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Accounting for Russia's Post-Crisis Growth

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ABSTRACT/RÉSUMÉ

Accounting for Russia's post-crisis growth

This paper provides an in depth analysis of Russia's recent growth, with a view to understanding the prospects for its continuation. It examines in detail the main drivers of growth, as well as the main developments and policies that have been underlying it. A key finding is that the role of the oil sector, and particularly privately owned oil companies, has been vastly more important in driving economic growth since 2001 than most analyses have recognised. The oil sector's contribution to growth has hitherto been severely underestimated as official data do not account for transfer pricing and thus fail to reflect fully the importance of the hydrocarbon sector in the Russian economy. The paper further argues that prudent post-crisis fiscal policy, by balancing the federal budget over the oil-price cycle, has also been essential for creating a macroeconomic environment conducive to strong growth. Looking forward, it is argued that - given its economic structure - Russia is bound to remain a heavily resource dependent economy for some time to come. This reality largely defines the most important challenges facing Russian policy-makers as they seek to create a framework for sustained growth, with respect to both managing a resource-based economy successfully and facilitating economic diversification over time.

JEL classification: E6, O1, O52, P2, Q43
Keywords: Russia; Transition; Economic Growth; Fiscal Policy; Monetary Policy; Real Exchange Rate; Capital Flight; Natural Resources; Dutch Disease; Resource Curse; Oil; Gas; Property Rights; Diversification.

* * *

Bilan de la croissance après la crise en Russie

Cet article analyse en profondeur la croissance économique récente en Russie afin de comprendre les perspectives de sa continuité. L'article examine en détail les principaux moteurs de la croissance, ainsi que les principales évolutions et politiques sous-jacentes. Un des principaux résultats est que le rôle du secteur pétrolier, en particulier les compagnies pétrolières privées, a été considérablement plus important comme moteur de la croissance depuis 2001 que ne l'ont constaté la plupart des analystes. La contribution à la croissance du secteur pétrolier a jusqu'à présent été grandement sous-estimée à cause des données officielles qui ne prennent pas en compte l'utilisation des prix de transfert, et par conséquent ne reflètent pas entièrement l'importance du secteur des hydrocarbures dans l'économie russe. Cet article fait également le point sur la politique budgétaire prudente d'après la crise, qui en gardant le budget fédéral équilibré sur l'ensemble du cycle des cours pétroliers, a été essentielle pour créer un environnement macroéconomique propice à une croissance soutenue. L'argument avancé est que dans l'avenir et pour un certain temps encore, la Russie – étant donné sa structure économique – est contrainte de rester une économie fortement orientée vers des ressources naturelles. Cette réalité détermine largement les défis importants auxquels sont confrontés les dirigeants russes dans leur recherche d'un cadre pour une croissance soutenue, concernant aussi bien la gestion réussie d'une économie basée sur des ressources naturelles, que le soutien à une diversification économique continue.

Classification JEL: E6, O1, O52, P2, Q43
Mots clés: Russie; transition; croissance économique; politique budgétaire; politique monétaire; taux de change réel; fuite des capitaux; ressources naturelles; syndrome néerlandais; malédiction des ressources; pétrole; gaz; droits de propriété; diversification.

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ACCOUNTING FOR RUSSIA'S POST-CRISIS GROWTH

by Rudiger Ahrend[1]

The factors driving post-crisis growth

Growth has consistently exceeded expectations since the financial collapse

Russian economic growth since the August 1998 financial crisis has consistently exceeded expectations. In the immediate aftermath of the crisis, most observers did not expect any growth at all. When the economy then began to recover sooner and more robustly than anticipated, it was widely argued that, in view of Russia's remaining structural problems, growth would come to a halt as soon as the effects of the devaluation wore off.[2] Both predictions were regarded as reasonable at the time, but a comparison of consensus forecasts and actual outcomes (Table 1) shows that they were far off the mark. This is more than an academic puzzle: an understanding of the factors and policies that have underlain this unexpected performance is crucial to any attempt to assess the conditions under which Russia could maintain current high growth rates in the future.

Table 1. GDP: forecast vs. outcomes

	Consensus forecast		OECD		Actual
2000	1.5	(Dec-99 - Jan-00)	1.0	EO66, Dec-99	10.0
2001	4.0	(Jan/Feb-01)	4.0	EO68, Dec-00	5.1
2002	3.5	(Jan/Feb-02)	5.0	EO70, Dec-01	4.7
2003	3.9	(Jan/Feb-03)	4.5	EO72, Dec-02	7.3

Source: Russian Development Centre (Concensus forecast); OECD Economic Outlook.

1. The author works in the Non-Member Economies Division of the OECD Economics Department. This paper draws on material originally produced for the fifth OECD *Economic Survey* of the Russian Federation published in July 2004, and the author is grateful to the many Russian and western officials, experts and businessmen, too numerous to list here by name, who discussed economic issues with the *Survey* team. The author is indebted to Svetlana Arkina, Andrew Dean, Vladimir Drebentsov, Evsey Gurvich, Val Koromzay, Silvana Malle, Isabel Murray, Douglas Sutherland, William Tompson, Alexander Ustinov, Anna Vdovichenko and Oleg Zasov for their comments on earlier drafts of this text, as well as to many colleagues in the OECD Economics Department for helpful discussions. Special thanks go to Corinne Chanteloup and Anne Legendre for technical assistance, as well as to Muriel Duluc and Lillie Kee for secretarial assistance. Responsibility for any errors of fact or judgement that remain in the paper rest, of course, entirely with the author.

2. For an exception to this view, see Ahrend (1999) and Breach (1999).

Table 2. Basic economic indicators

	1998	1999	2000	2001	2002	2003
Real GDP growth	-5.3	6.3	10.0	5.1	4.7	7.3
Gross fixed capital formation growth	-12.4	6.3	18.1	10.3	3.0	12.9
CPI inflation (Dec./Dec.)	84.5	36.6	20.1	18.8	15.1	12.0
Exchange rate (Rouble/USD, average)	9.7	24.6	28.1	29.2	31.4	30.7
Unemployment (ILO-type measure, end year, percentage of labour force)	13.2	12.4	9.9	8.7	8.8	8.0
Exports of goods (USD billion)	74.4	75.6	105.0	101.9	107.3	135.9
Imports of goods (USD billion)	58.0	39.5	44.9	53.8	61.0	75.4
Current account: USD billion	0.2	24.6	46.8	33.9	29.1	35.9
per cent of GDP	0.1	12.6	18.0	11.1	8.4	8.3
Budget balance (general government, per cent of GDP)	-5.3	-0.5	3.5	3.1	0.3	1.2[1]
CBR gross foreign exchange reserves (USD billion, end of period)	12.2	12.5	28.0	36.6	47.8	76.9

1. Preliminary data.

Source : Goskomstat, Central Bank of Russia, Ministry of Finance, Ministry of Economic Development and Trade, Economic Expert Group, OECD calculations.

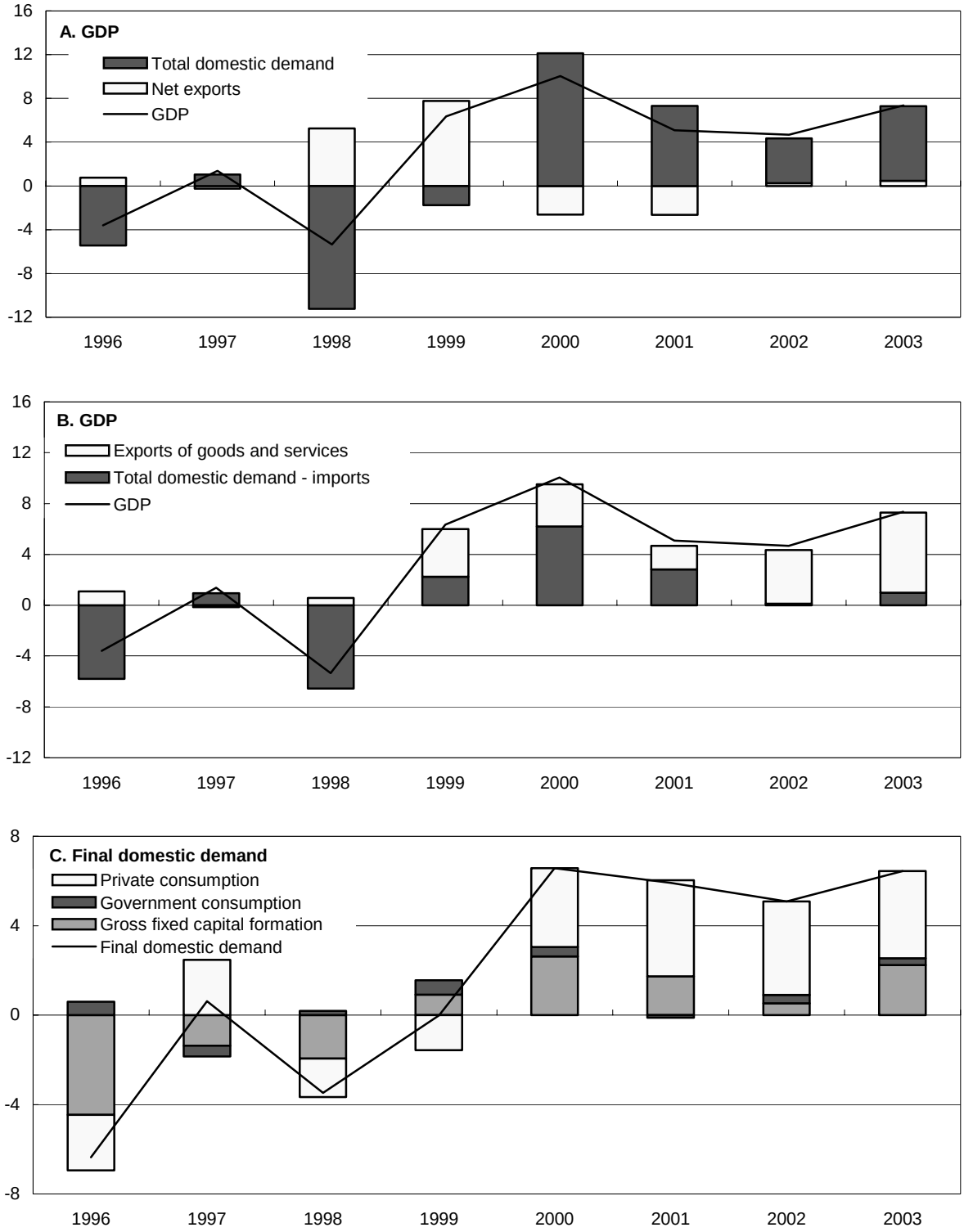
Internal demand rapidly replaced external demand as the main driver of growth

Russian growth in 1999-2003 averaged slightly above 6.5 per cent per annum. Annual growth rates, partly driven by changes in the terms of trade, fluctuated between 4.7 and 10 per cent[3] (Table 2). It seems reasonable to assume that the trend growth rate has been roughly 5.5 per cent (see below). The drivers of growth, however, changed significantly during this period. In the immediate aftermath of the crisis, the main contribution to growth came from net exports. However, domestic demand took over as the dominant driver by mid-1999. Surging imports have meant that the contribution of net exports to growth has actually been negative or insignificant since mid-2000 (Figure 1A; for quarterly contributions, see Annex, Figure A1). This should not be taken to imply that the role of export-oriented sectors in driving the recovery has declined; on the contrary, such sectors continue to account for most of the growth in industrial production. Moreover, the role of domestic production in satisfying domestic demand has been gradually declining since 1999 (Figure 1B), and since mid-2002, increases in domestic demand have been largely satisfied by imports.[4] In other words, while rapid import growth continues to ensure that the contribution of net exports to GDP growth is small or negative, economic growth since mid-2002 would in all likelihood have been relatively weak in the absence of very strong export growth.

3. The 10 per cent growth achieved in 2000 was, however, exceptional. It was driven by the fact that the post-crisis recovery coincided with a sharp improvement in the terms of trade.

4. Some of this import growth has probably contributed directly to export growth (*e.g.* the re-export of gas or oil from Central Asia or the export of aluminium produced from imported bauxite). However, the impact on overall export growth would be limited and would not affect the overall picture.

Figure 1. Contributions to GDP growth, expenditure side view
As a percentage of GDP in previous period

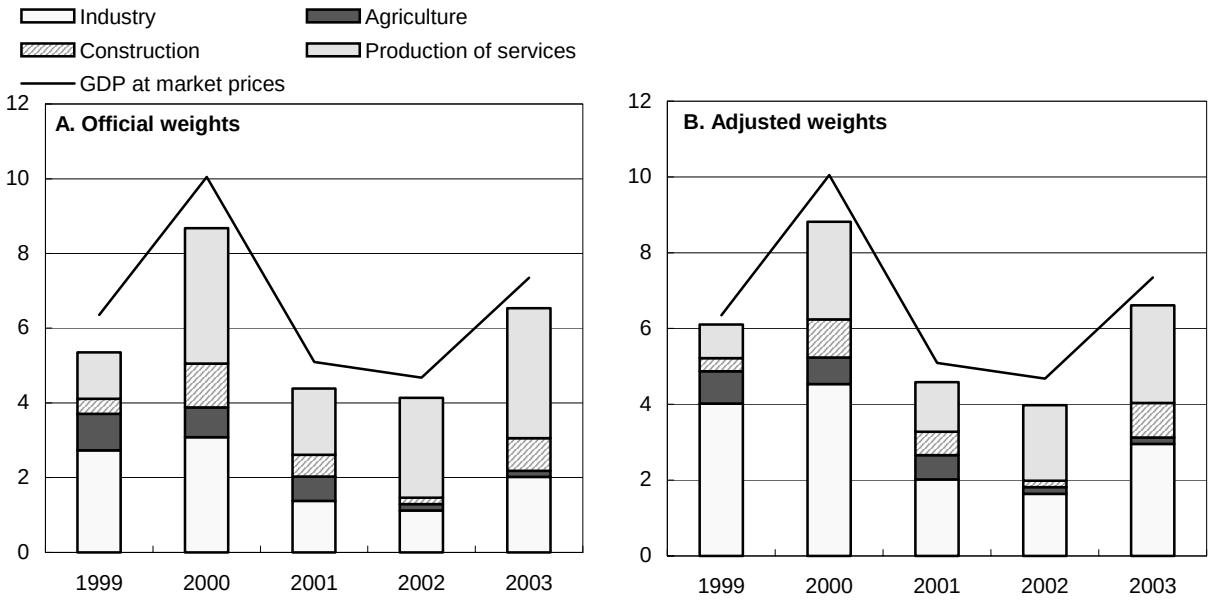


Source : Goskomstat.

The importance of the service sector for growth has been increasing…

While growth immediately after the crisis was overwhelmingly driven by industry and construction, the relative importance of service-sector growth has been increasing, especially in 2002-03 (Figure 2A). This holds even when adjusting for the fact that the service sector's share of total GDP is significantly overstated in official Russian statistics (Box 1). Even on the adjusted weights, services still account for roughly one-third of economic growth in recent years (Figure 2B). Within the service sector, both retail trade and catering, as well as communication and transport, have been growing rapidly.[5]

Figure 2. Contributions to GDP growth, production side view
As a percentage of GDP in previous period



Source : Goskomstat, World Bank and OECD calculations.

5. Wholesale trade has recorded some of the strongest increases, but it is questionable to what degree this is genuine and does not rather reflect transfer pricing by resource-sector exporters.

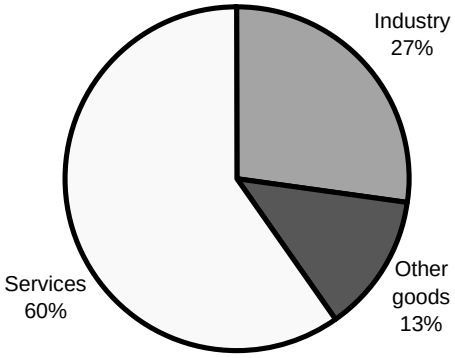
Box 1. Transfer pricing and the structure of GDP

Official statistics, though technically correct, present a somewhat distorted picture of the Russian economy. This is because a large share of the value added generated by 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 especially common where output is exported. While transfer pricing is often used to shift profits to companies located in low-tax jurisdictions, it is also to some extent a logical form of industrial organisation for products whose domestic and export prices differ substantially. As a result, export-oriented industries are under-represented in industrial production, and industry as a whole is under-represented in Russian national accounts. Trade, and hence the service sector, is over-represented. There have recently been several attempts to estimate the size of these distortions and correct for them.[1] This article will at times use the recent World Bank (2004b) estimates of the relative weights of different sectors in GDP.[2] The use of these alternative estimates can sometimes help to present a more meaningful picture of the Russian economy.

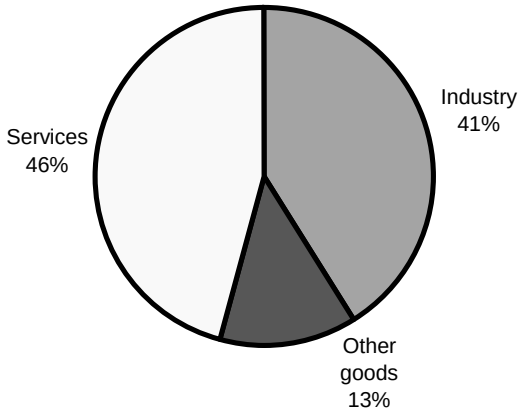
Official statistics suggest that Russia has a highly developed service sector, contributing roughly 60 per cent of GDP, which is only marginally below the 65-70 per cent typical of the most advanced OECD economies. This, however, seems counter-intuitive, given that most services in Russia are still relatively under-developed. Even the communications and banking sectors, arguably among the most developed Russian service sectors, are relatively small when compared with countries that have developed service sectors. The apparent contradiction disappears when correcting for transfer pricing: the share of industry increases from 27 to 41 per cent, and the oil and gas sector's share of GDP rises from around 8 per cent in the Goskomstat data for 2000 to just above 19 per cent. This is broadly in line with the estimates produced by the Economic Expert Group attached to the Ministry of Finance, which suggest that the oil and gas sector's share of GDP was around 21 per cent in 2000 and hovered at around 17 per cent thereafter.[3] At the same time, the services share drops from 60 to 46 per cent when employing the World Bank weights, which seems far more plausible (Figure 3). The fact that the Russian service sector is less developed than the official statistics imply should not necessarily be seen as a negative, as it suggests that there is greater scope for 'catch-up' growth in services than appears at first glance. The service sector is set to grow strongly with increasing living standards, if provided with the right conditions, and hence could enhance Russia's growth potential for some years to come.

Figure 3. Structure of GDP

A. Official weights
GDP 2003, current basic prices



B. Adjusted weights
GDP 2003, current basic prices, WB weighted



Source : Goskomstat, World Bank and OECD calculations.

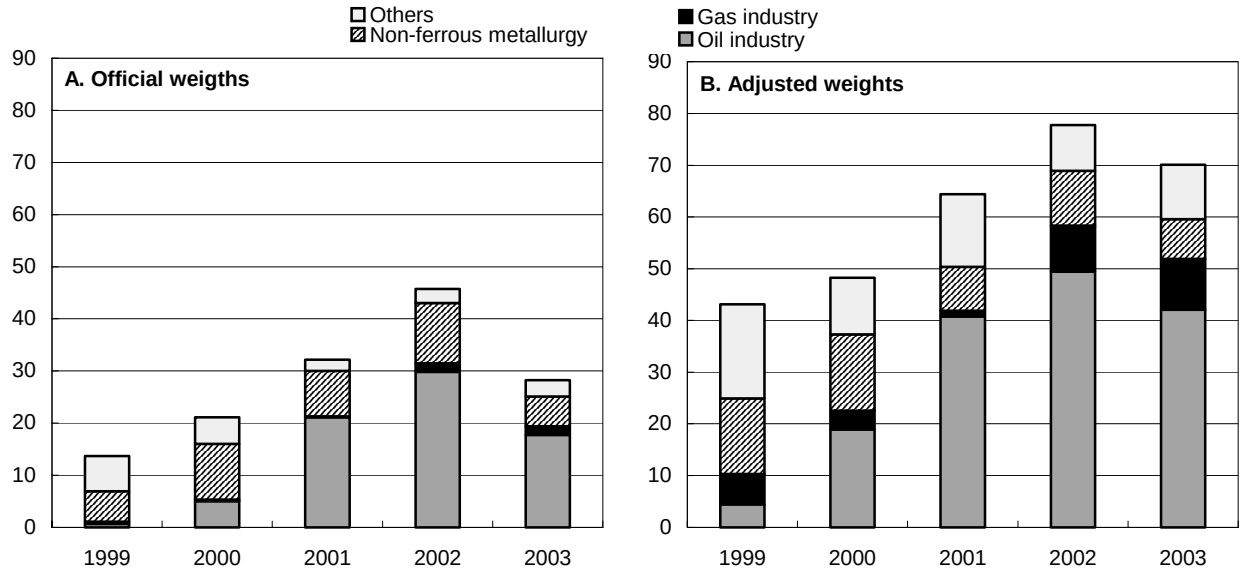
1. Kuboniwa (2003); World Bank (2004b).
2. These are adjusted sectoral weights based on adjusted sectoral value added in 2000 Russian GDP at basic prices. These adjusted sectoral weights are calculated in World Bank (2004b) using Canadian trade margins.
3. Gurvich (2004).

…but industrial production has overwhelmingly been driven by resource sectors

While overall economic growth has been relatively broad-based, industrial growth has been overwhelmingly driven by resource sectors and related industries. Adjusting for the under-representation of these sectors in the official data (see Box 1) reveals the staggering extent to which resource sectors have driven the growth of industrial output. The fuel, non-ferrous metals and forestry sectors account for almost 70 per cent of industrial growth over the last three years, with the oil sector alone accounting for around 45 per cent (see Figure 4B). There has also been relatively strong growth in some other areas (*e.g.* the food sector) but the comparatively small size of these sectors (especially using the adjusted sectoral weights) means that their contribution to industrial growth has been relatively small. The strong pick-up of growth in machine-building in 2003, and the corresponding decline in the contribution of the resource sectors to growth, may indicate a change of trend, but it is too soon to tell.[6]

Figure 4. Percentage of contribution of resource related sectors to industrial production growth

Per cent



Source: Goskomstat, World Bank and OECD calculations.

Industry has held up relatively well in the face of increasing competitive pressure

Immediately after the financial crisis, Russian industry profited from a sharply devalued exchange rate and sharply reduced real energy prices. These factors were major drivers of the industrial recovery in 1999-2000, but both the real exchange rate and energy prices were at unsustainably low levels during this period. Subsequent real energy price rises, together with strong wage increases, have generated cost pressure on Russian enterprises. These developments, together with a steadily appreciating real exchange rate, have put considerable pressure on Russian enterprises to restructure in order to remain competitive. Moreover, enterprise surveys[7] show that managers have felt increasing competitive pressure since 2002 not

6. It has been argued that growth in machine-building was driven by sub-sectors whose output is used by resource industries. While there was indeed extremely strong growth in some of these sub-sectors, they account for little of the observed growth in machine building, given their small share within the sector.

7. See Tsuhklo (2003) and CEFIR (2003).

only from imports but also from other Russian enterprises (Table 3).[8] So far, much of Russian industry seems to have withstood competitive pressures relatively well. While industrial production growth slowed in 2001-02, it recovered to around 7 per cent in 2003. The main reason for this resilience appears to be significant labour productivity increases in a large majority of sectors[9]. In the early years of the recovery, enterprises were also able to draw on the existing but under-employed stock of both capital and labour– in the former case, via higher capacity utilisation rates and in the latter via increases in effective hours worked. There is also widespread anecdotal evidence that important corporate restructuring has been taking place, both through M&A activity at the industry level, and at enterprise level (see below).

Table 3. Importance of factors that increase competition for Russian industrial enterprises

Percentage of surveyed enterprises that mention a factor

	1996	1997	1998	1999	2000	2001	2002	2003
Growth of volume of imported goods	31	23	28	8	9	14	23	30
Better quality of imports	7	9	11	7	14	10	18	20
Low prices of imports	17	14	18	5	9	12	12	24
Russian competitors keeping their prices constant	14	15	15	20	23	23	26	31
Entry of new Russian enterprises into market	18	25	25	26	34	36	44	42
Antimonopoly Ministry and Government activity	8	9	4	6	3	5	6	4

Source: Tsukhlo (2003).

Growth depends less on oil prices than is usually claimed

Increasing oil production has undoubtedly played the major role in sustaining growth in recent years, and changes in oil prices have also been a factor. However, the influence of the oil price *level* as such on growth is probably overstated.[10] Estimates based on macroeconomic models (see Box 2) can give a rough idea of what growth would have been if oil prices after 1999 had stabilised at their 15-year average of about USD 19/bbl for Urals crude rather than rising sharply. Growth would have varied between about 5.3 and 7.1 per cent, averaging slightly below 6 per cent (Table 4). This would have been approximately one

8. The surveys suggest that internal competition is especially strong in chemicals and petro-chemicals, building materials and food processing, and lowest in metallurgy (see Table A1).

9. See Ahrend (2004).

10. The exception would be if oil prices fell to extremely low levels and stayed there for a significant period, so that oil production in Russia became unprofitable – a situation that is highly unlikely to occur. Other arguments that have been advanced in favour of the relevance of oil prices instead of oil price changes concern mainly the fact that oil companies may invest more – which will increase future production – when oil prices and thus profits are high. While such considerations may have been more relevant in the 1990s, when Russian oil companies had little access to credit markets and had to finance most investment out of retained profits, the greater opportunities they now enjoy to tap financial markets and/or borrow from banks should have greatly reduced the dependence of oil-sector investment on current oil price levels. Moreover, the tax system has increasingly been adjusted in recent years so as to tax oil much more heavily as prices increase. As a result, the state now captures the great bulk of the windfall revenues generated at high oil prices. Finally, even if there were some positive effect from high oil prices on growth in the oil sector, it should not be forgotten that high oil prices also result in a stronger real exchange rate, and hence could affect growth in other industrial sectors negatively.

percentage point below the average growth rate actually recorded during the period. These estimates suggest that the economy would have grown very robustly even at average oil prices.

Table 4. Actual and simulated GDP growth rates

	Actual	Simulated[1]
2000	10.0	6.3
2001	5.1	6.1
2002	4.7	4.5
2003	7.3	6.2
Average	6.8	5.8

1. Assuming constant oil prices at long-term average levels (USD19 Urals) from 2000-03.

Source: OECD calculations based on World Bank (2003) and Economic Expert Group.

Box 2. Estimating growth at average oil prices

It is often argued that Russian growth is heavily dependent on oil price levels. Given the large share of hydrocarbon products in Russian exports (almost 55 per cent in 2002), the oil price undoubtedly is an important determinant of Russia's terms of trade and also of its current account and budget revenues. Nonetheless, it is hard to see why the *level* of a country's terms of trade as such should have a sizeable impact on economic growth. Standard economic theory holds that it is *changes* to the terms of trade that affect economic growth. The impact of such changes may be felt over time, however, so the impact of oil price changes in one period may continue to be felt in subsequent periods. Nevertheless, at least as long oil prices are sufficiently high to make production of Russian oil profitable, one should look at the impact of oil-price changes on Russian growth rather than at oil-price levels. While it is difficult to estimate exactly the impact of price changes in an economic environment that has been changing rapidly in recent years, it is possible at least to assess the order of magnitude of such effects.

A recent World Bank study based on macroeconomic modelling[1] estimates the elasticity of output with respect to the oil price at around 0.07 (a 10 per cent increase in the oil price leads to an increase in growth of 0.7 percentage points). For oil prices around USD 15-20 per barrel this would be roughly equivalent to a USD 1 increase in the oil price adding an additional 0.4 percentage points to growth (for USD 20-25 approximately 0.3, and for USD 25-30 roughly 0.25). The Economic Expert Group, also working on the basis of macroeconomic modelling, estimates the oil-price elasticity of GDP at roughly 0.2 percentage points per USD 1/barrel. While we do not *a priori* see any reason to prefer one of the above estimates, we use the World Bank estimate, with its higher oil price elasticity, in the discussion that follows. This will give a larger impact of oil price changes on GDP growth. The results obtained are thus more likely to exaggerate the impact of oil price changes on economic growth than to understate them. Assuming that oil price changes affect activity with a three-month lag,[2] we roughly assess what growth would have been if oil prices had remained unchanged.

1. See World Bank (2003).
2. There is usually a lag before oil extraction reacts to price changes, especially before export revenues are repatriated.

On the supply side, growth has mainly been driven by productivity increases

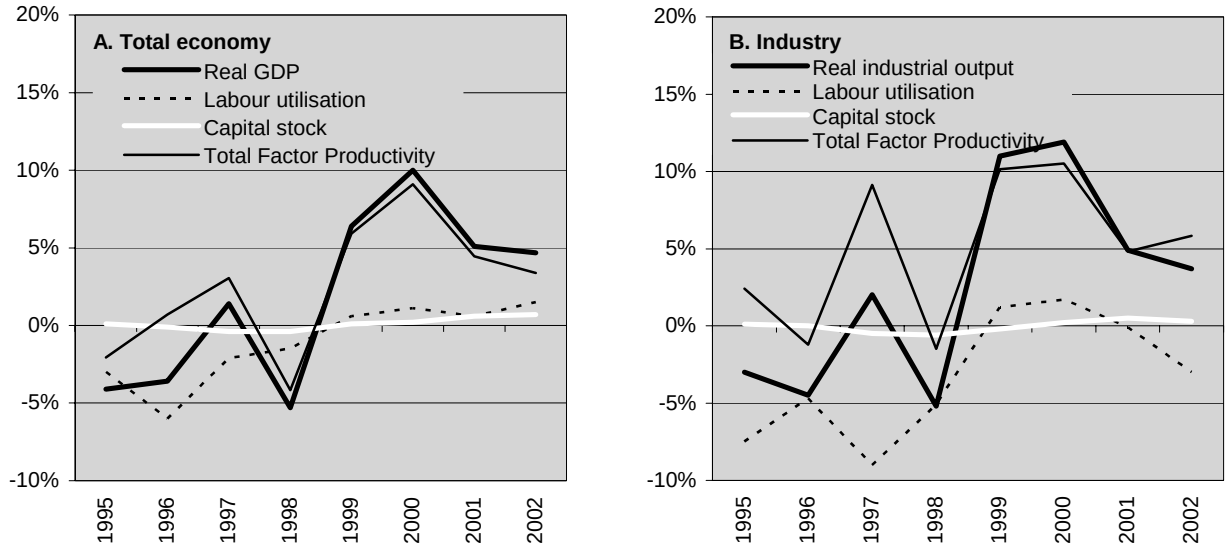
From a supply side point of view, growth has almost certainly been driven by strong increases in total factor productivity (Box 3), as overall investment levels have been low and there has been little labour

force growth. Large increases in labour productivity would tend to support this hypothesis[11]. 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 – often a drastic reduction in the labour force with relatively little investment and stagnant or declining output. Output growth has been concentrated in those sectors that restructured actively, not only increasing productivity but also investing. Figure 6 shows the close correlation between the respective shares of different sectors in industrial investment and their contribution to industrial growth in 1997-2003. Investment alone, however, was insufficient. Some industries, like gas and electricity, largely failed to restructure, recording no significant increases in labour productivity. Such sectors contributed little to output growth despite significant investment.

Box 3. Decomposing growth

Growth can be decomposed into increasing labour utilisation, increases in the capital stock, and increases in total factor productivity (TFP). TFP growth means that a country is using a given capital stock and labour force more efficiently. Russian capital stock estimates are of relatively low quality, because investment undertaken in Soviet times is hard to evaluate, so exact estimates of TFP changes should be viewed with caution. Their order of magnitude, however, is interesting.[1] They suggest that both GDP and industrial growth have been overwhelmingly driven by TFP increases in recent years, with neither changes in reported labour utilisation nor changes in the installed capital stock making a significant positive contribution (Figure 5).

Figure 5. Decomposing growth
Percentage growth

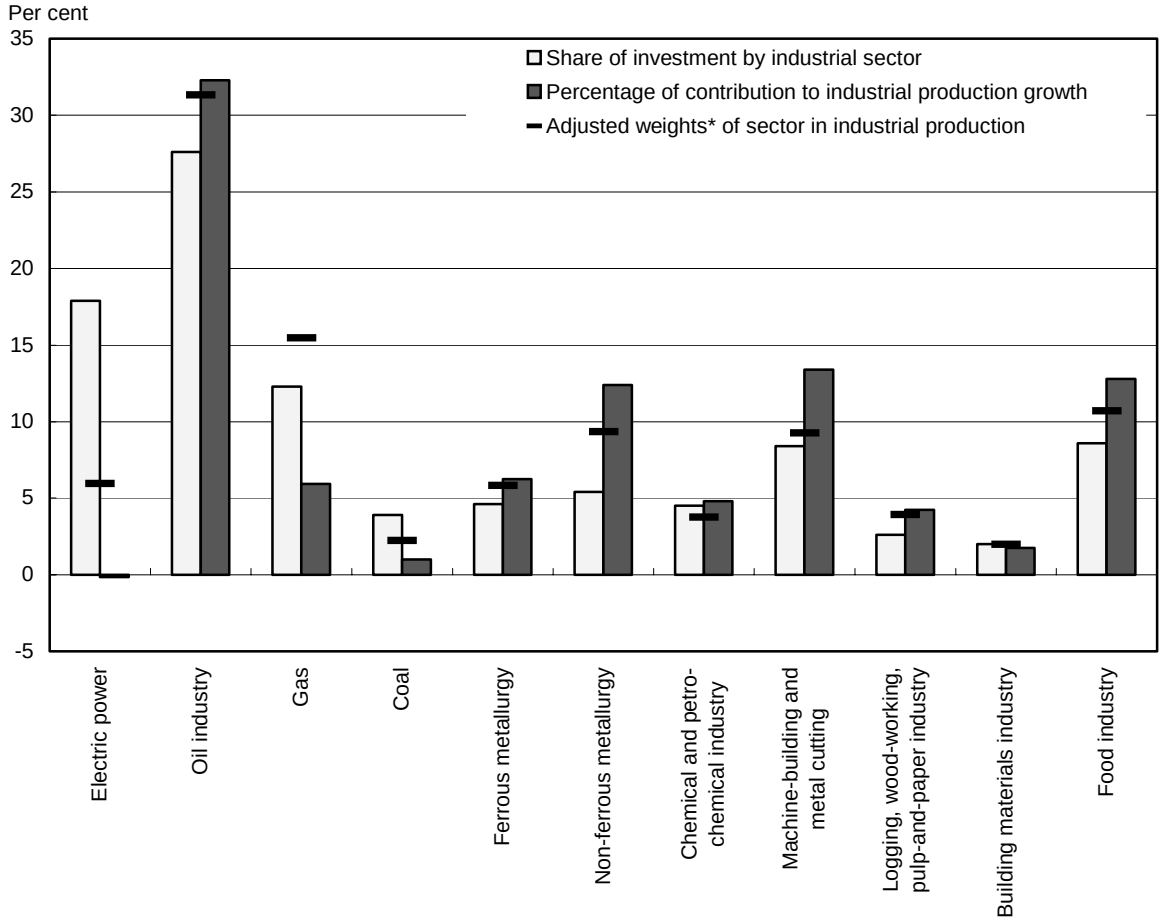


Source: Goskomstat, OECD calculations.

1. TFP is estimated using a standard Cobb-Douglas production function (growth accounting) approach with labour elasticity of 0.7 and capital elasticity of 0.3 as in Koen/De Broek (2000) and Dolinskaja (2003).

11. For more information see Ahrend (2004)

Figure 6. Investment share and industrial growth contributions by sector
1997-2003



* See World Bank, 2004.
Source: Goskomstat, World Bank and OECD calculations.

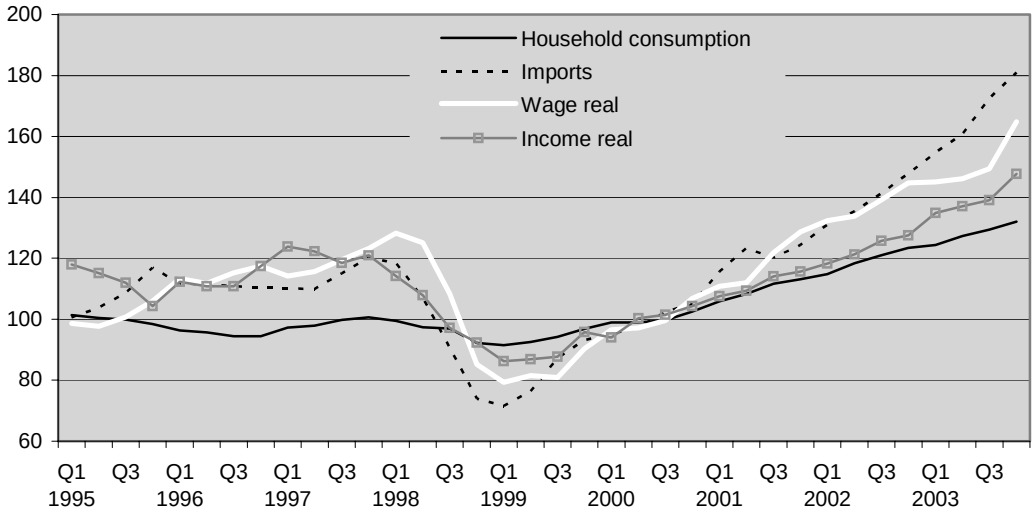
Russia has been able to achieve high growth rates in recent years despite comparatively low investment rates. Investment as share of GDP has been around 18 per cent, which is significantly below the shares found in other fast-growing countries in Eastern Europe or Asia and also well below the OECD average of around 22 per cent (Table A2). The large productivity increases that underlay recent strong growth were possible because Russian enterprises could draw on idle or under-utilised capital stock. While much of industry's idle capital stock is obsolete and some of it will probably never be profitably employed, there may yet be some under-utilised or inefficiently utilised production facilities. Russian enterprises may therefore continue to achieve strong output growth with relatively little investment for some time yet. Over the medium term, however, Russia will have to increase investment rates to sustain high growth

On the demand side, growth has increasingly been driven by a consumption boom

The main factor driving growth from a demand perspective has been rapidly increasing private consumption, which has grown by an average of more than 8 per cent per annum since 2000. The consumption boom, in turn, has been driven by increases in the real purchasing power of households, as a result of rising real disposable incomes and exchange-rate appreciation. Real wages increased by 82 per

cent during 1999-2003, and were 28 per cent above pre-crisis levels at the start of 2004.[12] Productivity increases have so far been sufficient to offset the negative effect of wage and exchange-rate increases on competitiveness. It will, however, become increasingly difficult, if not impossible, to sustain very rapid real wage increases without putting the competitiveness of part of the Russian industrial sector in jeopardy, especially given that further real exchange-rate appreciation seems unavoidable. Rapid growth in real incomes has also led to even faster import growth (Figure 7). This growth has so far been balanced by sharply increasing oil exports and favourable terms of trade, which have prevented the current consumption boom from putting the external balance of the economy in danger. It should also be noted that fiscal restraint has played an important role in preventing an unsustainable overheating in recent years.

Figure 7. Income, consumption and imports
Index 2000=100, Seasonally adjusted



Source: Goskomstat, OECD.

The policies and developments underlying growth

Prudent fiscal policy has been the authorities' most important contribution to sustaining growth

The most important economic policy choice underlying the expansion since 1998 has been the adoption of a prudent fiscal stance – in sharp contrast to the pre-crisis period. Since 2000, federal budgets have been drafted to aim for surpluses based on conservative oil price assumptions. This approach has not only delivered sizeable surpluses but also a budget that has been balanced over the oil price cycle. Simulations show that the federal budget would have remained in rough balance even with oil prices unchanged at USD 19/bbl (Urals) throughout the period.[13] Indeed, there would have been only a relatively moderate deficit, not exceeding 2 per cent of GDP, if oil prices had fallen to extremely low levels (Table 5). To be sure, fiscal responsibility has been facilitated by growing revenues due to favourable terms of trade and strong growth. However, the government has largely resisted the temptation to spend this windfall, instead using a significant part of it to repay debt and accumulate some reserves. Parts of

12. Averages for the years in question.

13. See Kwon (2003).

these reserves have been used to set up a stabilisation fund. The government also took advantage of the favourable fiscal situation to implement a comprehensive reform of the tax system, which would have been far more difficult under other circumstances, and also to adopt a number of institutional reforms designed to improve both the process of fiscal policy-making and the management of public expenditure (see Box 4). Such institutional reforms are intended to help entrench fiscally responsible practices.

Table 5. Federal budget: key variables under different oil price assumptions

As a share of GDP

	1997	1998	1999	2000	2001	2002	2003
Actual revenues (excluding Social tax) (1)	10.8	9.2	12.8	15.5	17.8	17.2	16.7
Revenues assuming average oil price (2)							
($19-Urals)	12.6	10.4	13.2	14.1	16.2	15.3	15.0
Oil windfall (3) = (1) - (2)	-1.8	-1.2	-0.4	1.4	1.6	1.9	1.7
Actual budget balance (4)	-7.4	-5.0	-1.1	1.4	3.0	1.7	1.7
Budget balance assuming average oil price :							
($19-Urals)	-5.6	-3.9	-0.7	0.0	1.4	-0.2	0.0
($12-Urals)	-6.0	-4.4	-1.9	-1.0	0.0	-2.1	-2.0
Actual budget surplus as a % of oil windfall ((4) / (3))				103	190	88	100

Source: Economic Expert Group, OECD calculations based on Kwon (2003).

Tight fiscal policy has also been instrumental in sterilising part of the foreign exchange inflows resulting from large external surpluses. These would otherwise have resulted in a sharper appreciation of the rouble or even faster monetary expansion. Fiscal sterilisation has been mainly achieved via budget surpluses. Recently, an increasing – though still small – share of fiscal sterilisation has also been realised by shifting hard-currency denominated sovereign debt into rouble-denominated debt, reflecting the financial markets' renewed interest in such instruments.[14]

Tax reform has also played an important role in sustaining the recovery (see Box 4 for recent changes).[15] Greater simplicity has increased the efficiency of taxation while decreasing distortions to economic activity. Many tax rates were significantly reduced, while tax bases were broadened. This has diminished both incentives and opportunities for tax evasion. Moreover, the tax system has also been oriented towards capturing a larger share of natural resource rents, especially windfall profits from high oil prices. This, together with a reduction in the profit tax rate and the introduction of a simplified unified

14. Internal government debt was roughly constant between 1999 and 2001 and increased by Rb144bn (ca. €4.8bn/USD 4.6bn) in 2002. In 2003, new issuance of domestic debt (OFZ-AD) increased significantly, to around Rb333bn (ca. €9.6bn/USD 10.8bn), but there was almost no net effect on outstanding internal debt, as the bulk of the OFZs issued in the rescheduling of the pre-crisis GKOs (OFZ-PD) fell due.

15. For an overview of tax changes in 2000-01 see OECD (2002).

social tax (regrouping several social payments), has also been a first step towards decreasing general tax pressure on the whole of the productive sector, while increasing taxation of the resource sector.

Box 4. Reforming fiscal institutions

The overhaul of the tax system that began in 2000-01 continued in 2002-04. The most important early steps included the introduction of a flat-rate income tax of 13 per cent, the introduction of the unified social tax, the elimination of various turnover taxes and the lowering of profit tax rate from 35 to 24 per cent in conjunction with the abolition of numerous tax breaks. The remaining regional profit-tax concessions were cancelled from 1 January 2004. In 2003, the remaining turnover taxes were also abolished.

The abolition of turnover taxes, levied without reference to profitability, was a particularly important step. The finance ministry's Economic Expert Group estimates that the abolition of the full array of turnover taxes in 2001-03 reduced the tax burden on industry by 8.5 per cent of value added, The burden on construction fell by an estimated 7.3 per cent and that on transport by 5.8 per cent. Moreover, the Group estimates that the effective reduction was roughly twice as great for processing sectors as for those involved in resource extraction, because the ratio of value added to sales is far lower in the former.

The introduction of the Natural Resource Extraction Tax (NDPI) in 2002 was a further major step. Oil extraction was initially taxed at Rb340/tonne, rising to Rb347 from 1 January 2004. It was initially planned that the new rate would remain unchanged until 2006. However, the scale will be revised as from 1 January 2005 so as to increase the NDPI rate at international prices above USD18/bbl but to reduce it at lower prices. A new scale of crude oil export duties enters into force on 1 July 2004, with much the same effect – increasing the tax take when prices are high but providing some relief when they fall. In May 2002, the government lost its power to adjust duties on oil product exports under a law that linked such duties to the crude oil export duty. That legislation was repealed at the end of 2003 and the government again has the power to use export tariffs to hold down domestic prices of oil products during periods of peak demand.

The NDPI rate for gas was initially defined ad valorem (16 per cent or approximately Rb23.4 per tcm), but since 1 January 2004 natural gas extraction has also been taxed at a fixed rate per unit of output, in this case Rb107 per 1,000 cubic meters. This represents a roughly five-fold increase on the old ad valorem rate. The rate for gas condensate, which is still levied ad valorem, has been increased to 17.5 per cent. At the same time, the excise on gas was abolished but the export duty was raised from 5 to 30 per cent.

A significant reduction in the tax burden took place on 1 January 2004, when VAT fell from 20 to 18 per cent and the sales tax that had been levied by regional authorities (at the maximum 5 per cent rate in most regions) was abolished. There were also changes in the allocation of tax revenue between different budget levels. For example, the federal share of the 24 per cent corporate income tax fell to the equivalent of a 5 per cent rate in 2004 from 7.5 per cent in 2002. The regional share increased from 14.5 percentage points to 17 over the same period and the local budget share of 2 percentage points remained constant. Regional authorities retained the right to reduce the overall profit tax rate by up to four percentage points at the expense of their own profit tax revenues. A new Tax Code chapter covering the enterprise property tax1 also took effect in 2004. The standard rate has increased from 2.0 to 2.2 per cent (regional authorities may alter this within limits), but the tax base has been narrowed somewhat.

On the expenditure side, the Russian authorities have continued the overhaul of fiscal institutions begun in the late 1990s. The Budget Code was adopted in July 1998, just before the financial collapse, and entered into force in 2000. The code made it much easier for the government to put state finances on a sound footing after the crisis, as did the shift to execution of all budgetary expenditure via the federal treasury, which has reduced the scope for diversion of budgetary resources away from their intended purposes. The code regulates the formulation and adoption of the budget as well as its execution. It also imposes controls on deficit spending and government borrowing. Recent revisions to the code have focused on sorting out fiscal federal relations and limiting the opportunities for fiscal irresponsibility on the part of sub-national governments. The government is also turning its attention to performance-based budgeting, in an effort to increase the effectiveness of public expenditure. Institutional reforms such as these do not eliminate the possibility of fiscal slippage – the commitment of the authorities to fiscal prudence is still critical – but they do mean that fiscal responsibility is less dependent on short-term decisions and conjunctural political factors than it would otherwise be.

1. This tax applies to a range of (mainly physical) assets, not to real property.

There have also been very deep structural cuts on the expenditure side. General government expenditures (including all levels of government and social funds) are now about 10 percentage points of GDP lower than before the crisis, while revenues relative to GDP have remained at roughly their pre-crisis levels[16]. This reduction in the spending-to-GDP ratio has coincided with massive reductions in wage and

16. In fact, cash revenues (and thus effective revenues) are substantially higher than they were before the crisis. Pre-crisis federal revenues amounting to 3.6-3.7 per cent of GDP and regional revenues of the order of roughly 6 per cent of GDP were non-cash revenues, consisting of bartered goods, offsets, bills of exchange and other money surrogates. Since the recorded value of these non-cash payments was often substantially greater than their real value, the shift to cash collections means that effective revenues have increased relative to GDP, even if nominal revenues have declined.

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. There has also been a 'virtuous cycle' with respect to debt, as debt repayment from budget surpluses and rouble appreciation have led to sharp falls in the ratio of debt service to GDP. Federal interest expenditures fell from 3.4 per cent of GDP in 1999 to 1.7 per cent in 2003. Lower levels of government expenditure have also given Russia room to reduce the tax burden, which has been an additional stimulus for private investment and consumption, and hence economic growth.

Table 6. The federal budget

Shares of GDP

	1997	1998	1999	2000	2001	2002	2003	2004[4]
Revenues	10.8	9.2	12.8	15.5	17.8	17.2[1]	16.7[1]	15.1[1]
Tax revenues	8.7	7.9	10.3	13.2	16.3	15.7	15.3	13.5
Value-added tax	3.9	3.5	4.5	5.1	7.1	6.9	6.6	6.5
Profit tax	1.2	1.1	1.6	2.4	2.4	1.6	1.3	1.1
Excise taxes	1.8	1.6	1.7	1.8	2.3	2.0	1.9	0.6
Customs duties	1.2	1.4	1.8	3.1	3.7	3.0	3.4	3.5
Other tax revenues	0.6	0.2	0.8	0.8	0.8	2.2	2.0	1.9
Non-tax revenues	0.5	0.4	0.9	1.0	1.3	1.4	1.4	1.4
Revenues of budgetary funds	1.6	1.0	1.1	1.3	0.2	0.1	0.1	0.1
Expenditure	18.1	14.3	13.8	14.1	14.8	15.5[2,3]	15.0[2]	14.5[2]
Debt service	5.0	4.1	3.4	3.5	2.6	2.1	1.7	1.9
Domestic debt service	4.0	2.5	1.5	0.8	0.5	0.3	0.3	0.4
Foreign debt service	1.0	1.6	1.8	1.6	2.1	1.7	1.3	1.5
Non-interest expenditure	13.1	10.2	10.4	10.6	12.2	13.0	13.3	12.6
of which								
Defence	2.7	1.8	2.3	2.6	2.8	2.7	2.7	2.7
Internal security	1.7	1.2	1.1	1.4	1.7	1.8	2.1	2.0
Social sphere	2.0	2.1	1.8	1.8	2.3	2.6	2.3	2.3
Financial aid to the regions	1.7	1.4	1.3	1.4	2.6	2.9	6.0	5.3
Budget balance	-7.4	-5.0	-1.1	1.4	3.0	1.7	1.7	0.5
Primary Deficit (-)/Surplus(+)	2.3	1.0	2.0	4.9	5.6	3.8	3.4	2.4

1. Excluding social tax.

2. Excluding transfer of social tax to pension fund.

3. Excluding purchase of Vneshtorg Bank shares by the government from the Central Bank in October 2002 (42.1 bn Roubles).

4. As set out in the law on the 2004 federal budget.

Source: Economic Expert Group.

Table 7. The general government budget

Share of GDP

	1996	1997	1998	1999	2000	2001	2002	2003[1]
Federal government								
Revenue	13.4	10.8	9.2	12.8	15.5	17.8	17.2	16.7
Expenditure	22.3	18.1	14.3	13.8	14.1	14.8	15.5	15.0
of which transfers to regions	2.5	1.7	1.4	1.3	1.4	2.6	2.9	2.8
of which transfers to extra-budgetary funds (excl. UST)	0.5	1.0	0.5	0.6	0.5	0.4	0.5	0.8
Balance	-8.9	-7.4	-5.0	-1.1	1.4	3.0	1.7	1.7
Consolidated regional budgets								
Revenue	16.1	18.5	15.7	13.7	14.6	14.8	15.1	14.5
of which transfers from federal budget	2.5	1.7	1.4	1.3	1.4	2.6	2.9	2.8
Expenditure	17.1	20.0	16.1	13.6	14.1	14.9	15.6	14.9
of which transfers to extrabudgetary funds				0.2	0.2	0.4	0.6	0.4
Balance	-1.0	-1.5	-0.3	0.1	0.5	-0.1	-0.5	-0.4
Extrabudgetary funds								
Revenue	8.7	10.7	8.6	10.2	10.7	9.3	9.8	8.5
of which:								
Transfer of UST							3.1	2.8
Transfer from federal budget	0.5	1.0	0.5	0.6	0.5	0.4	0.5	0.4
Transfer from regional budgets				0.2	0.2	0.4	0.6	0.4
Expenditure	8.8	10.6	8.5	9.8	9.1	9.2	10.7	8.7
Balance	-0.1	0.1	0.1	0.4	1.6	0.1	-0.9	-0.2
General government								
Revenue	35.1	37.2	31.7	34.6	38.7	38.5	38.1	36.1
Expenditure	45.1	45.9	37.0	35.1	35.2	35.4	37.8	34.9
Balance	-10.1	-8.7	-5.3	-0.5	3.5	3.1	0.3	1.2

1. Data for extrabudgetary funds and general government are preliminary.

Source: Ministry of Economic Development and Trade, Ministry of Finance, Economic Expert Group, Goskomstat.

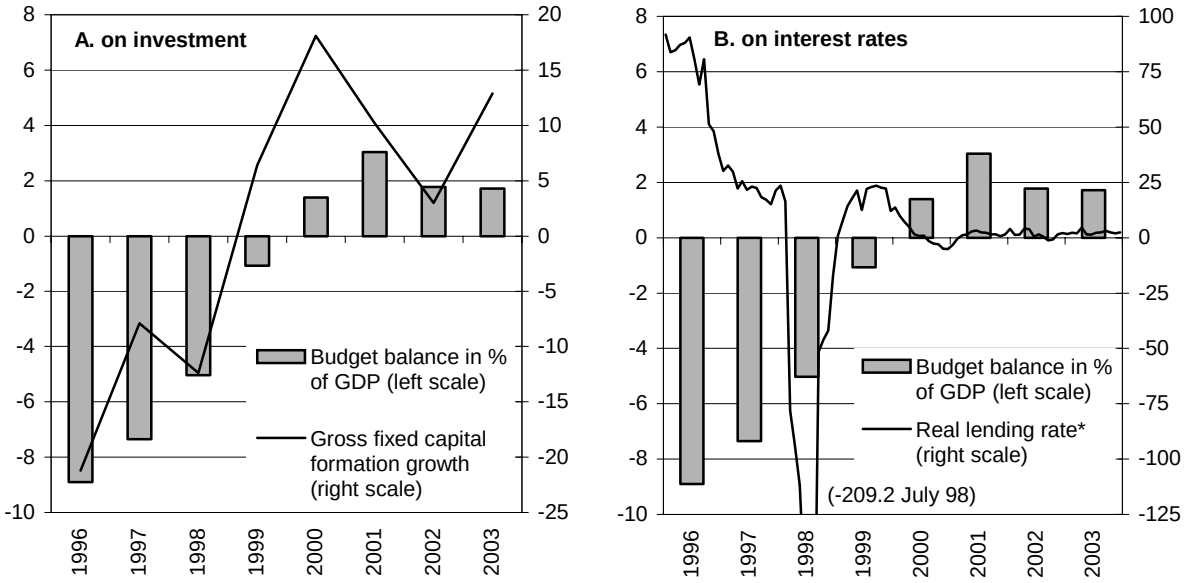
Fiscal surpluses have led to a 'crowding in' of private investment

Prudent fiscal policy and the resulting budget surpluses have played a key role in reviving private investment. From 1990 to 1998 real investment fell continuously. After 1995, this was to a great extent because large government deficits and correspondingly large borrowing requirements pushed real yields on government paper into double and even triple digits, crowding out private investment.[17] New issuance of government bonds after the crisis was very limited and took place at negative real interest rates, which served to redirect private capital to more productive uses. This was reflected in increasing investment (Figure 8A). Moreover, while interest rates for private borrowing mattered little immediately after the crisis (non-related-party lending was almost non-existent), in recent years the positive impact of tight fiscal policy on interest rates has become more important (Figure 8B).[18] Fiscal discipline has helped reduce spreads on Russian external debt and also helped lower internal real interest rates.

17. See, *e.g.*, Ahrend (1999).

18. The post-crisis recovery was mainly driven by the increased competitiveness of Russian industry after the devaluation. Falling interest rates played a relatively minor role as there was little bank lending due to the

Figure 8. Impact of fiscal policy



* Lending rate deflated with seasonally adjusted CPI (6 months forward).

Source: Central Bank of Russia, Economic Expert Group,Goskomstat, OECD.

Declining sovereign foreign debt levels, together with the improved perceptions of the Russian economy, have in recent years helped large Russian companies to borrow increasingly from foreign banks and international markets (Table 8). Enterprises' foreign debt exposure increased by more than USD 20bn between 2000 and 2003. While increased corporate borrowing in foreign currencies carries some systemic risks and has complicated monetary policy (see below), the positive effect of this has been that Russian banks are being forced to begin lending to a wider range of corporate clients than before, as well as to consumers.

dire state of the banking system. The main achievement of tight fiscal policy at this stage was to prevent a return to very high inflation. Moreover, it helped to signal a radical break with the unsustainable pre-crisis policies and thus to rebuild confidence.

Table 8. Foreign debt

USD billion, end of period

A. Foreign debt of the federal government[1]				
	2000	2001	2002	2003
Federal government	143.4	130.1	122.1	119.7
To official creditors	67	57.1	52.4	54.7
of which Paris Club	47.5	42.3	44.7	47.7
To multilateral creditors	16.1	15.2	13.9	12.1
Bonds	47.2	45.3	46.2	43.0
of which Eurobonds	36.4	35.3	36.9	35.7
Others	13.1	12.5	9.6	10.0

B. Debt of the private sector to non residents[2]				
	2000	2001	2002	2003
Banks (excluding equity capital)	9.3	13.6	14.2	24.8
Non-financial enterprises (excluding equity capital)	21.8	24	33.8	50.3

1. Foreign currency denominated.

2. Including domestic and foreign denominated debt.. It should be noted that at least some private-sector debt to non-residents appears to be to offshore entities controlled by, or at least linked to, the Russian borrowers rather than to third parties.

Source: Ministry of Finance, Central Bank of Russia.

The recovery of fixed investment has also been supported by reduced uncertainty

Macroeconomic stabilisation and the consolidation of state authority (particularly steps to restore a common legal space within Russia) have reduced economic uncertainty in recent years. This reduction in perceived risk is evident, for example, in the decline of the risk premia both on Russian sovereign and corporate foreign-currency debt.[19] This, together with the widespread impression that property rights had become more secure, contributed to a stock-market boom which saw the major stock index (the RTS) increasing by around 50 per cent per year during 2001-03.

Reduced uncertainty about property rights contributed to a boom in oil-sector investment

Although a number of developments in late 2003 and early 2004 raised new concerns with respect to property rights, the perception that property rights had become sufficiently secure was one of the factors contributing to the recovery of investment in 2000 and especially 2001, particularly in the oil sector.[20] Oil-sector investment jumped from roughly 25 per cent of industrial investment before the crisis to around 35 per cent from 2000 onwards. Strikingly, the growth of oil-sector investment was led by companies controlled by the state or by oil industry insiders: by 2000, their investment was already 70 per cent above 1998 levels. By contrast, oil companies owned by major financial groups (whose owners' property rights were perceived as less secure) were investing only marginally more than in 1998 (Table 9; see also Annex, Tables A3-A5). In 2001, however, as perceptions of the security of property rights further improved, the latter group of companies began rapidly increasing investment, soon reaching levels comparable with the former group. This investment led to a sharp increase in oil production and exports in the following years.

19. The spread of Russian sovereign debt over US Treasuries (EMBI+ Russia) declined by significantly more than the average spread for emerging markets (EMBI+) in recent years. This also reflected fiscal consolidation.

20. Clearly, high oil prices were another major factor.

Output growth, however, was uneven. From 1998 to 2003 both inside- and financial group-controlled companies increased output by roughly 45 per cent and 60 per cent respectively, with the output of the three largest oil companies owned by financial groups up by 90 per cent. State-controlled companies increased output only marginally. The picture with respect to exports is even more extreme. While there was only a slight increase in the exports of state-controlled companies, exports were up 30 per cent in the insider-controlled companies and 80 per cent in the financial group-controlled companies (almost 140 per cent in the three largest).

Table 9. Oil sector investment output and exports

As a percentage of 1998 figures

	Upstream capital spending				
	1999	2000	2001	2002	2003
Total	65	148	215	167	
Financial group owned	48	117	188	160	
of which 3 largest	35	122	225	202	
Oil industry insider owned	80	169	229	174	
State controlled	73	173	244	169	
	Output: crude and condensate production				
	1999	2000	2001	2002	2003
Total	101	107	115	125	139
Financial group owned	99	105	116	136	158
of which 3 largest	99	119	138	162	190
Oil industry insider owned	102	111	128	135	144
State controlled	98	100	103	106	113
	Non-CIS crude export				
	1999	2000	2001	2002	2003
Total	98	118	125	139	164
Financial group owned	90	111	129	142	180
of which 3 largest	104	147	178	190	239
Oil industry insider owned	86	100	111	124	131
State controlled	86	104	97	99	109

Source: Ministry of Energy, InfoTEK, Rennaissance Capital estimates, RIANTEC, OECD calculations.

Increased production by private oil companies has been a key factor in recent GDP and export growth

Since 2000, the importance of the private oil companies' performance for the economy as a whole has been enormous. Industry accounted for slightly below half of GDP growth in 2000-03 and the oil sector for somewhat below half of industrial growth.[21] Since the state-owned companies barely grew, this means that Russia's private oil companies directly accounted for somewhere between one fifth and one quarter of GDP growth. Taking into account the knock-on effects from oil-sector procurement and wages on domestic demand, the actual contribution of the private oil companies to economic growth was probably greater still. Moreover, the private oil companies have played a crucial role in keeping Russia's external balance in surplus, and thus in allowing the current consumption boom to unfold. It is unlikely that Russia would have been able to grow at anything like the rates it has experienced in recent years had the private oil companies not raised investment, output and exports very rapidly. Moreover, the examples of the state-

21. Using the adjusted sectoral weights discussed above. Contributions to industrial growth are calculated on the assumption that the share of value added in production has been roughly constant in the short term.

controlled oil companies and of other important state-controlled companies[22] would appear to 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.

Export growth and favourable terms of trade have generated large current account surpluses

Russia's export structure is still dominated by commodities and basic manufactures, which account for over three-quarters of exports (see Figure 9A). More than half of exports are hydrocarbons, with the oil sector alone accounting for 40 per cent. Russia, as a large commodity exporter, has benefited from healthy terms of trade since 2000 (Figure 9B). The current account surplus, however, has not been driven by high oil and commodity prices alone. Export volumes increased by roughly 30 per cent during 2000-03 (Figure 9C). This increase was overwhelmingly driven by the oil sector, which increased export volumes by more than 60 per cent. The other major export sectors (ferrous and non-ferrous metals[23], as well as machine building) contributed little to overall export growth, as their export volumes increased by only around 10-15 per cent during the period,[24] and the export volumes of the gas sector even fell significantly.[25]

Given that import volumes increased by an average of 21 per cent per year between 2000 and 2003,[26] both strong oil prices and sharply increasing oil export volumes have been vital in keeping the current account in surplus. Exports in 2000 were almost double the value of imports, which has allowed import growth to outstrip export growth for several years without pushing the current account into deficit (Table 10). While import levels are still significantly below those of exports, differences in growth rates between exports, which grew at an average annual rate just below 9 per cent during 2000-03, and imports will have to converge in coming years if Russia wants to keep a sustainable external balance.

22. See Ahrend (2004), Ahrend/Tompson (2004) and Tompson (2004).

23. The performance of the non-ferrous metals sector may have been better than reported here (or reflected in official data), as export increases through tolling schemes may have been reported as service exports.

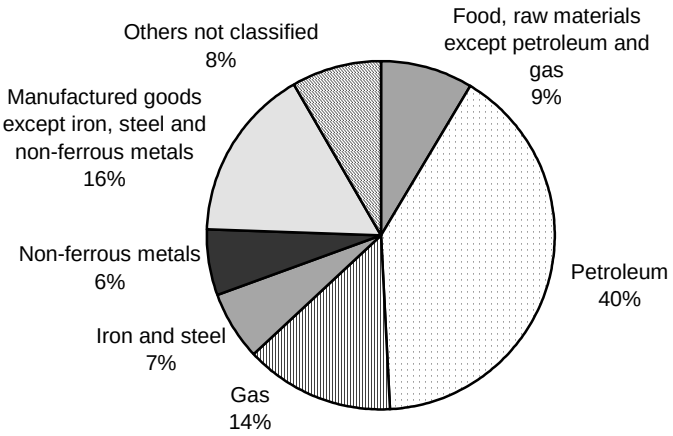
24. According to official statements, the armaments sector increased export volumes, but there are no official published statistics that would allow an evaluation of the extent of the increase. In any case it is unlikely that these increases would have influenced total export performance very substantially as the share of arms in exports is in all likelihood not very large, probably somewhere around 5-10 per cent.

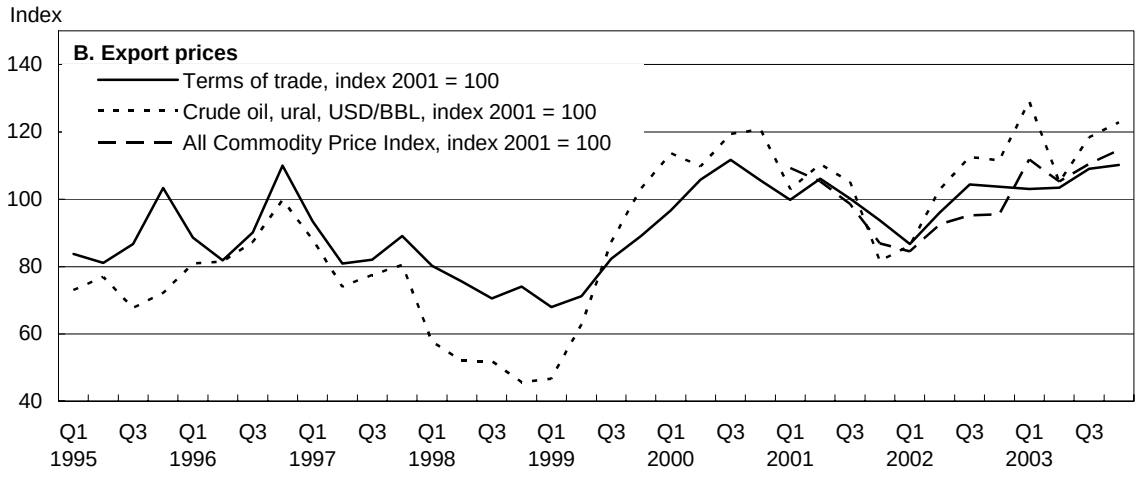
25. Gas export volumes to non-CIS countries, which are widely reported, actually increased over the period. Total gas export volumes (including to CIS countries) fell quite significantly, however. To the extent that gas prices for sales to non-CIS countries are often significantly higher than for sales to CIS countries, this may have contributed to increasing export revenues in spite of falling export volumes.

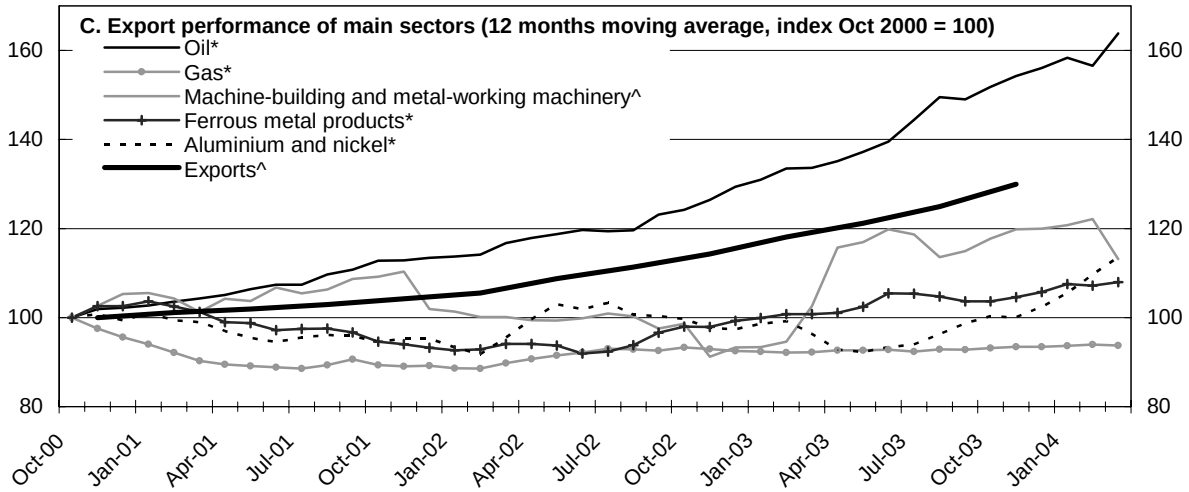
26. Import growth in 2000 was especially strong and was to some degree a recovery from artificially low post-crisis levels. Even so, average import growth in 2001-03 was an impressive 17 per cent.

Figure 9. Exports

A. Detailed structure of exports, 2003







* Physical volumes

^ Real roubles

Source: United Nations, *Commodity Trade Statistics Database (COMTRADE),* SITC Rev 3, Goskomstat, Datastream, Moscow Narodny Bank, OECD calculations and estimates.

Table 10. Balance of payments

USD million

	1999	2000	2001	2002	2003
Current account	**24 616**	**46 839**	**33 935**	**29 116**	**35 905**
Goods and services	**31 730**	**53 507**	**38 990**	**36 449**	**49 400**
Export	84 618	114 598	113 325	120 912	151 959
Import	-52 888	-61 092	-74 336	-84 463	-102 558
Goods	*36 014*	*60 171*	*48 120*	*46 335*	*60 493*
Export	75 551	105 033	101 884	107 301	135 929
Oil and oil products	19 606	36 191	34 364	40 366	53 739
Natural gas	11 352	16 644	17 770	15 897	19 981
Others	44 593	52 198	49 750	51 037	62 209
Import	-39 537	-44 862	-53 764	-60 966	-75 436
Services	*-4 284*	*-6 665*	*-9 131*	*-9 886*	*-11 093*
Export	9 067	9 565	11 441	13 611	16 030
Transportation	3 006	3 555	4 654	5 487	6 119
Travel	3 723	3 429	3 572	4 167	4 502
Other services	2 338	2 580	3 216	3 956	5 409
Import	-13 351	-16 230	-20 572	-23 497	-27 122
Transportation	-2 221	-2 330	-2 979	-2 836	-3 103
Travel	-7 097	-8 848	-9 285	-11 283	-12 880
Other services	-4 033	-5 052	-8 308	-9 377	-11 139
Investment income & compensation of employees	**-7 716**	**-6 736**	**-4 238**	**-6 583**	**-13 132**
Received	3 881	4 753	6 800	5 677	5 487
Paid	-11 597	-11 489	-11 038	-12 260	-18 620
Current transfers	**601**	**69**	**- 817**	**- 750**	**- 363**
Capital and financial account	**-16 058**	**-37 683**	**-24 454**	**-22 615**	**-28 705**
Capital transfers	**- 328**	**10 955**	**-9 356**	**-12 388**	**- 993**
Investment	**-13 952**	**-32 628**	**-6 886**	**1 148**	**-1 347**
Direct investment	*1 102*	*- 463*	*216*	*- 72*	*-2 989*
Abroad	-2 208	-3 177	-2 533	-3 533	-4 133
In Russia	3 309	2 714	2 748	3 461	1 144
Portfolio and other investment	*-15 054*	*-32 165*	*-7 102*	*1 219*	*1 642*
Liabilities	-2 088	-14 095	-7 258	- 185	19 937
of which:					
Net repayments of enlarged government*	- 41	-14 721	-10 926	-14 706	-5 453
Net loans to non financial enterprises and households and changes in liabilities of banks	1 263	3 340	6 417	17 984	26 535
Assets	-12 965	-18 070	157	1 404	-18 296
of which:					
Trade credits and advanced extended by non-financial enterprises and households	-3 322	-4 245	475	-1 697	-4 012
Non-repatriation of export proceeds and non-supply of goods and services against import advances	-5 051	-5 293	-6 388	-12 244	-15 435
Cash foreign currency non financial enterprises and households	1 031	- 904	- 815	- 817	6 580
Changes in reserves (includes Central Bank correction)	**-1 778**	**-16 010**	**-8 212**	**-11 375**	**-26 365**
Errors and omissions	**-8 558**	**-9 156**	**-9 481**	**-6 501**	**-7 199**
Balance	**0**	**0**	**0**	**0**	**1**

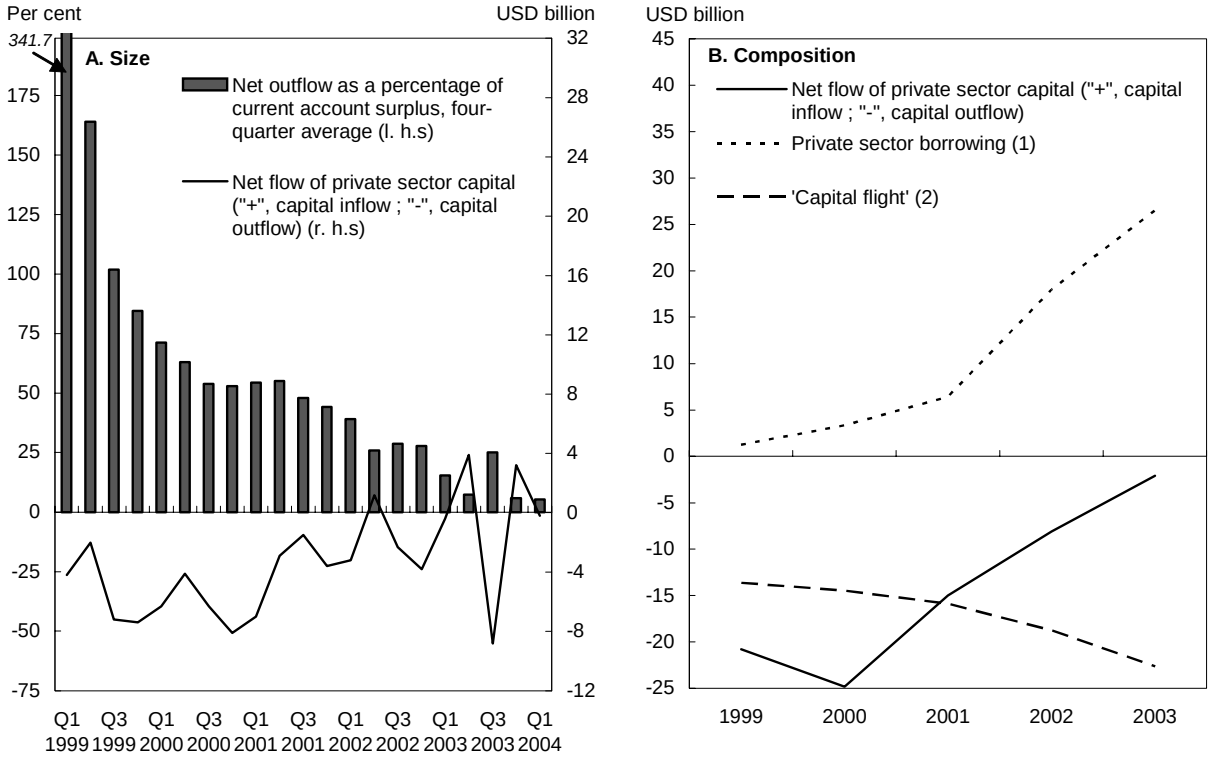
* including local governments and the monetary authority.

Source : Central Bank of Russia, OECD calculations.

Strongly decreasing net capital outflows have put additional upward pressure on the rouble

While the current account surplus has been consistently large, the net outflow of private sector capital has been relatively steadily decreasing since 2001 as the situation in Russia has normalised (Figure 10A). Since 2002, this trend has been increasingly driven by corporate borrowing abroad (Figure 10B). At the same time, unrecorded capital outflows continued unabated, doubtless reflecting what is often referred to as 'capital flight' or 'asset diversification', but also to some degree financing un- or under-reported imports. The reduction in net private capital outflows is a positive trend, as it reflects increasing confidence in the Russian economy and mirrors increased investment activity. However, decreasing net private capital outflows, alongside large current account surpluses, have generated strong upward pressures on the exchange rate and have complicated monetary policy.[27]

Figure 10. Net private capital flows



1. Net loans to non-financial enterprises and households and changes in liabilities of banks.

2. Non-repatriation of export proceeds and non-supply of goods and services against import advances plus errors and omissions.

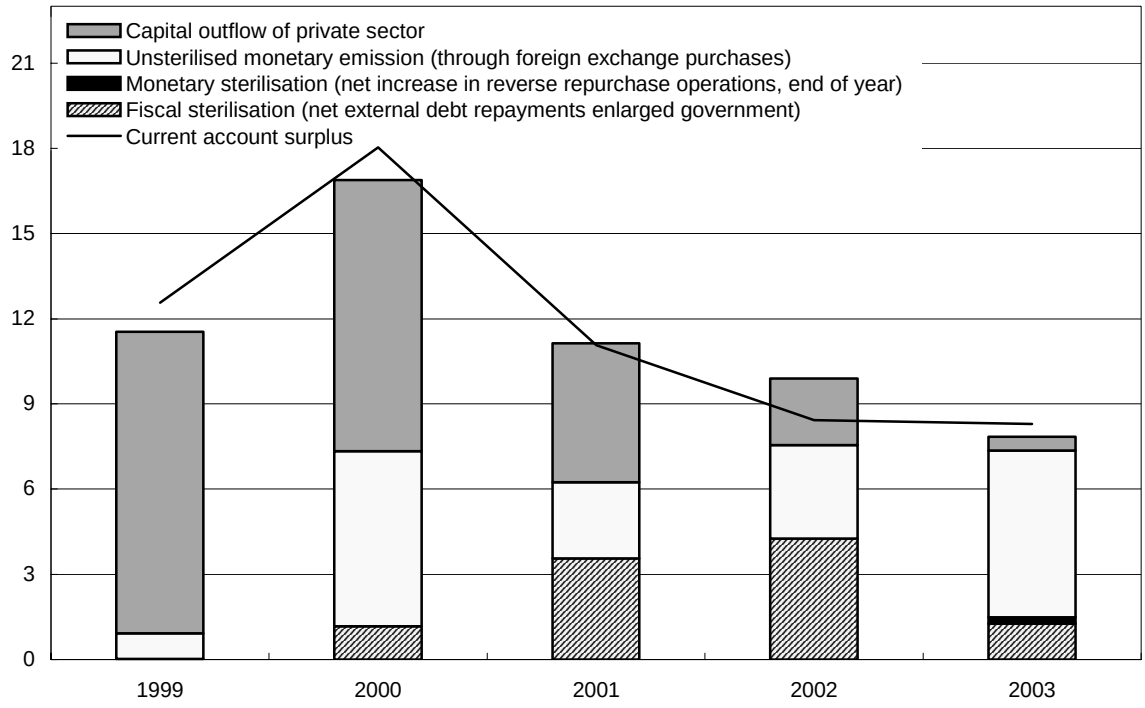
Source : Central Bank of Russia.

27. It should also be noted that increased external borrowing by Russian corporates increases the vulnerability of the economy to terms of trade shocks (see below).

Monetary policy has been pragmatic, but complicated by the pursuit of partly conflicting policy goals

Monetary policy in recent years has been dominated by the pursuit of conflicting policy goals,[28] and has *de facto* been very loose. The Central Bank of Russia (CBR) has followed a policy aimed at gradually reducing inflation while limiting the real appreciation of the rouble in order not to endanger the competitiveness of Russian industry. Given the large current account surpluses and decreasing net capital outflows, this determination to prevent the rouble from appreciating too rapidly has increasingly compelled the CBR to intervene on the foreign exchange market (Figure 11). Until 2002, the CBR's task was made easier by significant net private capital outflows, and fiscal sterilisation was also able to absorb a large amount of the current account pressure, reducing the need for CBR intervention. Fiscal sterilisation, however, declined in 2003, and would probably have become overburdened anyway, as net private capital outflows decreased sharply in 2003. The policy of restraining the nominal and real appreciation of the rouble was therefore increasingly pursued via large-scale foreign currency purchases by the CBR.

Figure 11. Decomposition of the current account surplus (capital account view)
As a percentage of GDP

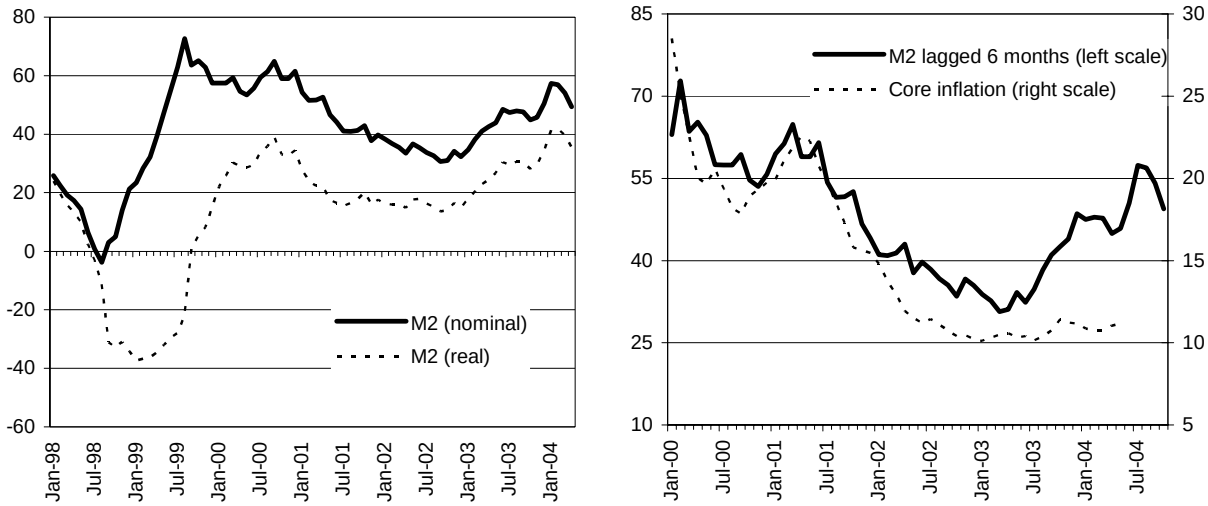


Source: Central Bank of Russia and Goskomstat.

28. OECD (2002).

As a result, CBR reserves have reached levels that, if expressed as a share of GDP or exports, are very high by international standards.[29] However, in the absence of efficient large-scale sterilisation tools[30] the accumulation of reserves has led to very strong monetary expansion in recent years. The growth of rouble M2 re-accelerated sharply in 2003. After the crisis, monetary expansion was accompanied by rapidly growing money demand, as the economy 're-monetised'. This sharply reduced the inflationary effects of rapid growth in the money supply. However, the speed at which further re-monetisation of the economy can take place has been dramatically reduced;[31] and since 2001 core inflation[32] has increasingly been driven by monetary expansion (Figure 12). It is thus highly unlikely that further sustainable disinflation could be achieved with monetary expansion continuing at anything like the rates seen in recent years. While core inflation fell swiftly from almost 30 per cent at the beginning of 2000 to roughly 10 per cent at the beginning of 2003, it reaccelerated somewhat in the second half of 2003 (Figure 12).

Figure 12. Monetary growth and inflation
Year-on-year growth rates



Source: Central Bank of Russia, Goskomstat, Economic Expert Group, OECD calculations.

29. CBR reserves by end-February 2004 had grown to above USD 80bn, providing the Russian monetary authorities with some power to shield the exchange rate in the case of purely speculative attacks on the rouble. These reserves amounted to roughly 15 per cent of GDP or around 8 months' import cover.

30. Large-scale, longer-term monetary sterilisation remains impossible, as the CBR still cannot issue its own debt. While the statute providing for the issue of CBR bonds was adopted in the 1990s, it is still ineffective, because the corresponding regulation was never issued by the now-abolished securities commission. As a substitute, the CBR currently uses government bonds from its portfolio in reverse repo operations, mainly for short-term sterilisation purposes. The issue of short-term sterilisation became especially prominent in 2003, with a sharp increase in speculative short-term capital flows into and out of Russia.

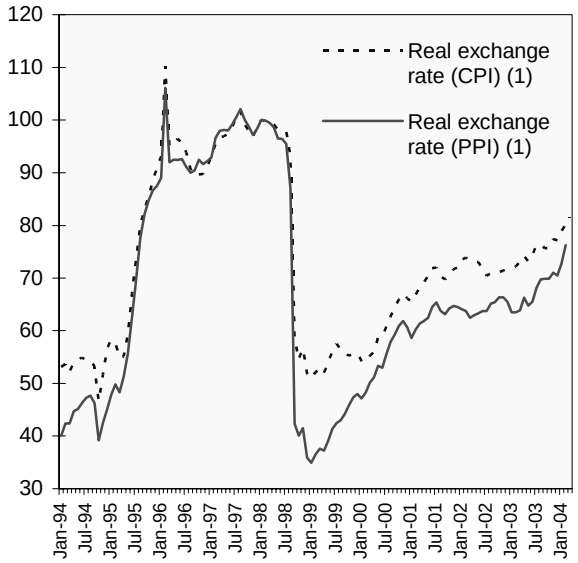
31. There might be greater scope for further re-monetisation if de-dollarisation of the economy were to continue at a rapid pace.

32. Core inflation excludes changes in fruit and vegetable prices and in regulated prices (*i.e.* housing and communal services charges, fuel, passenger transport services, and some communication services).

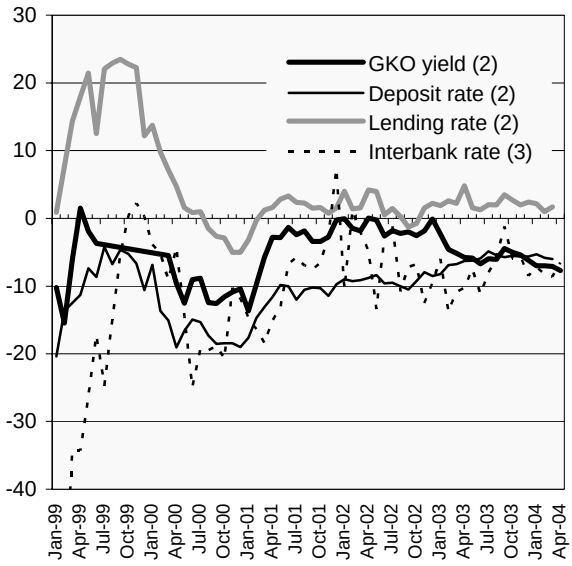
Russian monetary policy in recent years has been oriented more towards slowing exchange rate appreciation (Figure 13A) and sustaining short-term economic growth than towards reducing inflation.[33] As a result, real interest rates for rouble lending to enterprises and individuals have been very low since mid-2000, and real interest rates on deposits or government bonds have actually been negative (Figure 13B). Given the circumstances, the focus on sustaining short-term growth may have been an appropriate focus for the period in question, and the CBR, aided by rapid growth in money demand, was still able to keep inflation on a downward path. Indeed, given the constraints on its freedom of action, the CBR must be given credit for its achievements in recent years. Real appreciation was limited to around 6 per cent per year in 2001-03, while inflation was brought down from 20 per cent in 2000 to 12 per cent in 2003.[34] Inflation stayed within the government's target range in 2003, for the first time since the crisis. This success must, however, be qualified, for, as noted above, core inflation began to rise again in 2003, after having declined steadily for roughly two years. The overall reduction in the inflation rate was largely due to the authorities' decision to limit the rate of increase of regulated prices in the second half of the year in the run-up to the elections (Figure 14).[35]

Figure 13. Real exchange rate and real interest rates

A. Real exchange rate



B. Real interest rates



1. Using a currency basket (50% US$, 50% Euro), index Jan-98=100.
2. Nominal rates deflated with seasonally adjusted CPI (6 months forward).
3. Interbank rate deflated with seasonally adjusted, annualised monthly CPI.

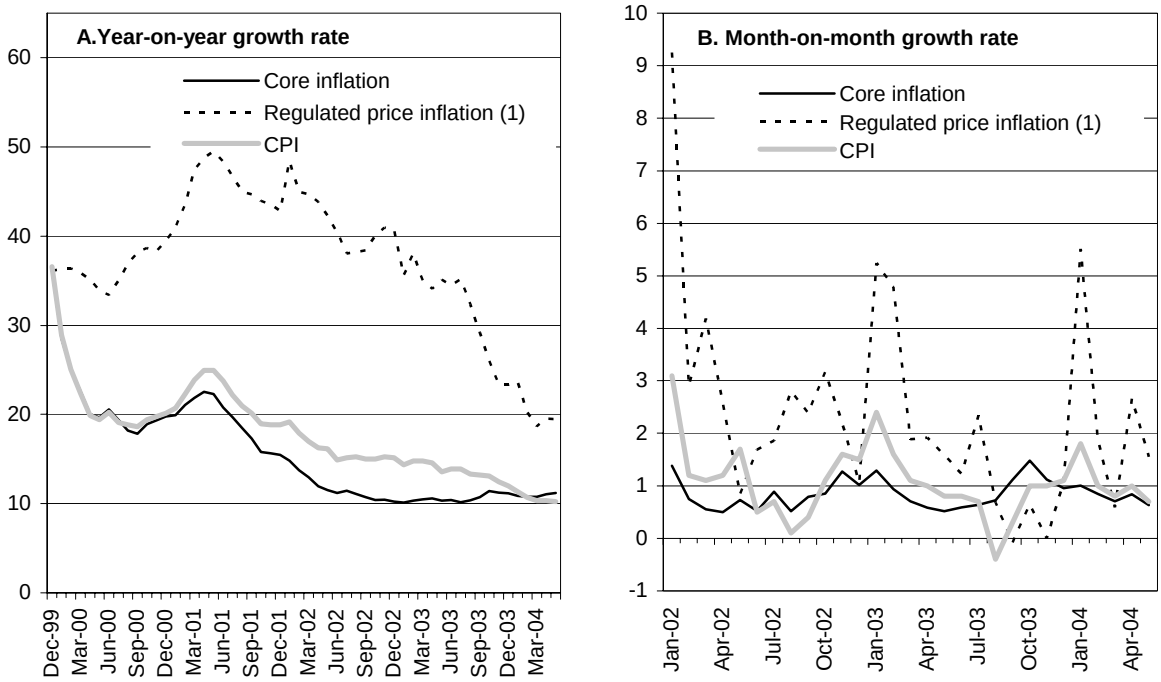
Source: Central Bank of Russia, Goskomstat, OECD.

33. For an econometric analysis of CBR monetary policies which concludes that, despite the officially declared priority of reducing inflation, the CBR's major concern has been the management of the exchange rate, see Vdovichenko (2004).

34. Consumer price index, December/December.

35. Regulated prices (*i.e.* housing and communal services, fuel, passenger transportation services, and some communication services) account for roughly 10 per cent in the consumer price index. While some slowdown in regulated price increases can be considered as normal when those prices get closer to a sustainable level, the slowdown seen in 2003 was arguably larger that what would have been warranted.

Figure 14. Inflation
Growth rate



1. Housing and communal services, passenger transportation services, communication services.
Source: Goskomstat, Central Bank of Russia, Economic Expert Group calculations, OECD calculations.

Industrial consolidation and labour reallocation has contributed to efficiency

Consolidation in the industrial sector continued at a rapid pace in the aftermath of the crisis. The industrial structure that has emerged is dominated by a relatively small number of large industrial groups, most of which were founded around some commodity exporting business, and which have in recent years mainly pursued strategies of vertical integration.[36] Recent research estimates that the ten largest industrial groups, together with the state-controlled national gas and electricity companies, account for roughly half of Russian industrial output (Table 11).[37] 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[38]. If in the 1990s, banks and cash-rich resource companies simply bought up whatever they could as fast as they could, M&A activity since 2000 has been characterised by a determination to create vertically integrated structures. Often companies with monopoly

36. This largely reflects a rational response to potential uncertainties and risks connected with enforcing contracts with third parties in the Russian legal environment.

37. Dynkin (2004). It should be noted that these estimates rely on Goskomstat sectoral weights.

38. See also Boone and Rodionov (2002). It seems that there have also been roughly equivalent productivity increases in privately owned enterprises that are not controlled by the large industrial groups.

or near-monopoly positions in one sector sought to use their market power to extend their reach up- or down-stream into related sectors. Groups formed in the mid-1990s set about rationalising their structures, abandoning some activities to concentrate on others. While expanding into new sectors,[39] most of these groupings remain heavily focussed on their core businesses.

Table 11. Output share of integrated business groups and state-controlled monopolies

2001

	Share in industrial output	Share in output of goods and services
State controlled monopolies	13.9	10.5
Electricity	7.7	3.3
Gas	6.2	3.1
Railway transport		2.1
Pipeline transport		2.0
Integrated business groups	35.6	13.7
LUKoil	7.6	2.9
Alfa group - Renova	6.7	2.6
Yukos	5.3	2.1
Bazoviy Element - Sibneft	4.7	1.8
Interros	3.8	1.5
Surgutneftegaz	3.0	1.2
Sistema	3.0	1.2
Severstal	1.4	0.6
Others	50.5	75.8

Source: Dynkin (2004).

In addition to efforts to increase efficiency at enterprise and holding level, there has also been a sectoral reallocation of resources. Industries with poor competitiveness have generally been shedding labour, while some of the more competitive ones have been hiring. In addition, unit labour costs, which fell sharply in all sectors after the devaluation, have increased less in those sectors where they had been particularly high before the crisis. This large relative adjustment of unit labour costs has been an important factor in enabling industry to remain competitive in recent years despite rapidly rising average wages, which reached pre-crisis levels in dollar terms in 2002.[40]

And there have been positive developments in the small business sector

The small business sector has also been developing relatively rapidly in recent years, although it remains comparatively small. This holds true even when adjusting for the unusually large role played by unincorporated entrepreneurs (the so-called PBOYuL)[41] in the small business sector.[42] This is important because PBOYuL do not currently appear in official statistics covering the small enterprises' (SE) sector.

39. Dynkin (2004).

40. See Ahrend (2004) for details. Overall economic efficiency was also increased by a net shift of labour from agriculture to services.

41. PBOYuL is the Russian acronym for *predprinimateli bez obrazovania iuridicheskogo litsa* ('entrepreneurs without the formation of a legal person').

42. A great deal of activity that in other countries would be carried out by small companies is in fact done by PBOYuL in Russia.

The number of people working in the SE and PBOYuL sectors is roughly of the same order of magnitude, and together they account for somewhat above 20 per cent of the work-force[43]. While the small business sector is thus larger than usually claimed, it is still relatively small by the standards of OECD economies, where it is not unusual for more than half of the labour force to works in SMEs. The available data suggest that the combined SE/PBOYuL sector has been growing at around 15-20 per cent per year since 2001, with growth accelerating to around 30 per cent in 2003.[44] The acceleration in 2003 was mainly driven by the ongoing consumption boom, as witnessed by particularly strong increases in the retail sector and transport.

The challenge of sustaining growth

Sustaining high growth rates will require continued strong growth in exports

Imports in recent years have tended to increase at least in line with disposable incomes (see Figure 7). 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. Russian industry is still unable to compete with imports of many sought-after consumer goods. Moreover, the continued real appreciation of the rouble will further increase demand for imported goods, for both consumption and investment.[45] This rise in imports may be somewhat dampened by further import substitution.[46] Nonetheless, it would be very surprising if imports did not continue to grow strongly.

To sustain such a situation, Russia must continue to increase exports. While the present large current account surplus could be taken to mean that Russia has ample space for increasing imports without a corresponding increase in exports, this is not the case. The current terms of trade are extremely favourable but will in all likelihood deteriorate at some point in the future.[47] If oil prices had been at their long-term average of USD 19/bbl (Urals) in 2003, and everything else equal, the current account surplus would have been of the order of USD 20bn, which would have only been somewhat above estimated capital flight. Alternatively, assuming that import volumes increase at roughly their current rate in dollar terms, with growth in export volumes slowing to a still reasonable 5 per cent by mid-2004 (which is above the 1996-99 average, as well as the rate recorded in 2001), the current account surplus would disappear by end-2005 even with Urals crude at around USD 25/bbl. Given continued capital flight, Russia would be structurally dependent on importing foreign capital even when oil prices were relatively high. Given Russia's vulnerability to terms-of-trade shocks, this would be a highly dangerous situation, especially in the absence of strong, stable FDI inflows. In short, if Russia wants to sustain high growth, it will have to be able to sustain rapid export growth.

Growing oil and gas exports are hence of prime importance

While the Russian authorities would understandably – and rightly – prefer a more diversified export structure, Russia's revealed comparative advantage (RCA) in recent years has been in natural resources,

43. For more information see OECD (2004), Annex 1.A4.

44. It should be borne in mind that, owing to the limitations of the available data, these estimates are necessarily very rough.

45. Short-term real appreciation will be driven by the current account surplus, medium-to-long term appreciation by the Balassa-Samuelson effect.

46. Production increases in import-competing sectors would also contribute to a welcome diversification of the economy.

47. This would reduce the pressure for real appreciation and might therefore slow import growth, at least temporarily. The general process of strong import growth with improving living standards is, however, set to continue.

especially hydrocarbons, and energy-intensive basic manufactures (steel, aluminium, nickel, fertiliser), plus some other commodities.[48] Moreover, the RCA in oil has been growing strongly in recent years[49], as the oil sector has increased exports much faster than any other important sector (Figure 9C). In any case, more than 50 per cent of Russian exports consist of oil, oil products and gas. Even if Russia managed sharply to increase exports of more sophisticated manufactures,[50] their contribution to total export growth would remain modest for some years to come, given their small share in current exports. Basic manufacturing in energy-intensive sectors may also be able to make some contribution to future export growth, although part of their competitive advantage will be eroded by necessary increases in domestic energy prices and by exchange-rate appreciation. In any case, recent experience suggests that potential export growth in these sectors may be constrained by the threat of protectionist measures on the part of Russia's trade partners.[51]

Sustained growth in hydrocarbon exports will probably require new pipeline capacity…

Robust export growth in the short-to-medium term will probably not be possible without further increases in mineral, and especially hydrocarbon, exports. Strong growth in oil production and exports should be possible through 2008. Beyond that, some significant new pipeline capacity would probably be needed. It is often claimed that slow progress in realising large-scale export infrastructure projects would sharply constrain the growth of oil exports in the coming years. There are, however, a number of smaller (and thus less visible) infrastructure improvement projects that should allow oil exports to increase at an estimated average annual rate of around 10 per cent, at least between 2004 and 2006.[52] It appears that production increases would be consistent with such export increases for the next few years, although production growth is currently expected to slow towards the end of the decade. One should, of course, keep in mind that increases in oil output have been consistently above forecasts in recent years. Nevertheless, if Russia is to maintain reasonable oil-sector growth beyond the end of the decade, it will be vital to ensure that fiscal and regulatory policies encourage the development of new oil fields to replace production from those currently in decline. While Russian oil companies appear to consider current fiscal terms attractive enough to invest in short-term projects, enhancing production from existing fields, it is not clear that this regime will be equally attractive when it comes to making large, up-front investments in the development of new fields. Any changes in oil-sector taxation should be sensitive to this problem, and there is an urgent need to streamline government decision-making with respect to new field development and to reduce the existing, very considerable bureaucratic barriers that currently impede such activity. In this connection, it will also be important to ensure that property rights are clearly assigned and secure, lest asset-control contests damage the sector's ability to finance new investment.

… as well as gas sector reform

In the longer term, oil exports probably cannot remain the chief driver of export growth. Russian oil reserves are comparatively limited,[53] and, perhaps more importantly, continued rapid export growth would

48. Russia also seems to have a comparative advantage in arms production.

49. See Ahrend (2004).

50. There is little scope to compete in labour-intensive basic manufactures with countries like China, which have much lower wage levels than Russia and almost unlimited surplus labour.

51. 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 per cent of these applied to steel exports, with a further 25 per cent affecting the chemicals sector.

52. See Collison *et al*. (2004).

53. At least those for which development is commercially viable at current technology levels.

at some point risk a price war with OPEC.[54] The obvious candidate to take the lead as oil export growth slows would be gas. Russia has the world's largest proven gas reserves. While many of them are in areas that are difficult to develop, Russia's gas monopolist OAO Gazprom, as well as its smaller gas producers, have exhibited real technical excellence in extracting them. Gas has the added advantages that world demand for it will probably continue to increase and Russia's gas reserves mean that it probably faces no threat of a price war if it increases exports. Unfortunately the gas sector in its current highly monopolised and heavily regulated configuration is unlikely to deliver sustained output and export growth. This underlines the importance of gas-sector reform from a macroeconomic point of view. 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. In all likelihood the same would hold for a reformed gas sector.

The service sector could be another driver of long-term growth. With Russia becoming a richer country, demand for services will increase. As the service sector is still largely underdeveloped (once the statistical effect of transfer pricing in export sectors is stripped out), there is ample scope for catch-up growth in services.[55] The service sector, however, will not develop very strongly in the absence of a general increase in living standards: in other words, services growth may well outpace overall GDP growth but it must be accompanied by increases in goods production and exports.

A strategy of further developing resource-sector exports is not without risks, but these should remain manageable. Moreover, this is the course Russia has been following for several years now and it is difficult to see how it could change in the short to medium term without causing major disruptions. Even if policies favouring economic diversification are highly successful, Russia's performance will continue to depend on its resource sectors for quite some time to come. In a resource-exporting economy there are, however, three important types of potential risk that policy-makers need to address: external vulnerability, Dutch disease, and institutional pathologies that appear to be associated with resource-driven development.

Russia will have to cope with external vulnerability

Given its industrial and export structure, the crucial importance of good fiscal and monetary policy for the Russian economy can hardly be overstated. It will also be important to continue developing institutions that enhance the sustainability and political feasibility of responsible macroeconomic policies. On the fiscal side, given that revenues are extremely sensitive to oil prices, this translates into a need for prudent fiscal policy based on conservative oil price assumptions and a large stabilisation fund. If Russia continues to adhere to the fiscal conservatism of recent years, the negative impact of a sharp fall in oil prices would be substantially mitigated. If not, effects would be magnified, as the government would have to run extremely restrictive (pro-cyclical) fiscal policies during periods of low oil prices, because external borrowing in such circumstances would probably be prohibitively expensive, if available at all on the necessary scale.

The recently established stabilisation fund (see Box 5) could play a crucial role in using fiscal policy as a stabilisation tool over the oil price cycle. If the fund is indeed to serve its purpose, it must be large enough to insure the budget against several years of below-average oil prices. This implies that the amount to be accumulated in the fund should be raised. It is currently planned to accumulate Rb500bn in the fund, roughly 3.8 per cent of 2003 GDP. This is a much smaller figure than was first proposed: the finance ministry's initial aim was to accumulate the equivalent of around 8.7 per cent of GDP in the fund. A larger

54. 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).

55. Part 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 faster than for tradable with the Russian currency appreciating.

fund, moreover, would strengthen Russia's bargaining position *vis-à-vis* OPEC. Whatever its planned size, the stabilisation fund may at some point reach a level sufficient to ensure that the budget is adequately insured against oil-price drops. At that point, it would be advisable to use additional surplus revenues in the first instance for early debt repayment. This would allow for sustainable higher government spending or lower taxation levels in subsequent years. The authorities might also wish to consider accumulating additional oil windfalls in the fully funded pillar of the state pension system. This would be a macroeconomically responsible way of distributing the windfall to the population and would help in particular to enhance the pensions of those citizens who, owing to age or income, will otherwise have little or no direct involvement in the fully funded scheme (see below). The authorities should resist the temptation to use windfall revenues accruing after the fund has grown to the required level to finance tax cuts or higher current spending that in all likelihood would turn out to be unsustainable and strongly pro-cyclical (and would thus counteract the purpose of stabilisation), since oil prices are likely to be relatively high when the fund achieves whatever planned level is set for it.

Box 5. The fiscal stabilisation fund

The Stabilisation Fund of the Russian Federation was established in 2004 following the adoption of amendments of the Budget Code of the Russian Federation in December 2003.[1] The purpose of the fund is to insure the federal budget against oil-price volatility. Under the Budget Code amendments, 'surplus' revenues resulting from relatively high oil prices are accumulated in the fund automatically: all income from the natural resource extraction tax and the crude oil export duty above that which would accrue at an oil price of USD20/bbl (Urals) is automatically transferred to the fund. The government may also be required to transfer to the fund budget surpluses accumulated in the previous fiscal year, although this is less automatic: some surplus funds may be carried over to finance budgetary expenditures in the early months of the new year, when tax revenues are traditionally low.

The legislation stipulates that, until the fund accumulates a total of Rb500bn, the revenues accumulated in the stabilisation fund may be spent only to finance the federal deficit arising as a result of oil prices below the baseline USD20 level for Urals crude. The Russian authorities estimate that a fund of Rb500bn would insure the budget against the revenue losses arising from two consecutive years with oil prices averaging USD15/bbl for Urals crude. Once the fund exceeds Rb500bn, the government will be able to spend the additional revenues for unspecified 'other purposes', albeit only with the agreement of the Federal Assembly (such spending must be specified in the law on the federal budget for the year in question). The government intends that such surplus revenues would be used, in the first instance, to repay foreign debt early and to finance spending on structural reforms, but there is no requirement to this effect in the Budget Code.

The fund is managed by the Ministry of Finance, although the government may delegate some management functions to the CBR. The only instruments in which stabilisation fund revenues may be invested are foreign government securities; the government is to define the list of states whose securities may be used for this purpose. One welcome side effect of this arrangement is that stabilisation fund investments will help to stabilise the exchange rate. The investment and spending pattern of the stabilisation fund will contribute to capital outflows when oil prices are high and capital inflows when they are low. These flows will be an important mechanism to counteract current account pressure on the exchange rate, thus helping to shield the economy somewhat from potentially damaging sharp exchange-rate fluctuations.

It is important to recognise that the fund's purpose is fiscal stabilisation across the oil price cycle. In this, the fund differs from some other oil funds, most notably that of Norway.[2] 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. The Norwegian fund actually accumulates all of the state's net cash flow from petroleum activities, a portion of which is then transferred back to the budget to finance the non-oil budget deficit.

1. 'O vnesenii dopolnenii' (2003).

2. On the Norwegian fund, see Finansdepartementet (2003).

Keeping external debt low can also help to reduce external vulnerability, both by decreasing the risk of currency crises and by limiting the economic fallout from such crises if they occur. This applies to both sovereign and private external debt, so it will be important to prevent the private sector's external borrowing from reaching dangerous proportions. Recent empirical work undertaken at the IMF suggests that external debt above a certain level has a negative impact on growth. This research suggests that the optimal external debt level for Russia is probably somewhere below 40 per cent of GDP.[56] The reduction in external sovereign debt in recent years is thus a welcome development, as is the shift from external to internal sovereign debt issues, although this has so far been on a small scale. Ideally, sovereign debt should be predominantly in domestic currency, or at least oil-price indexed, so that debt service would fall when oil prices were low. Hitherto, commodity-price-indexed bonds have principally been employed by companies or in the context of sovereign debt restructurings, but there is no obvious reason why they could not be used more widely for sovereign issues.[57] Such paper could be attractive to individuals, companies or countries needing a hedge against oil price rises.

On the monetary side, given the large share of exports that are subject to large price fluctuations (a share that may further increase in the short-to-medium term), exchange-rate flexibility is needed to accommodate terms-of-trade shocks, especially negative ones. Exchange-rate corrections following terms-of-trade shocks are especially painful if the exchange rate has become fundamentally overvalued beforehand. In this respect, there may be some scope for efforts to avoid excessive exchange-rate appreciation, especially when oil prices are high and there are major short-term capital inflows. However, the pursuit of such exchange-rate goals with the monetary policy tools currently available (mainly unsterilised exchange-rate intervention) incurs significant costs in terms of inflation. While it may be both desirable and necessary to accept relatively gradual disinflation in order to support growth and manage the exchange rate, it is important to ensure that inflation does remain on a downward path, to avoid a shift of expectations from declining to increasing inflation. Such a shift would make fighting inflation much harder and costlier in the future. Continued disinflation should thus be a priority even if it meant a somewhat stronger nominal appreciation of the rouble.

It should be possible to make the inflation/rouble appreciation trade-off somewhat less acute by giving the CBR a wide range of sterilisation instruments. In general, the fact that Russia can expect to experience exceptionally large swings in capital flows implies that the CBR should have an especially large capacity for monetary sterilisation.[58] First and foremost this means that Russia should have a large market in rouble-denominated government debt. This market is still too small. Secondly, the CBR should be able to issue securities. The primary legislation needed to do this has been in force for some time, but the secondary legislation has not been forthcoming. The new Federal Financial Markets Service, which has been created to replace the Federal Securities Market Commission, should make it a priority to resolve this issue. More generally, dollarisation (or euro-isation) of the economy as such should be avoided or reduced, with prices and contracts being in local currency as far as possible. Such a structural shift would further reduce the economy's vulnerability to exchange-rate fluctuations. This shift will not happen overnight. It will require further bolstering the confidence of business and the public in the rouble, above all by maintaining sound fiscal policies and achieving stable low inflation.

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56. Empirical work by Patillo *et al*. (2002) argues that, for developing and emerging countries, the average impact of external debt on growth becomes negative at about 35-40 per cent of GDP or about 160-170 per cent 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 per cent of GDP.

57. See UNCTAD (1998:41-5).

58. In recent years sterilisation may have been difficult because of limited demand for rouble debt instruments. This is no longer the case, as witnessed by the fact that interest rates on rouble instruments are very low and often negative in real terms.

Continued vigilance will be needed to avoid 'Dutch disease'

Further increasing the importance of the mineral sector in the economy also increases the risk of 'Dutch disease'. This term usually refers to a situation in which a country suddenly discovers large natural resources, the extraction of which increases the equilibrium exchange rate and thereby puts pressure on the competitiveness of the other tradable sectors in the economy.[59] In the Russian context, the discovery of natural resources as such is not the source of the problem. Rather, it is the fact that their full weight in the economy made itself felt only at the start of the transition, when the relative prices of primary raw materials, which had been held at artificially low levels under central planning, soared, as did resource exports. This exposed large differences in productivity between sectors in Russia. Whereas the export-oriented energy sector is highly competitive and profitable, and would be so even at a stronger exchange rate, many enterprises, especially in the manufacturing sector, are already barely competitive at current wage and exchange-rate levels. The fact that many manufacturing enterprises are located in places with unfavourable climatic conditions (which increases operating costs) does not help.[60]

The strength of the resource sector allows – indeed, compels – Russia to have a relatively strong exchange rate, while high wages in the resource sector put upward pressure on wages in the rest of the economy. This is not all bad news. It increases living standards and boosts production in the non-tradable sector. However, it makes life much harder for other tradable sectors. Given the structure of the Russian economy, this is unavoidable. The non-resource tradable sector must therefore increase productivity and restrain unit labour costs sufficiently to stay competitive in order either to export or at least to withstand import competition. In this context, positive developments with respect to productivity in most sectors, and to some degree also unit labour costs, are encouraging.[61] This improvement must be sustained if Russia wants to maintain high growth rates and achieve a more diversified industrial structure in the longer term. Ironically, Russia's otherwise problematic industrial inheritance has so far made it easier for processing industries to cope with the effects of rising wage levels and an appreciating real exchange rate: the inefficiency of former Soviet industrial enterprises meant that there was often a great deal of scope for relatively easy productivity gains – not least by means of 'passive' restructuring (*i.e.* labour-shedding). However, there are limits to how far such passive restructuring can go. Further *active* industrial restructuring, including private investment to modernise production capacities, is thus the *sine qua non* for continuing strong growth.

Dutch disease may also, however, affect equilibrium employment levels. To the extent that the strength of the resource sector (which provides relatively little employment) necessitates relatively high levels of labour productivity in other industrial sectors, it also risks contributing to reductions in industrial employment. Decreasing industrial employment would not necessarily be a problem in itself if employment in the service sector could compensate for lost industrial jobs. The problem, however, is that a lot of the potential employment opportunities in the service sector are of rather low productivity, which would imply comparatively low wages. To the degree that large wage inequality may be socially and politically unacceptable, these potential employment opportunities in services may not arise.

There are, however, policy measures that can help limit the potential negative impact of the natural resource sector on the economy and ease the adjustment process for the tradable non-resource sector, while trying to avoid a low employment trap. While real exchange-rate appreciation in itself is not only desirable, but also unavoidable over the long term, attempts should be made to avoid sharp movements in relatively

59. The name 'Dutch disease' is in fact rather unfortunate, as the Netherlands actually handled such a situation comparatively well.

60. Mikhailova (2003).

61. For details see Ahrend (2004).

short time-spans. This is yet another reason for a fiscal policy that is to some degree countercyclical to the oil price, a substantial stabilisation fund and a wider range of monetary sterilisation mechanisms.

The tax structure of the economy can also be used to assist the development of the non-resource sector. The abolition of turnover taxes since 2000 represents an important step in this direction, since such taxes weigh particularly heavily on processing industries (see Box 4). Increasing direct taxation of the natural resource sector (not only the oil sector) via excise, extraction or export taxes should be used to lower overall tax levels in the economy and in particular to cut the unified social tax (UST), thereby reducing non-wage labour costs.[62] Such a cut might in some sectors be partially or even wholly offset by wage increases, but it should certainly lead to lower total labour costs in sectors with low productivity. Since a cut in the UST would cause shortfalls for the Pension Fund, it might be desirable to earmark a certain portion of price-independent resource taxes to make up these losses. However, any increase in taxation of resource-extraction industries must ensure that these sectors, which are critical to growth, remain sufficiently profitable to allow for their further development. Current steps to increase the tax burden on the oil sector, especially under favourable oil prices, while closing tax loopholes at the same time, are hence a step in the right direction. However, it would be unwise to focus solely on the taxation of the oil industry. There should also be attempts to increase taxation of other resource or related sectors. Taxing a larger part of the resource rent away should also lead to relatively lower wages in the resource sector and hence diminish the pressure on wages in other sectors. To the degree that this would allow the paying of lower wages for activities with lower productivity, it would help to preserve employment that would otherwise be lost (or facilitate the creation of jobs that might not otherwise exist).

While the foregoing measures could help to keep employment at acceptable levels, facilitate the diversification of the economy and favour the production of more sophisticated products, the transformation into a less resource-based economy will be a slow process. Diversification is an important long-term goal, but, even if diversification policies are relatively successful, the main structural changes in the economy in the coming years will probably be an increase in the service sector, as well as some increase in import substitution industries. Any major diversification in the export structure is unlikely except in the long term. For the foreseeable future Russia is almost certain to remain highly dependent on natural resource exports. It should therefore make the best of its resource endowments. While natural resources are sometimes seen as a 'curse' for longer-term economic development,[63] developing a successful modern economy based on natural resource exports is feasible, given the right institutions and policies, as the examples of OECD countries such as Canada, Australia or the Scandinavian countries demonstrate.

Resource wealth can make it harder to create sound institutions

Many of the potential macroeconomic problems arising from resource dependence can be resolved or at least substantially mitigated by the right macroeconomic policies and related structural reforms. The potential political economy implications may therefore be the toughest challenge. The literature suggests a number of reasons why resource orientation may complicate economic development. First, it has been shown that a larger share of natural resources in exports is related to more corruption,[64] which is associated with slower long-term growth.[65] Secondly, a higher natural resource share in the economy is often accompanied by greater inequality of incomes, which has also been shown to undermine long-term growth performance. Thirdly, it has been argued that the allocation of talent in natural resource economies is

62. OECD (2003).

63. See, *e.g.* Sachs and Warner (2001).

64. See, *e.g.* da Cunha Leite and Weidmann (1999).

65. Mauro (1995).

biased in favour of the resource sector. Highly capable individuals may focus on securing resource rents rather than building successful businesses in sectors with more potential for innovation.[66] Fourthly, resource wealth may favour the development of political and economic institutions which likewise favour rent-seeking over entrepreneurship, thereby reinforcing the structure of incentives faced by individuals.[67]

To the extent that inequality in Russian society is mainly 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, the solution is to tax away a larger part of the resource rents in a relatively corruption-proof way and to reduce general tax levels for the economy as a whole. This is essentially what the Russian authorities are committed to doing. Some increase in targeted social transfers would also play a role. A large reduction in resource rents going to individuals instead of 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. Hence the second and third concerns, regarding income inequality and the allocation of talent, basically reinforce the importance of the first, namely low levels of corruption.

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 standardised, with few exceptions and as little reliance as possible on bureaucratic discretion. Many recent legislative changes 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 by, for example, curtailing officials' inspection powers, simplifying business registration and reducing the range of activities subject to licensing requirements. In this context, recent proposals to vary effective tax rates in the oil sector on the basis of the quality of deposits exploited should be viewed with caution. Such an approach would in theory be more efficient, as it would not only favour 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 which 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. Though the adoption of such a relatively simple system may be advisable in the medium term, given widespread corruption and transfer pricing in the sector, it probably makes more sense at present to tax natural resources mainly through excise and similar taxes, as well as export taxes.

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.[68] The evidence also suggests that a lack of press freedom causes corruption.[69] It would thus be in Russia's economic interest not only to strengthen the judicial system, but also to foster the development of civil society and press freedom. Strengthening the rule of law and increasing the accountability of officialdom are particularly important in

66. See Acemoglu and Verdier (1998) for a related point.

67. Countries that are highly dependent on natural resource exports are also more likely to experience large-scale rebellions and civil wars. This point, however, is not particularly relevant for Russia.

68. Brunetti and Weder (1999).

69. Ahrend (2002).

creating an institutional environment more conducive to entrepreneurship and wealth creation rather than rent-seeking.[70]

Conclusion

Since the 1998 financial crisis, Russia has enjoyed five years of robust economic growth, which has been increasingly driven by the oil sector. This has shown that the rapid expansion of natural resource based sectors can provide a basis for fairly strong growth, at least in the short- to medium run. There are, however, dangers associated with such resource-dependent development, including vulnerability to external shocks, the risk of 'Dutch disease' and the institutional pathologies often associated with heavy reliance on natural resource sectors. The major challenge for Russia over the coming years will therefore be twofold. First, given that growth prospects will continue to depend heavily on resource sectors, the authorities will need to pursue policies that allow the further development of these sectors while acting to mitigate the risks associated with resource-dependent growth. Secondly, in order to facilitate the diversification of the Russian economy over the longer term, and thus to reduce its dependence on resource extraction industries, the authorities will need to pursue a range of structural reforms designed to create an environment conducive to investment in non-resource sectors.

70. 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.

ANNEX. MACROECONOMIC DATA

Table A1. Domestic competition

Percentage of surveyed enterprises (by industrial sector) that mention this factor

	1996	1997	1998	1999	2000	2001	2002	2003
Importance of "Russian competitors keeping their prices constant" as a factor that increases competition								
Metallurgy	42	14	20	32	31	29	20	26
Chemical and petrochemical industry	22	18	12	28	33	35	54	46
Machine building	12	11	11	18	20	20	22	28
Forestry, pulp and paper	17	24	15	11	23	30	31	45
Building material	2	7	20	13	21	31	35	53
Light industry	8	13	20	16	16	22	30	22
Food industry	12	25	23	18	24	29	39	42
Importance of entry of new Russian enterprises into the market as a factor that increases competition								
Metallurgy	19	26	20	31	21	38	48	29
Chemical and petrochemical industry	17	25	26	40	49	56	33	34
Machine building	18	26	23	20	33	33	45	44
Forestry, pulp and paper	14	23	36	34	37	44	25	33
Building material	26	16	29	37	25	41	59	62
Light industry	11	21	19	26	28	19	29	43
Food industry	26	36	39	56	62	55	76	68
Importance of Anti-Monopoly Ministry and Government activity as a factor that increases competition								
Metallurgy	0	13	6	14	1	8	11	8
Chemical and petrochemical industry	9	12	2	0	6	2	5	0
Machine building	8	4	4	7	2	3	5	4
Forestry, pulp and paper	16	12	1	3	4	11	6	1
Building material	6	7	1	1	7	2	0	1
Light industry	5	0	5	2	3	7	3	10
Food industry	6	4	6	5	4	7	11	5

Source: Data are derived from the IET Business Surveys and were generously provided to the OECD by Sergei Tsukhlo.

Table A2. Investment ratios

In per cent of GDP

	1995	1996	1997	1998	1999	2000	2001	2002
Russia	**21.1**	**20.0**	**18.3**	**16.2**	**14.4**	**16.9**	**18.9**	**17.9**
OECD	21.0	21.7	22.3	22.8	22.5	22.5	22.0	21.0
EURO zone	20.5	20.2	20.2	20.5	21.0	21.6	21.1	20.2
Japan	27.7	28.3	27.9	26.8	26.2	26.2	25.6	24.1
USA	18.2	18.7	19.1	19.8	20.3	20.5	19.7	18.6
Hungary	20.0	21.4	22.2	23.6	23.9	24.1	23.6	22.3
Poland	18.6	20.7	23.5	25.1	25.5	23.9	20.9	19.1
Mexico	16.1	17.8	19.5	20.9	21.2	21.4	19.6	18.9
Korea	36.7	36.8	35.1	29.8	27.8	28.4	27.0	26.8
China	40.7	33.8	33.4	35.7	36.4	36.8	38.8	42.2
Malaysia	43.6	42.5	43.1	26.8	21.9	25.6	24.9	23.1
Thailand	41.1	41.1	33.8	22.4	20.8	22.0	23.0	23.0

Source: Goskomstat, Asian Development Bank (ADB), National Bureau of Statistics of China.

Table A3. Upstream capital spending by company

USD million

	1998	1999	2000	2001	2002	Jan-Oct 2003
Total	2795	1821	4143	6018	4679	4690
Financial group owned	1156	555	1355	2174	1854	2070
of which 3 largest	776	269	948	1747	1571	1869
YUKOS	467	92	295	592	742	1124
TNK	115	104	450	621	335	286
Sibneft	194	73	203	534	494	459
Sidanko	165	125	100	177	119	96
Slavneft	100	76	157	250	164	105
Onaco	115	85	150			
Oil industry insider owned	1086	864	1832	2492	1892	1716
LUKOIL	447	284	718	1118	737	794
SurgutNG	627	573	1114	1374	1155	922
KomiTEK	12	7				
State-controlled	553	402	956	1352	933	904
Tatneft	269	194	419	608	324	204
Rosneft	168	107	356	416	369	510
Bashneft	116	101	181	328	240	190
	As percentage of 1998					
Total		65	148	215	167	
Financial group owned		48	117	188	160	
of which 3 largest		35	122	225	202	
Oil industry insider owned		80	169	229	174	
State-controlled		73	173	244	169	

Source : Ministry of Energy, InfoTEK, Renaissance Capital estimates, RIANTEC, OECD calculations.

Table A4. Oil output: crude and condensate production by company

Million tons

	1998	1999	2000	2001	2002	2003
Russia, total	303.4	305.0	323.2	348.2	379.0	421.4
Oil companies, total	263.7	264.0	280.6	310.4	339.2	384.0
Financial group owned	121.4	120.5	128.0	140.8	164.7	191.8
of which 3 largest	81.8	81.1	97.6	112.8	132.3	155.1
YUKOS	44.8	44.7	49.5	58.1	69.4	80.8
TNK	19.7	20.1	30.8	34.1	37.5	43.0
Sibneft	17.3	16.3	17.2	20.6	25.4	31.4
Sidanko	19.9	19.6	10.7	13.1	16.2	18.6
Slavneft	11.8	11.9	12.3	14.9	16.2	18.1
Onaco	7.9	8.0	7.5			
Oil industry insider owned	92.4	94.6	102.8	118.1	124.4	133.0
LUKOIL	53.7	53.4	62.2	74.1	75.3	78.9
SurgutNG	35.2	37.6	40.6	44.0	49.2	54.1
KomiTEK	3.5	3.6				
State-controlled	50.0	48.9	49.8	51.4	52.7	56.3
Tatneft	24.4	24.1	24.3	24.6	24.6	24.7
Rosneft	12.6	12.6	13.5	15.0	16.1	19.6
Bashneft	12.9	12.3	11.9	11.9	12.0	12.0
Gazprom	9.5	9.9	10.0	10.6	10.8	11.0
Non-integral producers and JV's	30.2	31.1	32.6	27.3	26.4	26.3
	As percentage of 1998					
Total		101	107	115	125	139
Financial group owned		99	105	116	136	158
of which 3 largest		99	119	138	162	190
Oil industry insider owned		102	111	128	135	144
State-controlled		98	100	103	106	113

Source : Ministry of Energy, InfoTEK, Renaissance Capital estimates, OECD calculations.

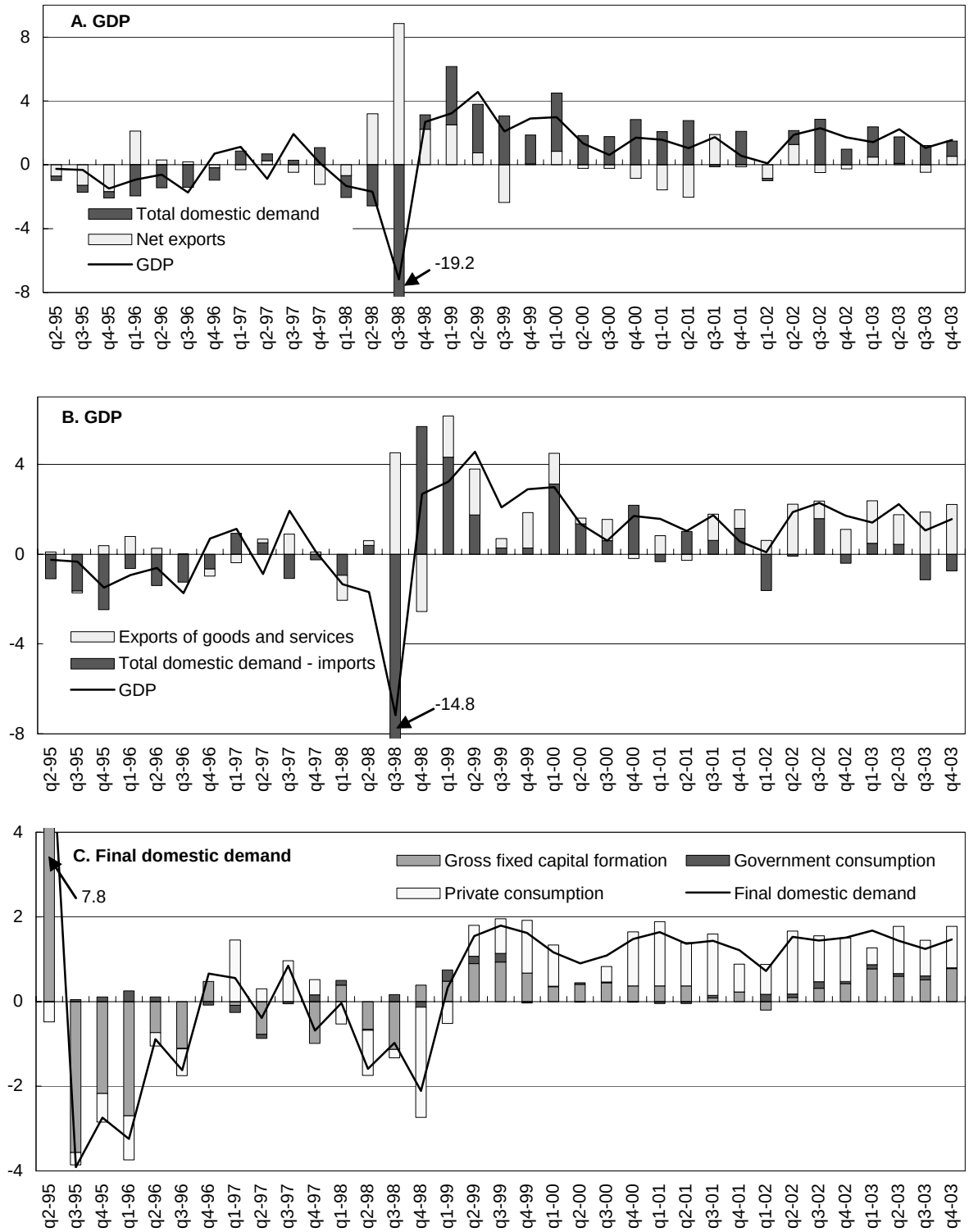
Table A5. Non-CIS crude export by company

Million tons

	1998	1999	2000	2001	2002	2003
Total exports from Russia	124.9	122.2	147.0	156.2	173.4	205.4
Transits through Transneft	6.8	11.0	14.1	16.0	18.7	19.0
Russia, total	118.1	111.2	132.9	140.2	154.6	186.4
Rail	3.3	4.1	6.5	8.4	22.4	
Other by-passing systems			4.7	5.5	3.9	
Transneft	114.8	107.2	121.7	126.3	128.3	150.5
Financial group owned	41.2	37.2	45.7	53.3	58.6	74.1
of which 3 largest	25.1	26.1	36.8	44.8	47.8	60.0
YUKOS	12.2	14.9	18.8	22.7	24.5	29.7
TNK	7.1	6.2	12.4	14.9	12.8	18.8
Sibneft	5.8	5.0	5.6	7.2	10.5	11.6
Sidanko	6.2	4.8	3.6	3.2	5.3	8.3
Slavneft	4.5	3.9	4.2	5.3	5.5	5.8
Onaco	1.9	2.1	1.1			
Eastern Oil	3.5	0.3				
Oil industry insider owned	34.7	29.9	34.6	38.6	43.0	45.4
LUKOIL	21.0	16.1	20.8	22.4	25.5	27.1
SurgutNG	12.2	12.3	13.8	16.2	17.5	18.3
KomiTEK	1.5	1.5				
State-controlled	19.1	16.5	19.8	18.6	18.9	20.7
Tatneft	8.4	7.6	9.7	9.2	8.7	10.5
Rosneft	6.9	5.0	6.3	5.5	6.1	6.4
Bashneft	3.8	3.9	3.8	3.9	4.1	3.9
Gazprom	2.2	1.8	1.3	1.2	0.1	0.2
Non-integral producers and JV's	17.6	21.8	20.3	14.4	8.3	9.3
	As percentage of 1998					
Total		98	118	125	139	164
Financial group owned		90	111	129	142	180
of which 3 largest		104	147	178	190	239
Oil industry insider owned		86	100	111	124	131
State controlled		86	104	97	99	109

Source : Ministry of Energy, Renaissance Capital estimates, OECD calculations.

Figure A1. Quarterly contributions to GDP growth, expenditure side view
As a percentage of GDP in previous period, seasonally adjusted



Source: Goskomstat, OECD calculations.

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