, or at least to withstand competition from imports, these sectors must increase productivity sufficiently fast to maintain their international competitiveness.

For Russia, this means that the relatively strong exchange rate puts a premium on the need for productivity increases in the non-mineral tradable sector. Thus far, this seems to have led to an increased effort to restructure, and therefore a large part of Russian industry seems to have withstood the increasing competitive pressures relatively well. While industrial production growth slowed in 2001–2002, it recovered to around 6–7 percent in 2003 and

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42 The name “Dutch disease” is in fact rather unfortunate, as the Netherlands actually handled such a situation comparatively well.
2004. The main reason for this resilience appears to be significant labor productivity increases in a large majority of sectors (see Ahrend, 2004). However, much of the increase in productivity, especially in sectors with very low initial productivity levels, has been achieved via what is often described as “passive” restructuring—a drastic reduction in the labor force with relatively little investment and stagnant or declining output. Ironically, the extreme inefficiency of many Soviet enterprises has actually facilitated productivity gains with little or no investment—manufacturers would have found it far more difficult to maintain competitiveness had they been very efficient to begin with. However, the easy gains have probably by now been realized to a substantial degree, and there are natural limits to how far passive restructuring can go. Further active industrial restructuring, including private investment to modernize production capacities, is thus the sine qua non for continuing strong growth, implying that sustaining competitiveness in the face of mounting cost pressures may turn out to be increasingly difficult.

While productivity increases in Russia as such are obviously welcome, a potential problem is that the strong pressure from the appreciating exchange rate on the non-resource tradable sectors may ultimately affect equilibrium employment levels. The resource sector usually provides relatively little employment itself. Therefore, if resource-based currency strength leads to a more capital- and less labor-intensive production pattern in other industrial sectors, it risks contributing to reductions in industrial employment. This may not be a problem if growth in non-resource–based activities is sufficiently strong to create the necessary jobs. An expansion of the service sector, in particular, could compensate for lost industrial jobs, but a significant part of the potential employment opportunities in the service sector may be of rather low productivity, which would imply comparatively low wages. This could therefore give rise to social tensions, or, if large wage inequality is socially and politically unacceptable, the service sector may fail to generate a significant part of potential employment.

The potential negative impact of the natural resource sector on the economy can, however, be mitigated by the right policies. The tax system, for example, can be instrumental in avoiding Dutch disease and in assisting the development of the non-resource sector. More precisely, direct taxation of the natural resource sectors should be high, while assuring that these sectors, which are often critical to growth, remain sufficiently profitable to allow for their further development. The proceeds of the high resource taxes should then be used to ensure low overall tax levels in the economy and in particular low non-wage labor costs. While lower non-wage costs might in certain sectors be wholly or partially offset by wage increases, they should at least lead to lower total labor costs in sectors with low productivity. Obviously, cuts in non-wage labor costs may cause shortfalls in social security or pension funds, but these could—if deemed important—be compensated by earmarking a certain portion of price-independent resource taxes. Moreover, taxing more of the resource rent away should also decrease wages in the resource sector and hence diminish the pressure on wages in other sectors. As this may allow lower wages for activities with lower productivity, it would also help to preserve employment that would otherwise be lost or create new employment opportunities that would otherwise not arise.

43Output growth has been concentrated in those sectors that restructured actively, not only increasing productivity but also investing. Investment alone, however, was insufficient. Some industries, like gas and electricity, largely failed to restructure, recording no significant increases in labor productivity; these sectors contributed little to output growth despite significant investment (see Ahrend, 2004).
With regard to using the tax system to fight the risk of Dutch Disease, the abolition of turnover taxes in Russia during 2001–2003 was a welcome development (as these taxes were relatively heavier on manufacturing industries; see OECD, 2004, Box 1.4), as was the decrease in Unified Social Tax (UST). Those measures undertaken in 2003–2004 that increased in an equitable way the tax burden on the oil sector were also steps in the right direction. However, instead of focusing on the oil industry alone there should also be a broader attempt to increase taxation of other resource or related sectors—obviously in a fashion that does not harm their future development.

While orienting the tax system toward the resource sector can help to alleviate Dutch disease, it also increases the dependence of the budget on commodity prices. This potential risk, however, should not be seen as a deterrent to orienting the tax system this way; rather, it underlines the importance of having a sufficiently large stabilization fund.

POLITICAL ECONOMIC CHALLENGES

As pointed out in the foregoing paragraphs, many, if not most, of the potential macroeconomic problems arising from resource dependence can be resolved or at least significantly reduced by following appropriate macroeconomic policies and undertaking related structural reforms. The potential political economy implications may therefore be the toughest problem that resource-based economies must face. The economic literature suggests a number of reasons why resource orientation may complicate economic development. Among those, the incentives for rent seeking—and its negative effects on economic development—are quite prominent. First, the allocation of talent in natural resource economies may be biased in favor of the resource sector, as highly capable individuals focus on securing resource rents rather than building successful businesses in other sectors. Second, countries with resource-based economies are also more likely to experience large-scale rebellions and civil wars—which to some degree is simply an unfortunate consequence of rent-seeking pushed to the extreme. Third, it has been shown that a larger share of natural resources in exports is associated with more corruption (e.g., see da Cunha Leite and Weidmann, 1999), which, in turn, is associated with slower long-term growth (Mauro, 1995). And finally, a higher natural resource share in the economy is often accompanied by greater inequality of incomes, which also has been shown to undermine long-term growth performance.

As rent-seeking or its consequences underlie most of these problems, part of the solution is simply to tax away a fair share of the resource rent. For example, to the degree that inequality is driven by the fact that those active in natural resource sectors (owners, managers and workers alike) get their share of the resource rent, and hence are usually doing far better than those in similar positions in other sectors, taking away these rents—obviously in a corruption-proof a fashion as possible—goes a long way toward solving the problem. The money thus collected can then be given back to the population through low general tax levels. To reduce inequality, using part of it for some increase in targeted social transfers may also be useful in some cases, especially in countries where the social safety net already in place is small and insufficient. By providing the state with additional resources and reducing the risk of social tensions through greater income equality, this could also reduce the risk of rebellions and civil wars. A large reduction in resource rents going to individuals instead of

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44 For a related point, see Acemoglu and Verdier (1998).
the state would also help solve the problem of potential misallocation of talent to resource sectors. The main obstacle to achieving this is that it requires a fairly efficient and non-corrupt administration—otherwise resource rents are simply divided between resource companies and their bureaucratic counterparts, with only a minor share making it into state coffers. Hence having an effective and relatively corruption-free state apparatus becomes one of the key priorities to overcome the political economy challenges that may come with resource dependence.

There are various measures that can be taken to limit corruption. The first step is to create more corruption-resistant structures. Rules, if necessary at all, should be simple, transparent, and standardized, with few exceptions and as little reliance as possible on bureaucratic discretion. Many recent legislative changes in Russia seem to be at least partly motivated by this kind of reasoning, including changes to fiscal federal relations and measures to curb bureaucratic interference in commercial activity. For example, such measures include curtailing officials’ inspection powers, simplifying business registration, and reducing the range of activities subject to licensing requirements. However, while drafting corruption resilient legislation is important, it will not be sufficient on its own to reduce corruption levels as long as corruption goes largely unpunished because of a lack of monitoring. Cross-country research shows that both the efficiency of the rule of law and the development of civil society are strongly and negatively correlated with corruption levels (Brunetti and Weder, 1999). The evidence also demonstrates that a lack of press freedom increases corruption (Ahrend, 2002). An independent justice, a free press, and generally a strong civil society are hence not a luxury for the sake of itself, but are important in bringing and keeping down corruption, and thus promoting long-term economic development.

Interestingly, all resource-based economies that have developed successfully had strong civil societies, relatively well functioning and independent judicial systems, high levels of press freedom, and relatively low levels of corruption, whereas resource economies that failed to achieve adequate economic progress usually lacked most of these features. There is also evidence that resource-based development has generally been more successful when state ownership in the resource sectors has been absent or very limited. In this respect, the contrast between the mainly state-owned Russian gas sector, and the (until 2005) almost entirely privately owned oil sector is suggestive. While from 2000 to 2004, the latter was one of the main engines of Russian growth, the former continued to stagnate.

**DIVERSIFICATION**

Developing a successful modern economy based on natural resource exports is feasible in principle. As stated before, there are, however, risks associated with being highly dependent on a limited number of resource-based sectors, and hence a more diversified economic structure is something that in principle is desirable for economic reasons. Moreover, a

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46 In this context, recent proposals to vary effective tax rates in the oil sector on the basis of the quality of exploited deposits should be viewed with caution, given widespread corruption and transfer pricing in the sector. A more differentiated approach would in theory be more efficient, as it would not only favor the exploration of less profitable fields but would also prolong the life of declining fields beyond what would be commercially viable under the current tax system. However, it will be critical to ensure that any such system of taxation relies on a small number of variables that are easily collected and monitored, and that it be implemented in a manner that does not give much discretion to bureaucrats. In Alberta, for example, the royalty system takes into account three basic variables—the age of the field, the depth of the oil, and the flow rate—all of which are easy to monitor.
significant part of the Russian political elite—given the global ambitions they see for the Russian state—would also consider a resource-based development path as politically unacceptable. Hence Russia should—and will—pursue policies to foster diversification in coming years. Given the political context it is, however, especially important to not lose sight of what diversification policies can and cannot achieve.

First, there is no miracle recipe to achieve diversification overnight. Fostering diversification will be a long, protracted process, and should thus be viewed as a long-term goal. Second, there is no shortage of examples of failed diversification policies, and economists know fairly well on the basis of international experience what does not work. Fiscal irresponsibility as well as large-scale state investment in pet industrial projects rank at the top of the list of what should be avoided in Russia. Unfortunately, there is less agreement among economists about what does work, as policies that work well in one place often fail dramatically elsewhere. Indeed, failures have been so common (and sometimes so spectacular) that, in recent years, economists have often preferred not to give any advice relating to diversification policies.

Nevertheless, there are some policies that are helpful in fostering diversification and should be fairly uncontroversial. Broadly speaking, they consist of getting framework conditions for entrepreneurship right, and making sure that the business environment is generally competitive and that there are sufficient incentives to invest in non-resource sectors. As such, they involve a large number of structural reforms typically advocated by mainstream economics. However, reasonable doubts have been voiced as to whether these policies would turn out to be sufficient for Russia to achieve the stated goal of diversification in a reasonable time span. While acknowledging the need for good framework conditions for business as a sine qua non, some economists therefore advocate the pursuit of “new-style” industrial policies as a supplement to the structural reform agenda.

The most obvious conventional measure is to use the tax system to assist the development of the non-resource sector. As the type of tax policies required are similar to the ones needed to combat Dutch disease (and hence have already been discussed above), it is only re-emphasized here that the guiding principle should be to make extensive use of taxes that specifically target the resource sectors, which in turn allows low general tax rates.

In addition to tax policy, there is also a large list of structural reforms, including financial and administrative reforms, that would be particularly important for facilitating the diversification of economic activity in Russia. Mechanisms for efficiently allocating investment resources across—and not merely within—economic sectors are important. Despite rapid growth in lending to the private sector in 2002–2004, Russia’s financial sector remains underdeveloped. Further reform of the banking sector, in particular, is thus a key priority.47

Given Russia’s potential in a number of high-tech sectors, facilitating the emergence of a venture capital industry would also be helpful, especially for assisting start-ups in sectors at the technological frontier. At the same time, there is a crucial need in Russia to improve basic framework conditions for business, particularly for small and medium enterprises (SMEs). There is still an overwhelming need to reduce the burdens imposed by heavy regulation and an often corrupt bureaucracy, which in addition to strengthening the financial system, would help to create a more level playing field and decrease barriers to entry. In this respect, a more active competition policy would also be needed. This is especially true for sectors such as

47 Developing a sound banking sector is complicated by resource dependence, as it makes it more difficult for banks to achieve sufficient sectoral diversification of their loan portfolios (see Narain et al., 2003).
natural gas and electricity, where large, state-controlled monopolies should be restructured, while creating legal and regulatory frameworks that combine robust competition with effective regulation. Finally, streamlining burdensome custom procedures could be helpful for potential Russian exporters (especially for SMEs) by facilitating their access to international markets. However, none of the above imperatives can be achieved without substantial improvements in the probity, efficiency, and accountability of the courts, the bureaucracy, and other state institutions.

On the less conventional side, “new-style” interventions recommend the creation of programs that would directly improve the productivity and competitiveness of selected enterprises, which would to some degree serve as an example for other entrepreneurs. The guiding features of such policies usually include high transparency. Also, participation in these programs needs to be determined by private-sector representatives, and the period during which any single enterprise can participate in such a program needs to be strictly limited. Programs should not involve significant transfers of resources to participating enterprises, but rather focus on the transfer of knowledge or skills, such as new production, management, or marketing techniques, or the dissemination of specific information (e.g., about potential export markets). In addition the necessity to enhance the establishment of links and networks has been stressed. Many of these “new-style interventions,” however, will require the intervention of some part of the Russian administration in one way or another, so increasing the quality of the state administration will prove crucial to their prospects for success.

CONCLUDING NOTE

Can Russia break the “resource curse”? This paper has attempted to show that, even if diversification policies were to prove highly successful, Russia is bound to remain a resource-based economy for the foreseeable future. I then raise the question of whether Russia’s economic development will therefore suffer from the “resource curse.” While acknowledging that resource-based economies face specific risks and challenges, I argue that the resource curse is no fatalité. Citing the examples of economies with strong private entrepreneurship in resource sectors, such as Canada, Australia, or the Scandinavian countries, I then posit that with the right institutions and policies it is possible to develop a successful modern economy based on exports of natural resources.

REFERENCES


48For details, see Tompson (2004) and Ahrend and Tompson (2005a, 2005b).
49In this spirit there have, for example, been proposals to create research parks and technology transfer centers attached to the leading educational and research facilities (see Kim, 2004).
50An extensive discussion of “new-style” industrial policy is beyond the scope of this paper, but can be found, for example, in Rodrik (2004) and Drebentsov (2004).


Auty, R., “Patterns of Rent-Extraction and Deployment in Developing Countries: Implications for Governance, Economic Policy and Performance.” Lancaster University, Bailrigg, Lancaster, UK, 2004 (mimeo).


