

# The Russian Nonfuel Sector: Signs of the Dutch Disease? Evidence from EU-25 Import Competition

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*It is evident that the Russian economy is largely based on the energy sector. This fact has caused concern in academic circles as to whether Russia is to some degree affected by the Dutch disease, i.e. whether a sharp rise of commodity prices might result in an appreciation of the real exchange rate, which would undermine the competitiveness of manufacturing and could lead to the deindustrialization of the economy. We focus on this possible final outcome, which has not been studied much in the literature so far: We compare Russian industrial import growth (based on figures of the volume of EU-25 exports to Russia) with domestic industrial production growth (disaggregated by industries) in the period from 2002 to 2006. In all manufacturing sectors except electrical, electronic and optical equipment and strongly protected foodstuffs, Russian imports are found to be expanding faster than domestic output. In some sectors, imports have even exceeded domestic production. Import competition is therefore strong and rising. We conclude that Russia may be facing incipient deindustrialization at least in some parts of the manufacturing sector. This could indicate that the Russian economy has contracted the Dutch disease, although it should be noted that other factors could also have driven sectoral changes. While it is beyond the scope of our study to examine whether the other chain links of the Dutch disease hold as well, the study does provide evidence of some movements in the direction of deindustrialization, which is in line with the Dutch disease theory.*

## 1 Introduction

Oil prices have risen very sharply and have attained high levels in recent years. This development has renewed interest in the Dutch disease hypothesis and in exploring its validity for oil-exporting countries like Russia. The core model of the Dutch disease hypothesis follows Corden and Neary (1982) and Corden (1984). It assumes that the economy consists of three sectors: Natural resources or resource tradable goods (simply referred to as “oil” in this contribution), non-resource tradable goods (“manufactured goods”) and nontradable goods (“services”).<sup>4</sup> Windfall revenues resulting from an increase in oil prices have the initial effect of raising the aggregate incomes of factors employed in the oil

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<sup>4</sup> Of course, these are not the only plausible references. For instance, in some countries/territories (Iceland, Greenland), fishing is the natural resource-based industry. Or, alternatively, in some Asian and African economies it is agriculture that can be squeezed by an increase in energy exports (Sachs and Warner, 1995; Bardt, 2005). Or, in particular circumstances, inflows of large amounts of foreign financial assistance might trigger deindustrialization (ICEG European Center, 2006). Furthermore, the above identifications, e.g. of nontradable goods as “services,” are admittedly not precise and somewhat outdated, as in the early 21<sup>st</sup> century, some services are actually more tradable than manufacturing goods, as they can be delivered via the Internet at virtually no cost – and under high competition. We continue to use the above terms, however, because they still seem to be largely correct and because they provide readers with concrete references that mean something to them.

sector. According to the model, this may give rise to a *resource movement effect* and to a *spending effect*.

The resource movement effect is brought about by a rise of wages in the oil sector, which induces a movement of labor out of manufacturing and nontradables (direct deindustrialization). The spending effect involves higher oil sector revenues, which raise aggregate demand, thus pushing up the price of services and fanning inflation. This implies an *appreciation of the real exchange rate*. Upward wage pressure throughout the economy erodes manufacturing competitiveness and forces a downsizing of the non-resource tradable sector (indirect deindustrialization). Moreover, the crowding out of manufacturing sets the stage for “unbalanced growth” which may be highly exposed to resource (oil) price and supply volatility and may therefore result in macroeconomic instability, stop-and-go investment activity, boom-bust cycles and overall sluggish long-term growth (Égert and Leonard, 2006). Once manufacturing is forfeited, growth tends to slow down because positive externalities from manufacturing in the form of faster technological progress are lost and production shifts away from activities that facilitate learning by doing (Kronenberg, 2004).

So far, there has not been much research on Russia and the Dutch disease. The reasons seem to be the short observation period for this transition country, difficult access to reliable data, frequent revisions of time series, and the fact that the most recent oil boom that could serve as a basis for measuring possible Dutch disease effects only started in 1999–2000. However, notwithstanding intermittent drops, this oil boom has continued until at least the fall of 2006, which is unusually long in the light of the experience related to oil cycles in the past decades. Moreover, Russia is one of the world’s primary producers of oil and gas. The share of oil and gas industries in Russia’s total GDP comes to about one-fourth, and the share of these two industries in the country’s total export revenues has reached nearly two-thirds.

Most studies so far have found that while Russia exhibits some of the symptoms of the disease, it has not (yet) caught the full-fledged malady. Åslund (2005) stresses the fact that average wages rose by over 30% annually in U.S. dollar terms from 1999 to 2005. His assessment concludes that many manufacturing branches cannot develop too favorably with such a leap in labor costs. Latsis (2005) goes one step further, maintaining that Russia’s currency is appreciating because of the huge inflows of export proceeds. In his view, the booming oil sector is strangling the country’s manufacturing industries and he therefore concludes that “the Dutch disease is already here.”

In contrast, in a study measuring U.S. dollar wages and comparing production growth, export shares and import penetration, Westin (2005) finds no compelling sign of a decline in manufacturing. From a trade perspective, the growth of Russian exports of consumer-related and high-tech commodities worldwide and to the EU did not generally suffer in the period from 1997 to 2001. However, the Russian market shares in exports of these product categories to the EU slightly declined during this time. Import penetration ratios are calculated for a very small group of 11 products (mostly belonging to machinery and equipment) where, according to Westin, production statistics reliably tally with customs statistics. Regarding this very

narrow sample, import penetration has progressed at a slower pace than the economy as a whole in the period from 1997 to 2003.

Roland (2005) likewise finds it premature to speak of the Dutch disease in Russia. The ruble has no doubt been appreciating in real terms, but this does not seem to have compromised manufactured goods' competitiveness. Between 2002 and 2004, the increase of Russian exports of iron, steel and manufactures outstripped that of fuels and mining. According to Ahrend (2005), real ruble appreciation in the period from 1999 to 2004 was matched by stepped-up industrial restructuring efforts that led to significant labor productivity adjustments in the large majority of non-resource tradable sectors. Much of the improved competitiveness has been attained by "passive restructuring" (labor shedding etc.). Real ruble appreciation as well as some other Dutch disease symptoms (e.g. the value added of some nontradables, namely trade and agriculture, growing faster than industry) are confirmed for the period from 1999 to 2004 by Égert (2005).

Based on sectoral and time series analyses covering the period from 1997 to 2004, Oomes and Kalcheva (2007) agree that high oil price-related windfall revenues in Russia have set the real exchange rate on an appreciation path that threatens the manufacturing sector's competitiveness. However, the resource movement effect is unlikely to play a significant role in Russia, given that the oil sector employs relatively few workers and that labor mobility is generally low. The spending effect seems to be more important. Consistent with the Balassa-Samuelson hypothesis, appreciation has been largely proportional to productivity differential growth. Oomes and Kalcheva conclude that what likely helped stall the Dutch disease thus far is Russia's prudent policy of saving its oil windfall revenues in the Stabilization Fund and swiftly redeeming its foreign debt.

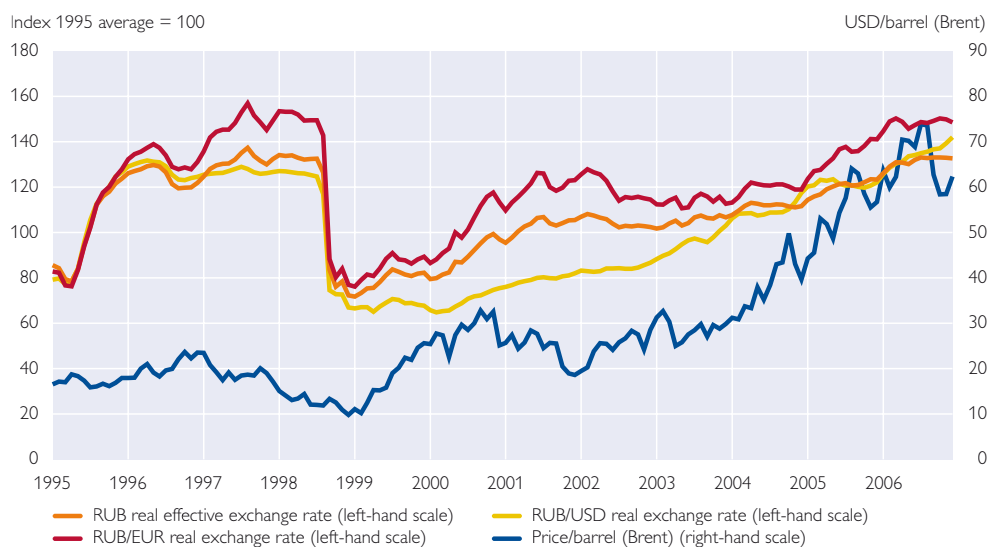
Analyzing data up to 2005 and comparing manufacturing sector growth with that of energy extraction and with total GDP growth, Beck, Kamps and Mileva (2007) only find mixed evidence on manufacturing sector decline in Russia. Moreover, they find that evidence on labor shifting from manufacturing to services and mining is not conclusive.

While according to most studies, the Dutch disease does not appear imminent in Russia – or more precisely, did not appear imminent at the time of writing – they do seem to maintain that the long-term threat of an outbreak remains real. There are unambiguous signs of a real appreciation of the ruble and of this real appreciation being at least partly triggered by oil price rises and foreign currency inflows (see also chart 1). But the majority of studies does not (yet) see any clear adverse effects on Russian manufacturing.

In this light we propose to add a specific contribution to the research and discussion of (the possible existence of) the Dutch disease in Russia. However, we will not attempt to verify the functioning of all (hypothetical) chain links of the Dutch disease. Our focus will be exclusively on the final stage, i.e. on whether some degree of deindustrialization or a loss of manufacturing competitiveness has happened or is happening. We are aware that a loss of industrial competitiveness itself does not necessarily have to be triggered by the Dutch disease. Hence, any conclusions with respect to the existence or

Chart 1

**Real Effective Exchange Rate of the Russian Ruble and Oil Price (1995–2006)**



Source: MinEcon.

nonexistence of the Dutch disease need not be absolutely compelling in our case.

Looking at the last link of the Dutch disease, we will focus on external competitiveness. A decrease in exports can be triggered by real appreciation, which may, in turn, be attributable to nominal appreciation or to unit labor cost increases. This point should be taken up in future research. Imports can also provide valuable information on the competitiveness of domestic industries, which may be crowded out by imports, given the effects of real appreciation, which is triggered either by nominal appreciation or by labor cost increases. In this study, we will concentrate on import competition, which in fact has not yet been analyzed in depth in the empirical literature on Russia. Does import growth outstrip domestic production growth in the nonfuel sector? And if it does, what size have imports attained compared with domestic output? We will analyze these questions on an industry-by-industry basis for the entire range of goods.<sup>5</sup>

While this approach is promising, some qualifications must be noted with regard to import penetration being a useful indicator of the competitiveness of domestic industry. High import content in final domestic goods could mitigate this fact, especially if intermediate goods are classified differently than final goods. Higher imports do not necessarily compete with domestic goods if domestic goods are of low quality and imports are luxury goods. Furthermore, imports could have a positive impact on Russia's productive capacity and thus stimulate investment, exports and growth in the longer term. Finally, although we exclude exports from our comparison, the case is still strong, as about four-fifths of Russia's exports are clearly natural resources, and manufactured

<sup>5</sup> We focus on manufacturing and do not include competitive market-oriented services (see footnote 1), given the lack of comparable data in the latter field.

goods account for only a tiny share of exports. Russia's market share in mature Western market economies' imports of manufactured goods is tiny. In the EU-25 market, for example, Russia's share of manufactured goods imports only comes to a few percentage points of total imports. Therefore, speaking of Russian export competition in this context would not be very meaningful.

The rest of this study is organized as follows. Section 2 is devoted to statistical issues and highlights the logic behind, and limitations to, our approach. Section 3 investigates whether Russia shows symptoms of the Dutch disease, based on the import competition approach. Section 4 draws overall conclusions.

## 2 Statistical Limitations

Instead of concentrating on import penetration like Westin (2005), we focus on growth rates in our approach. If imports in nonfuel sectors are found to have reached a substantial size and grow faster than domestic production, Russia would face some degree of the Dutch disease – otherwise not. Before proceeding to a detailed analysis of relevant data, some statistical limitations need to be discussed.<sup>6</sup>

The first problem we have to tackle is the lack of proper volume-based indices for Russian imports (and exports). The import figures reported by the Federal Customs Service of the Russian Federation are only available in nominal terms for international trade of goods classifications (Harmonized System,<sup>7</sup> two-digit level), while for 95 specific commodities only detailed volume figures are available, but no data aggregated by subgroups in any Harmonized System (HS) classification. Hence, we lack coherent official data on Russian foreign trade volumes.

The second problem related to trade figures is that the Federal Customs Service's figures tend to undervalue Russian foreign trade, and especially imports. This is true particularly in categories with high value-added commodities, textiles and footwear. For EU-25 exports to Russia, for example, the recorded value of 2005 exports was on average nearly 40% higher than the corresponding figure the Federal Customs Service reported for imports. Such discrepancies are partly connected to different ways of recording re-exports in trade with Russia. Moreover, personal imports and shadow economy activities are another reason for the gaps between partner countries' registered exports to Russia and Russia's registered imports. The Central Bank of the Russian Federation (CBR) includes a special estimate of this deviation factor in its balance of payments figures. It came to 22% of total imports in 2005.

It is normal, however, that partner countries' trade statistics deviate to some degree, as there usually are differences in methodologies, exchange rates and accounting periods. Some countries also use secret categories for strategic goods, which makes comparisons more difficult. Figures reported by the

<sup>6</sup> For more details, see Ollus and Barisitz, 2007.

<sup>7</sup> The Harmonized Commodity Description and Coding System, better known as the Harmonized System (HS) is a nomenclature developed by the World Customs Organization and covering two-digit to ten-digit levels. The EU's Combined Nomenclature (CN) classification corresponds to the HS up to the six-digit level. The Federal Customs Service's "Tovarnaya nomenklatura vneshe-ekonomicheskoy deyatelnosti" (TN VED) methodology also corresponds to the HS up to the six-digit level.

Federal Customs Service differ from partner countries' statistics particularly for value-added goods, which are also important in our comparison of import competition. Moreover, as there are no detailed data in volume terms or import prices for whole categories, it is impossible to calculate detailed sector-wise import penetration figures based on Federal Customs Service statistics.

We thus need to find an alternative way to calculate Russia's import development, namely on the basis of Russia's main trading partners' export statistics. In this paper we focus on Russian imports from the EU-25, as the relevant volume export data are available from Eurostat. According to the Federal Customs Service, the EU-25 have had a rather stable share of 44% in Russian imports over the past decade. A comparison of Eurostat data on exports to Russia with CBR import data also shows a quite stable average share of 48% for the same period. Hence, we use EU-25 exports as a proxy for developments in Russia's total imports. Still, we are aware that the structure of imports from the EU-25 is not similar to that of imports e.g. from China or the Commonwealth of Independent States (CIS). China's exports to Russia record a higher share of textiles and agricultural products with a lower value added than exports of the EU-25 and other OECD countries. However, we can probably assume that the structure of EU-25 exports closely corresponds to the export structure other OECD countries. According to the Federal Customs Service, the OECD countries account for 61% of Russia's total imports. Acknowledging the limitations in trade statistics, we still use EU-25 data from Eurostat for lack of any better alternative.<sup>8</sup>

We regrouped the Eurostat EU-25 data on exports to Russia from 12,061 categories according to the Combined Nomenclature (CN) eight-digit level to correspond to the international prodcom<sup>9</sup> industrial output structure (C, DA-DM and E) that Russia has followed since the beginning of 2005. Finally, the data were indexed to 2005 prices.

An additional constraint to our approach is the lack of reliable long-term industrial production data. The methodological change introduced by the Russian statistical office, Rosstat, at the beginning of 2005 for the reporting of GDP and especially industrial production output statistics makes it hard to construct long-term time series on Russian industrial production by subsectors. We built a monthly time series backward from April 2006 to the beginning of 2002 and indexed it to 2005 sold production prices. Our analysis is thus limited by the data basis it relies on and by the rather short time span it covers. Still, given that the rise in oil prices as well as the real effective exchange rate appreciation of the Russian ruble started to gather momentum at the beginning of this decade and continued largely unabated at least until mid-2006, our time frame for investigating the existence of the Dutch disease in Russia appears to be appropriate.

<sup>8</sup> Other OECD countries, like the U.S.A., Japan and South Korea, also publish volume-based export data, so it would be possible to widen the scope. As these countries' data vary in terms of classification, however, combining them would be very time-consuming. Moreover, their trade pattern with Russia correlates strongly with that of the EU-25. China and the other CIS countries do not publish detailed data on volume exports.

<sup>9</sup> Prodcom is a system for the collection and dissemination of statistics on the production of manufactured goods. The title comes from the French «PRODUCTION COMMUNAUTAIRE» (Community Production) for mining, quarrying and manufacturing: sections B and C of the Statistical Classification of Economy Activity in the European Union (NACE 2). See <http://epp.eurostat.ec.europa.eu>.

### 3 Results: EU-25 Import Competition

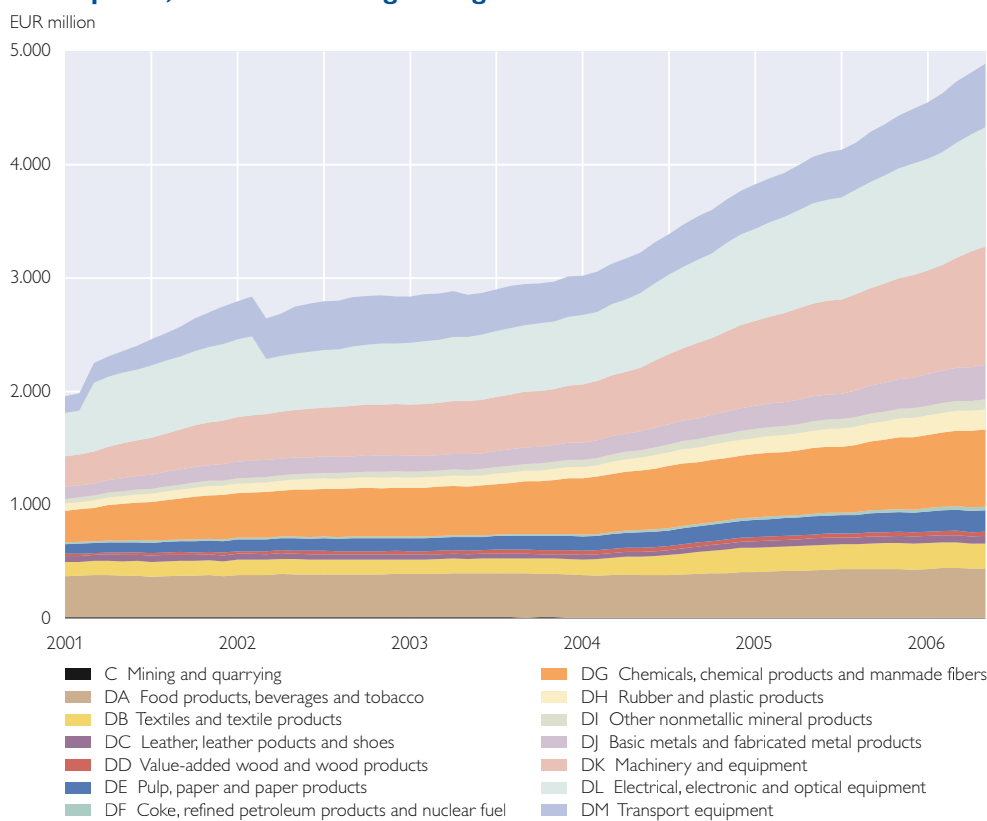
In nearly all categories reviewed, imports grew much faster than domestic production. Between 2000 and 2005, total imports increased by over 20% a year (in volume terms), while exports augmented by no more than 9% and production by little over 6%. Russian import elasticity is currently above 3, which is much higher than in emerging markets on average. The imbalance in the growth of export and import volumes, however is not yet visible in Russian trade or current account figures (as measured in U.S. dollars), as energy prices have kept rising over the whole period under review. If imports grow at such a quick pace, however, there is reason for concern. And if oil prices stop increasing or even fall for a sustained period, the underlying trade deficit will become visible. In the following section, we show the main results of our comparison of imports to Russia from the EU-25 with domestic production.

Chart 2 illustrates the structure of EU-25 exports to Russia between 2001 and 2006. Russian imports from the EU-25 consist mainly of machinery and equipment (DK), electrical, electronic and optical equipment (DL, in the following referred to as “electronics and optical equipment”), chemicals, chemical products and manmade fibers (DG, in the following called “chemicals”) and transport equipment (DM). The first two groups each accounted for about one-fifth of Russian imports from the EU-25. Given the

Chart 2

#### Structure of EU-25 Exports to Russia (2001–2006)

2005 prices, 12-month moving average

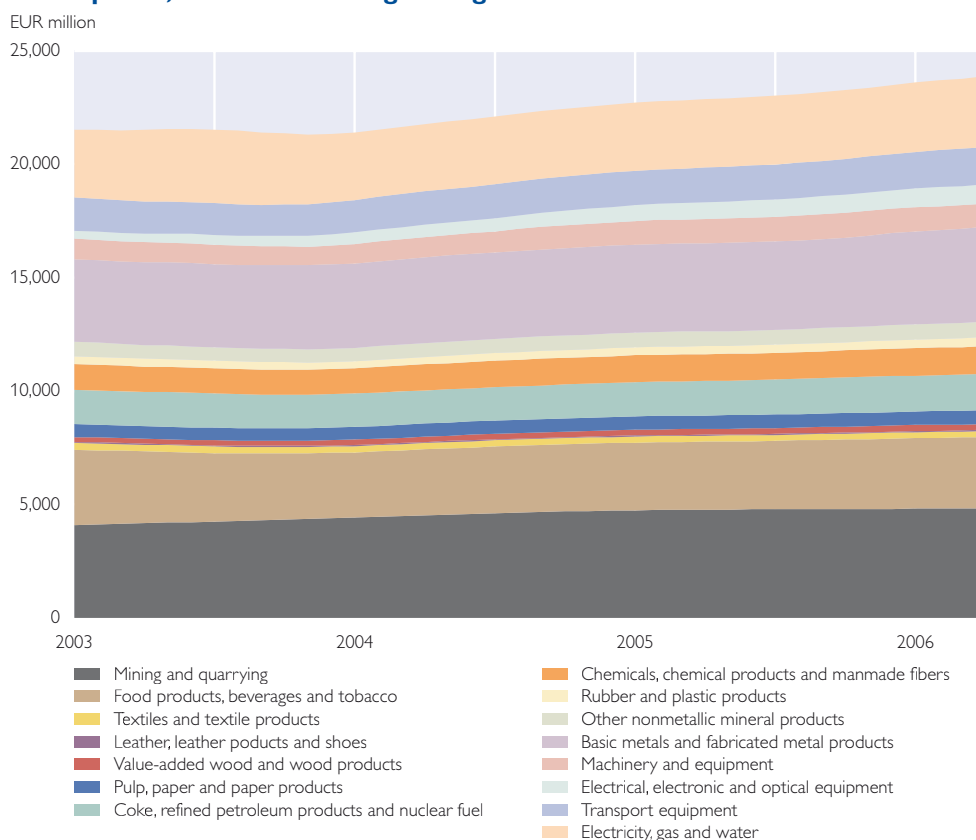


Source: Eurostat, Rosstat.

Chart 3

**Industrial Production (2002–2006)**

**2005 prices, 12-month moving average**



Source: Eurostat, Rosstat.

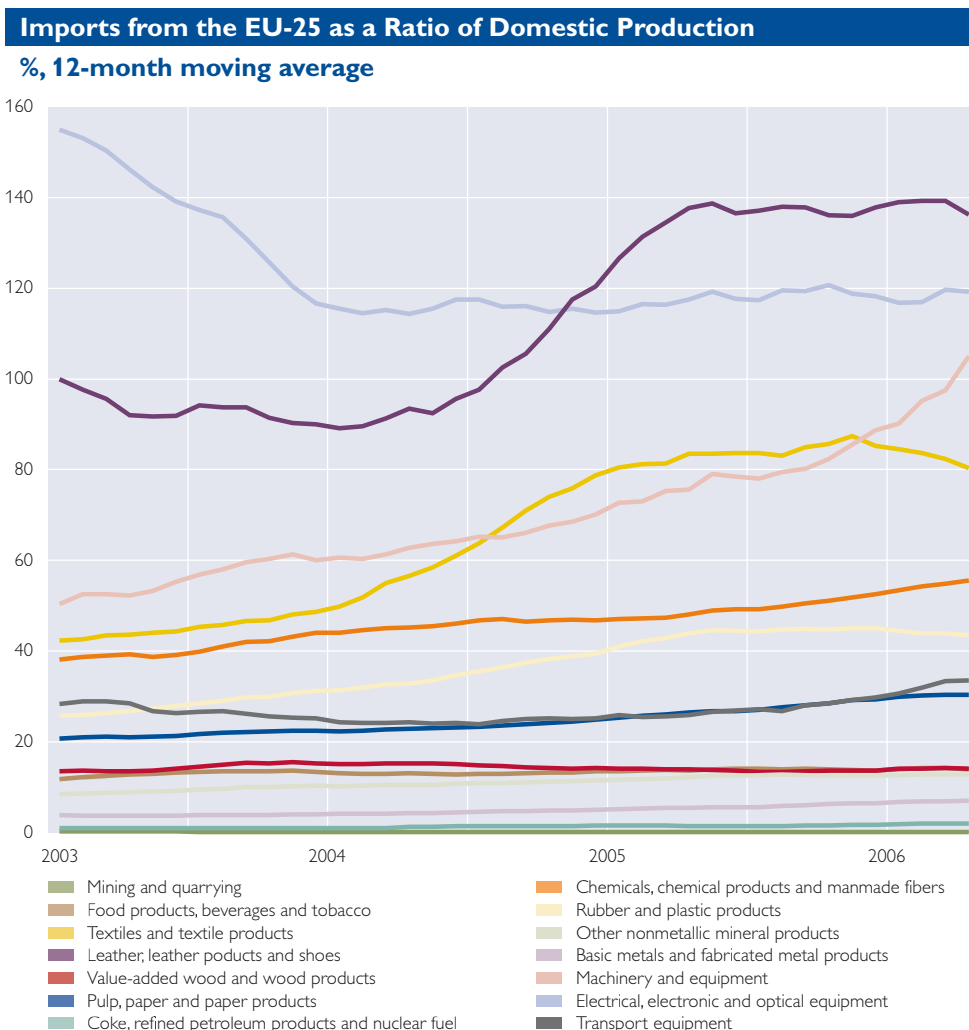
Note: See chart 2 for the abbreviations of the individual production categories.

inherited production structure, both groups could be important factors in the development of Russia's own competing nonfuel industry.

In mining and quarrying (C), only non-energy producing material (CB) was imported from the EU-25. Russia was fully self-sufficient in the mining and quarrying of energy products (CA). The monthly time series in Russian industrial production volume data do not distinguish between CA and CB; we therefore only compare total mining and quarrying production with imports. There were also no electricity, gas or water (E) imports from EU-25 countries.

Chart 3 shows the structure of Russia's industrial production. Mining and quarrying is by far the largest group, corresponding to nearly one-fifth of total production. Within this group, the largest contribution to production comes from the energy sector. It should be noted that oil refining also plays a role in the manufacture of coke, refined petroleum products and nuclear fuel (DF, in the following called "energy") as well as of chemicals. Energy and chemicals each account for about 5% to 6% of Russian industrial production. Accounting for nearly 18% of overall industrial output, the manufacture of basic metals and fabricated metal products (DJ, in the following referred to as "metals") has the second-largest share in production. These two categories mainly represent

Chart 4



Source: Eurostat, Rosstat.

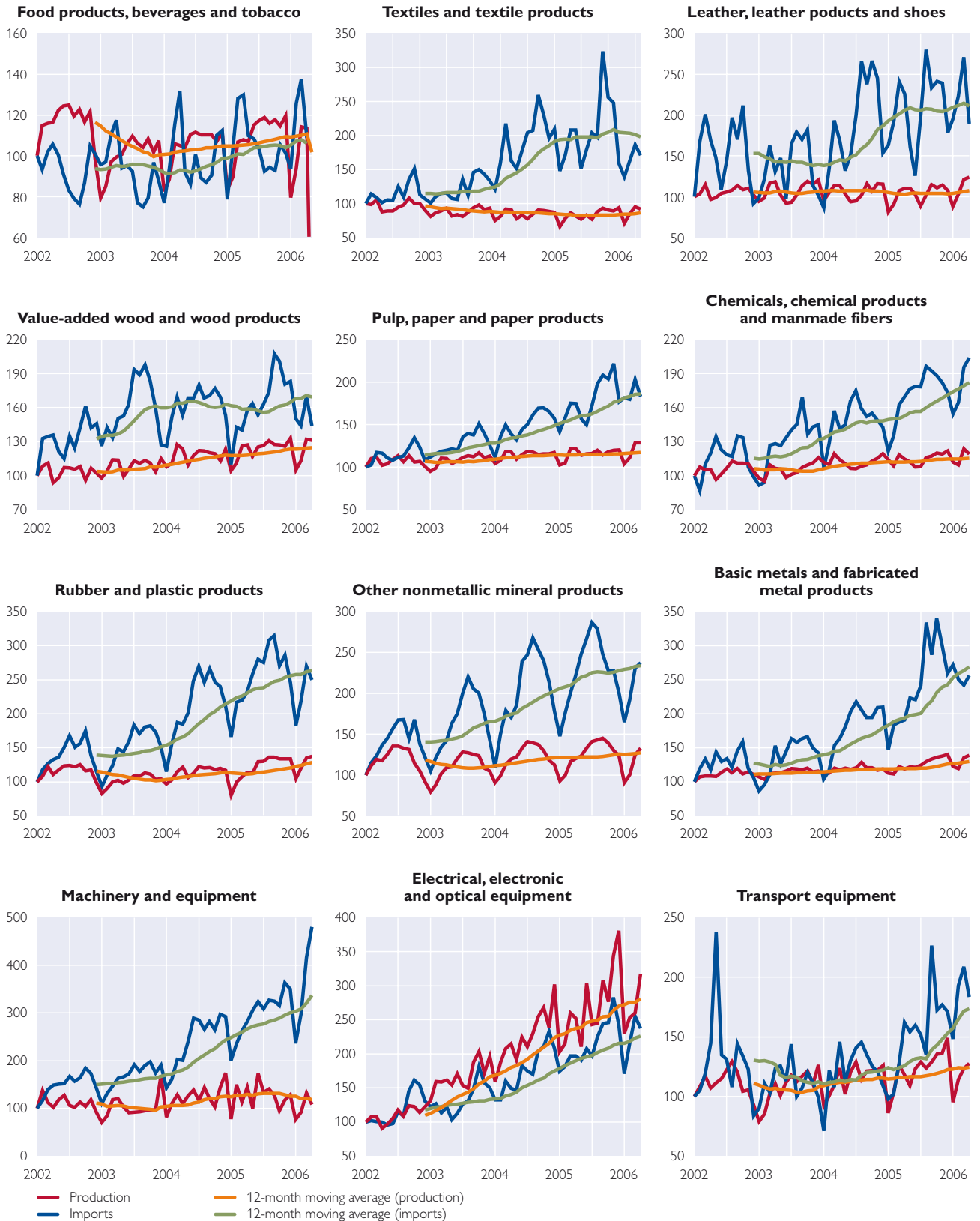
Note: See chart 2 for the abbreviations of the individual production categories.

low value-added manufacturing. The manufacture of electricity, gas and water and the manufacture of foodstuffs, beverages and tobacco (DA, “food”), which account for about one-eighth of production each, have the third-largest share in production. While no import competition from the EU-25 is registered for electricity, gas and water, food is the largest industry in Russia that really has to compete with imports. Other significant industrial clusters are the manufacture of machinery and equipment, electronics and optical equipment, and transport equipment, each accounting for around 4% of production. The output of other industrial clusters was very small. Total production growth has been slow over the last few years.

Chart 4 presents the ratio of imports from the EU-25 to total domestic production in Russia. In 2005 and 2006, imports from the EU-25 exceeded domestic production in the manufacture of leather, leather products and shoes (DC, “leather products”), electronic and optical equipment, and machinery and equipment. Imports from the EU-25 have reached a level of about 80% of

**Production and Imports of Industrial Clusters\* (2002–2006)**

Index: January 2002=100

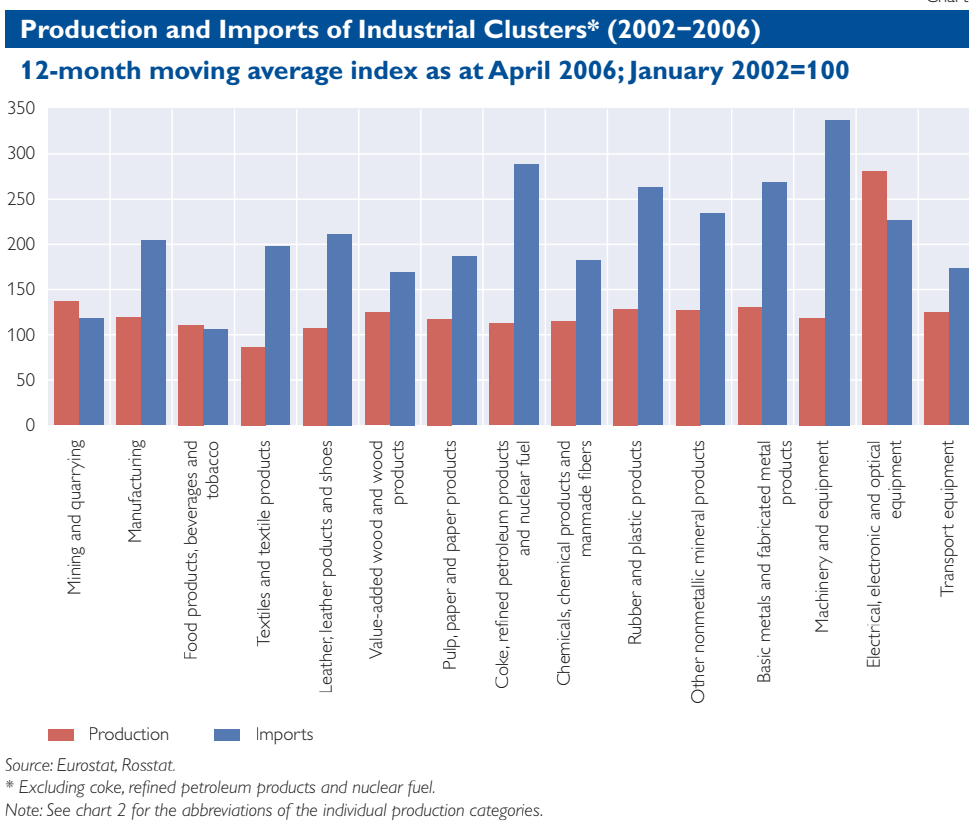


Source: Eurostat, Rosstat.

\* Excluding coke, refined petroleum products and nuclear fuel.

Note: See chart 2 for the abbreviations of the individual production categories.

Chart 6



Russian production in the manufacture of textiles and textile products (DB, “textiles”). In most of the above-mentioned categories, import penetration has rapidly increased in recent years.

Imports from the EU-25 are marginal or modest in categories like mining and quarrying, metals, other nonmetallic mineral products (DI), value-added wood and wood products (DD, “wood products”) and food. Of these categories, mining and quarrying, metals, nonmetallic mineral products and wood products are all natural resource clusters or booming sectors, while only food is clearly a “lagging sector.” With imports from the EU-25 corresponding to between 30% and 60% of domestic production, all other categories record a clear trend toward increasing import penetration.

Charts 5 and 6 contrast sectoral import growth with production growth in two different types of representation (current index data and bar chart). The charts show all the above-mentioned industries except energy, a sector in which Russia is largely self-sufficient and EU import competition is marginal. We see that imports grow significantly faster than domestic production in all categories except food, and electronic and optical equipment. Food production increases almost at the same pace as imports, which shows that food is an industry where domestic enterprises are doing relatively well. Corresponding to between 12% and 13% of domestic production in volume terms, imports from the EU-25 are still significantly smaller than domestic production. Most

of the larger food import categories are in fact complements<sup>10</sup> where Russia does not have its own production. Moreover, high import duties on most foodstuffs partly limit import growth. In general, the Russian food industry is among the industries that are most strictly protected from foreign competition by various means; customs duties were 15% on average in mid-2006.<sup>11</sup>

The situation is different for electronic and optical equipment, as both domestic production and imports in this sector have grown fast in recent years. Imports from the EU-25, however, clearly exceed domestic production. These imports mainly comprise mobile phones and mobile phone parts (about one-fourth), computer parts, and consumer electronics. However, most of the commodities in this sector are high-value consumer goods Russia itself does not produce. The respective import duties averaged 10% during the observation period.

In most of the other categories, imports have nearly doubled or even tripled since the beginning of 2002, with machinery and equipment recording the fastest import growth. Imports have expanded threefold since 2002, while domestic production rose only little. Machinery and equipment imports from the EU-25 are quite heterogeneously distributed between various categories. One can argue that imports increase as machinery and equipment is needed to develop the domestic manufacturing sector and equip households with appliances. However, Russia could supply goods from domestic production in many of these categories. The development in the machinery and equipment category in Russia is reason for concern, as imports have grown so fast. The sectoral import duty was 12% on average in mid-2006. Growth trends are also worrying for leather products, whose domestic production has grown modestly and whose imports have nearly doubled since 2002. The ratio of imports from the EU-25 to domestic production in this sector was highest in early 2006 at 140%. It is rather difficult in this case, however, to distinguish between luxury goods and standard consumer goods. The average import duty for leather products was 11%.

In the textiles sector, the import ratio expanded from 40% of the domestic production level in early 2003 to 80% in late 2005. Textiles were the only category where domestic production went down in the period from 2002 to 2005. The distribution of imports was also quite heterogeneous. Some of the categories clearly qualify as complements or special articles – categories in which Russia does not have its own competing production. The average customs fee for textiles was 12%. Moreover, most of textiles imports to Russia come from Asia, not Europe, and hence the comparison with EU-25 export data does not give a full picture of import competition in this sector.

<sup>10</sup> *Complements are materials/goods that complement domestically produced goods, as opposed to substitutes, which replace domestically produced goods.*

<sup>11</sup> *Russia uses various trade barriers, like import duties, product certificates and quotas, to protect especially the food industry from foreign competition. It is difficult, however, to measure the quantitative effect of the various trade barriers, which is why our focus here is exclusively on average import duties, given the availability of the relevant data which should also indicate a general level of protection for certain industries. Customs duties remained quite stable during the period under observation; the average Russian import tariff was about 12% to 13% in 2006. References to customs duties below are taken from Simola (2007).*

Import growth was more restrained in wood products, pulp, paper and paper products (DE, in the following called “paper”) and transport equipment – categories in which imports from EU-25 countries have grown more modestly (i.e. by less than 100%) since 2002. In the sector of wood products, imports from the EU-25 correspond to around 15% of Russian domestic production, which is still of low quality and developing slowly. Given that Russia’s wood reserves are among the largest worldwide, however, the economic potential for wood products is obvious. The average customs duty for imports in these categories was 13%. Paper imports from the EU-25 correspond to about 30% of the domestic production level. Russia purchases large quantities of paper abroad to satisfy domestic demand for paper products (especially newspapers and journals), which is also visible in the structure of imports from the EU-25. Parts of Russia’s newspapers and journals are in fact printed outside the country, as production quality is better abroad and production capacities in Russia are insufficient. Such a big consumption-driven cluster would leave ample potential for stepping up domestic production. The average customs duty in this category came to 11% in the period under review.

In transport equipment, import growth has been more moderate than in most other industrial clusters. In this category, the ratio of imports to domestic production reached 30% in early 2006. Interestingly, passenger cars accounted for over 40% of transport equipment imports from the EU-25 in 2005; aircraft and spacecraft came to 14%, and other vessels (including boats and ships) and parts accounted for the rest. According to reports by the Federal Customs Service, car imports, which are the main drivers of import growth, have doubled annually in recent years. The average import duty in the sector was 11% in mid-2006. However, duties were higher on a number of specific products, such as passenger cars (coming to at least 25%), which might be an important reason for establishing car plants in Russia.

Arguably, energy, chemicals and nonmetallic mineral products could also be classified as belonging to the fuel sector. Domestic energy production has grown at a slower pace than energy imports, which mainly comprise a variety of oils and – at a ratio of 30% to domestic output – do not constitute a serious threat to domestic production. The average energy customs duty was only 5%. The ratio of chemicals imports from the EU-25 to Russian domestic production grew from 40% to 60%. Accounting for about one-third of chemicals imports from the EU-25, medical products recorded the highest import shares. Most of the main subgroups in this sector are luxury goods Russia does not produce domestically (which is one of the reasons for the faster growth of imports). Although Russia has its own production in the medical sector, imports are clearly in the lead. The average customs duty for chemicals was 9%. In the area of nonmetallic mineral products, imports from the EU-25 corresponded to about 10% of domestic production. Various glassware accounted for one-third of imports, while various ceramics and semi-finished goods accounted for the rest. In all these categories, Russia has the potential for significant domestic production. With import duties coming to about 16% in mid-2006, which is clearly above average, protection for nonmetallic mineral products is rather pronounced.

For rubber and plastic products (DH, “rubber and plastics” for short), the ratio of imports from the EU-25 to domestic output went up from 20% to 40%. Here, the major categories of imports from the EU-25 were rubber tires, plastic plates, sheets, foil and film – in all these categories, competing domestic industries should exist. The average minimum import duty for rubber and plastics was 9% in mid-2006. For metals, the ratio of imports from the EU-25 to domestic production was about 5% and the import duty came to about 11% on average.

#### **4 Conclusions: Russia Shows Symptoms of the Dutch Disease**

Our approach showed that in the period from early 2002 to early 2006, Russian imports grew significantly faster than domestic production in nearly all product categories. This trend partly reflects overall economic developments, given that total Russian import growth (in terms of volume) has been nearly three times faster than GDP expansion during this period. In many industrial clusters, the share of imports is still small compared with competing domestic production; moreover, the imported goods are not necessarily substitutes of domestic products. This means that in some categories there are reasons behind the strong import growth which are not related to changes in the competitive position of Russian manufacturers. In categories like leather products, machinery and equipment, and electronic and optical equipment, however, imports from the EU-25 alone exceed domestic production. Moreover, imports of textiles nearly equal domestic production. Import growth exceeds domestic production growth in all sectors except electronic and optical equipment.

This could, however, imply that electronic and optical equipment may be an infrequent but important example of Russian firms (so far) withstanding foreign competition in a modern technological area. Textiles and leather products are marginal in total imports. Contrary to the situation of electronic and optical equipment, Russia’s competitiveness appears to be waning in the realm of the other major import component from the EU-25, machinery and equipment. One should point out, though, that a large share of machinery, equipment and electronics imports is accounted for by investment goods, which may help the country build up competitive industrial structures. The textiles sector is clearly deindustrializing, as domestic production is declining.

The trend observed in numerous other categories – paper, transport equipment, rubber and plastics, and chemicals – gives rise to concern. Import competition in wood products is still weak, but growing. By contrast, imports do not appear to threaten domestic production in mining and quarrying, energy, metals and nonmetallic mineral products. In food production, domestic industries are also doing well. However, foodstuffs are seen to benefit from one of the highest levels of Russian tariff protection. Russia’s WTO accession process promises to force highly protected industries to gradually lower import duties, which should increase import competition and raise pressures to restructure in the medium term.

Unlike most earlier studies on the Dutch disease in Russia, we clearly find a trend of increased overall import competition. This result is derived using EU-25 trade data, which correspond to about one-half of Russia’s value-based

imports. Total imports are therefore probably twice as large as indicated by our exercise. In our view, the observed tough import competition might be interpreted as a certain degree of the Dutch disease syndrome in many of the Russian industrial production sectors, especially in some important ones that might have the potential to drive economic diversification. This overall picture may correspond to an incipient deindustrialization process that affects large parts of manufacturing.

However, our approach is limited in a number of ways. First, we are only examining what we see as the last link of the hypothetical causality chain of the Dutch disease theory. This last link may be exposed to other influences lying outside the causality chain. For example, Russia's strongly rising average income levels in recent years have obviously contributed to making higher quality imports more easily accessible to the average Russian population. Second, it is still difficult to distinguish between substitutes and complementary products, as this would require more detailed industrial output data. Third, the time span under review is rather short. Fourth, we do not have full volume-based data on total Russian imports.

Despite these limitations, we show that – based on the simple Dutch disease theory of import competition versus domestic production – Russia has reasons to worry. Of course, higher competition and rising purchases of capital equipment may contribute to improving the productivity of domestic production and to boosting Russia's competitiveness in the medium and long term. Mounting import competition in recent years may also largely reflect some structural adjustment related to Russia's transition and continuing integration into the global market.

However, such strong import growth against much slower growth in domestic production is not sustainable in the long term if Russia wants to diversify its production structure from being predominantly natural resource-intensive to focusing more on value-added manufacturing. The question of how to tackle the current challenge will therefore partly depend on how successfully policymakers manage the macroeconomic developments and how effectively they use the buffers created by the tight fiscal policy in recent years when oil prices were high. So far, their overall record in this regard is quite respectable. Notwithstanding Russia's recent redemption of its entire Soviet-era foreign debt from its stabilization fund means, the fund doubled in size in the course of 2006. Curtailment of domestic demand through taxing and sterilizing oil-related proceeds has doubtlessly contributed to countering Dutch disease pressures.

The outcome will also depend on the way in which policymakers handle structural adjustments and on how the investment climate evolves. An improvement of the Russian business environment could contribute to helping curb or contain the Dutch disease. In addition, increased integration with the world economy, induced by Russia's WTO accession, would probably force domestic manufacturing to become more competitive and offer new markets in the medium and long term. In the short term, however, import growth would speed up if customs tariffs were abolished.

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