

OECD ECONOMIC SURVEY OF THE RUSSIAN FEDERATION 2004:

THE SOURCES OF RUSSIAN ECONOMIC GROWTH

This is an excerpt from the section on economic growth in chapter 1 of the OECD Economic Survey of the Russian Federation, 2004.

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.¹ Both predictions were regarded as reasonable at the time, but a comparison of consensus forecasts and actual outcomes (Table 1.1) 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 1.1. 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

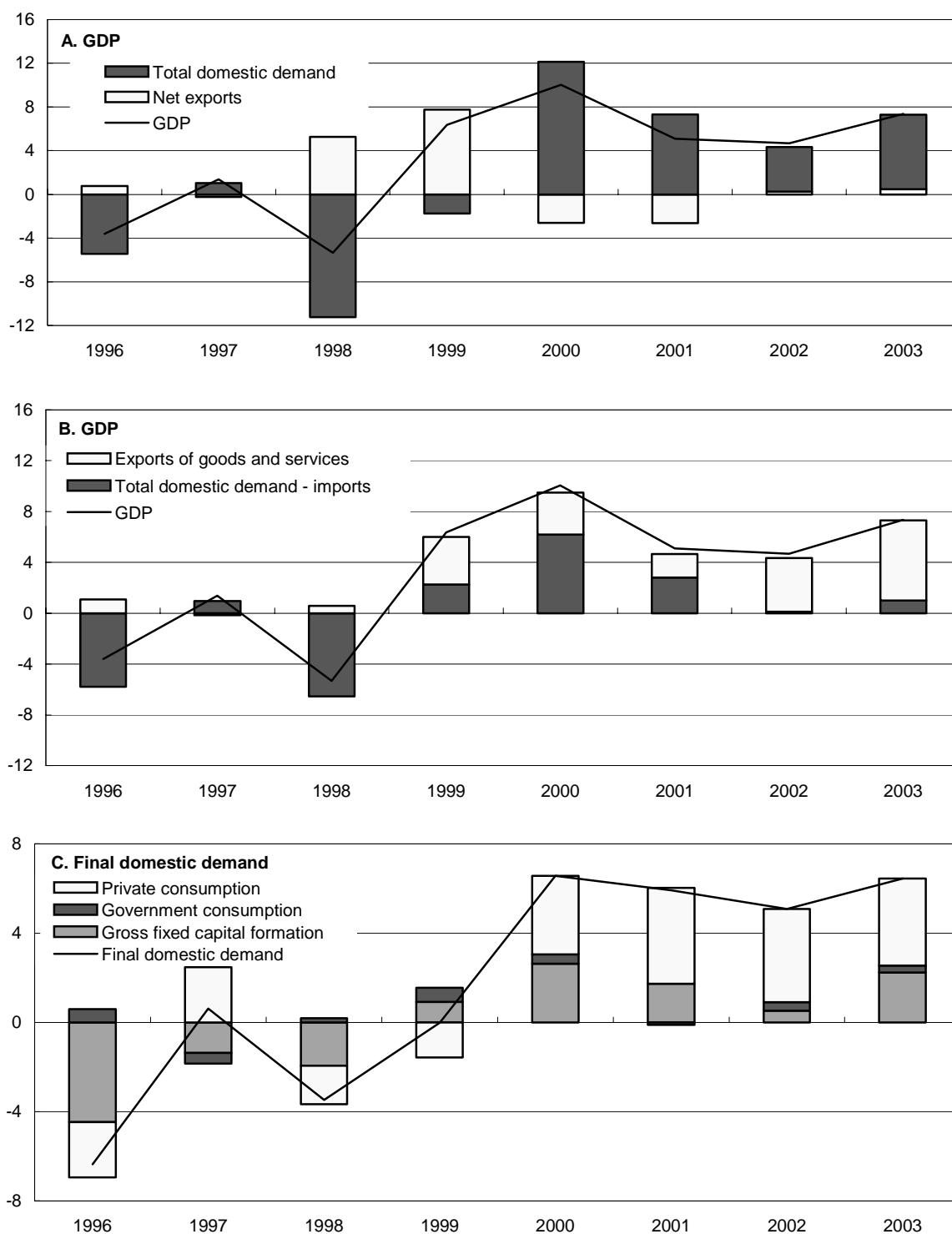
Source: Russian Development Centre (Consensus forecast); OECD Economic Outlook.

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 cent² (Table 1.2). 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 1.1A; for quarterly contributions, see Annex 1.1, Figure 1.A1.1). 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. However, the role of domestic production in satisfying domestic demand has been gradually declining since 1999 (Figure 1.1B), and since mid-2002, increases in domestic demand have been largely satisfied by imports.³ 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.

Figure 1.1. Contributions to GDP growth, expenditure side view
As a percentage of GDP in previous period

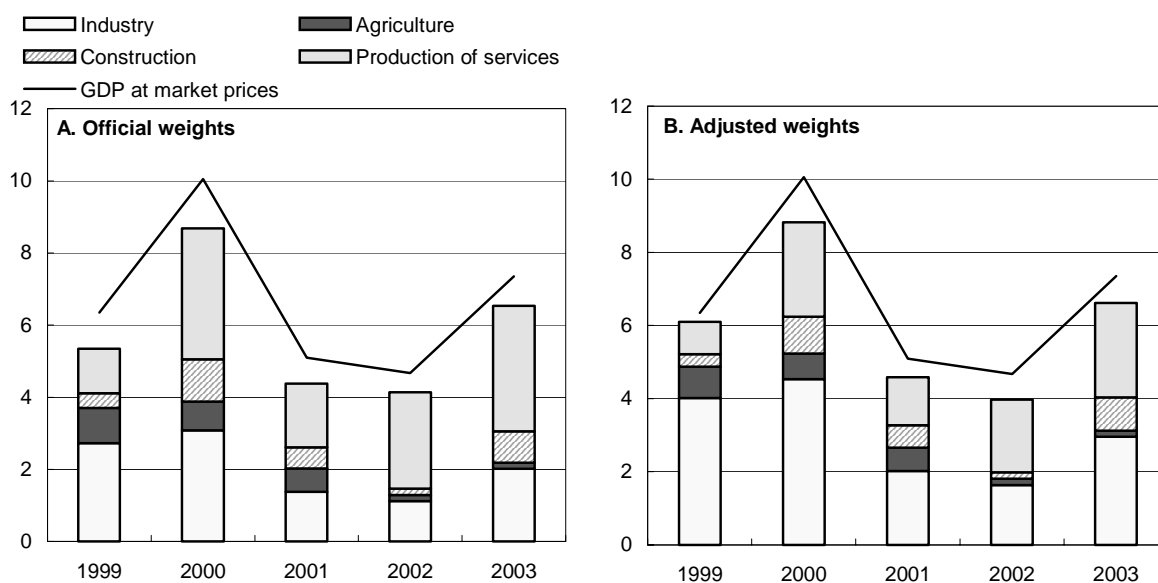


Source : Goskomstat.

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 importance of service-sector growth has been increasing, especially in 2002-03 (Figure 1.2A). 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 1.1). Even on the adjusted weights, services still account for roughly one-third of economic growth in recent years (Figure 1.2B). Within the service sector, both retail trade and catering, as well as communication and transport, have been growing rapidly.⁴

Figure 1.2. Contributions to GDP growth, production side view
As a percentage of GDP in previous period



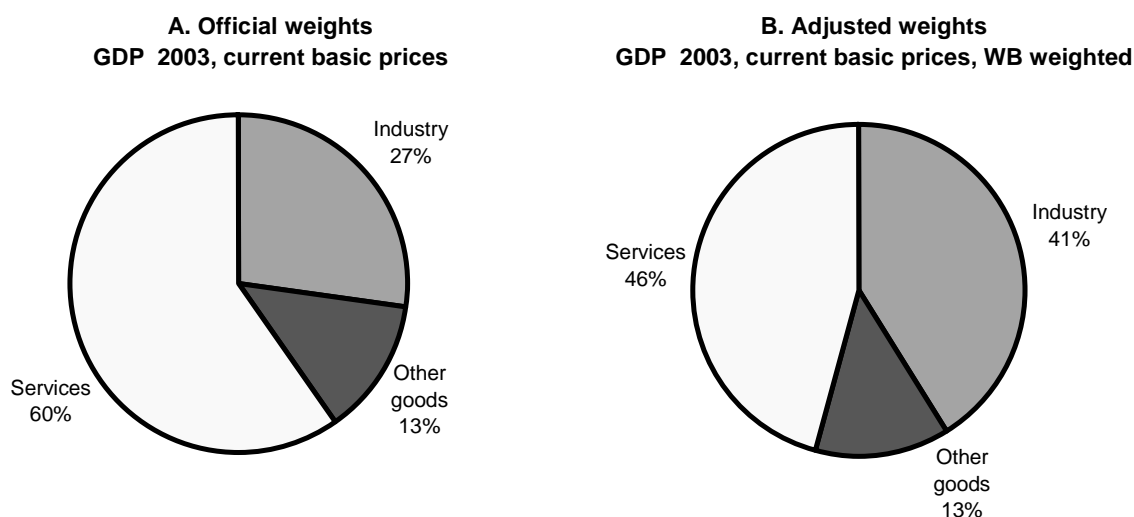
Source : Goskomstat, World Bank and OECD calculations.

Box 1.1. 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 chapter 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 (see Chapter 5 for details on financial sector development). 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 1.3). 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 1.3. Structure of GDP



Source : Goskomstat, World Bank and OECD calculations.

1. Kuboniwa (2003); World Bank (2004b).

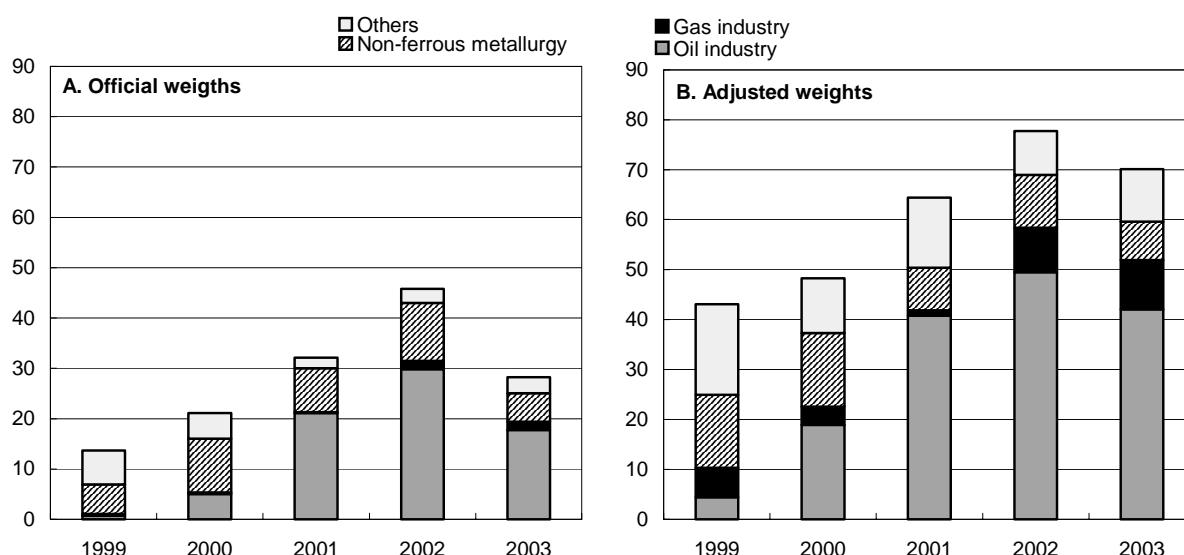
2. These are adjusted sectoral weights based on adjusted sectoral value added in 2000 Russian GDP at basic prices. These adjusted sectoral weights are calculated in World Bank (2004b) using Canadian trade margins.

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 1.1) 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 1.4B). 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.⁵

Figure 1.4. 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 (see Annex 3.1). 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 surveys⁶ show that managers have felt increasing competitive pressure since 2002 not only from imports but also from other Russian enterprises (Table 1.3).⁷ 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 (see Chapter 2). 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 1.3. 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.⁸ Estimates based on macroeconomic models (see Box 1.2) 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 1.4). This would have been approximately one 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 1.4. 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 1.2. 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 modelling¹ 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.

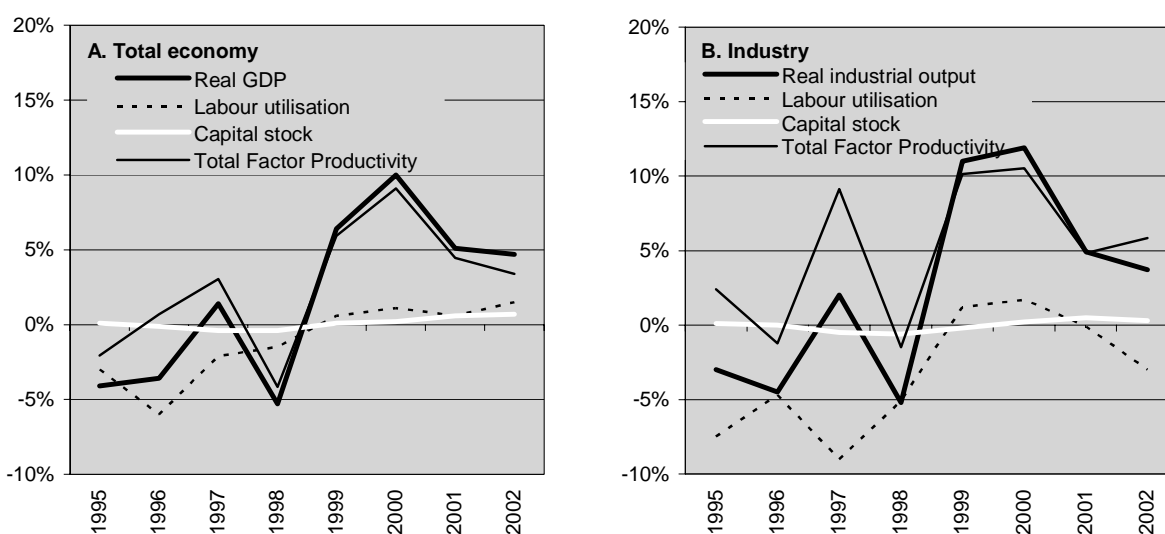
On the supply side, growth has mainly been driven by productivity increases

From a supply side point of view, growth has almost certainly been driven by strong increases in total factor productivity (Box 1.3), 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 (see Chapter 2). 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 1.6 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 (see Chapter 2). Such sectors contributed little to output growth despite significant investment.

Box 1.3. 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 1.5).

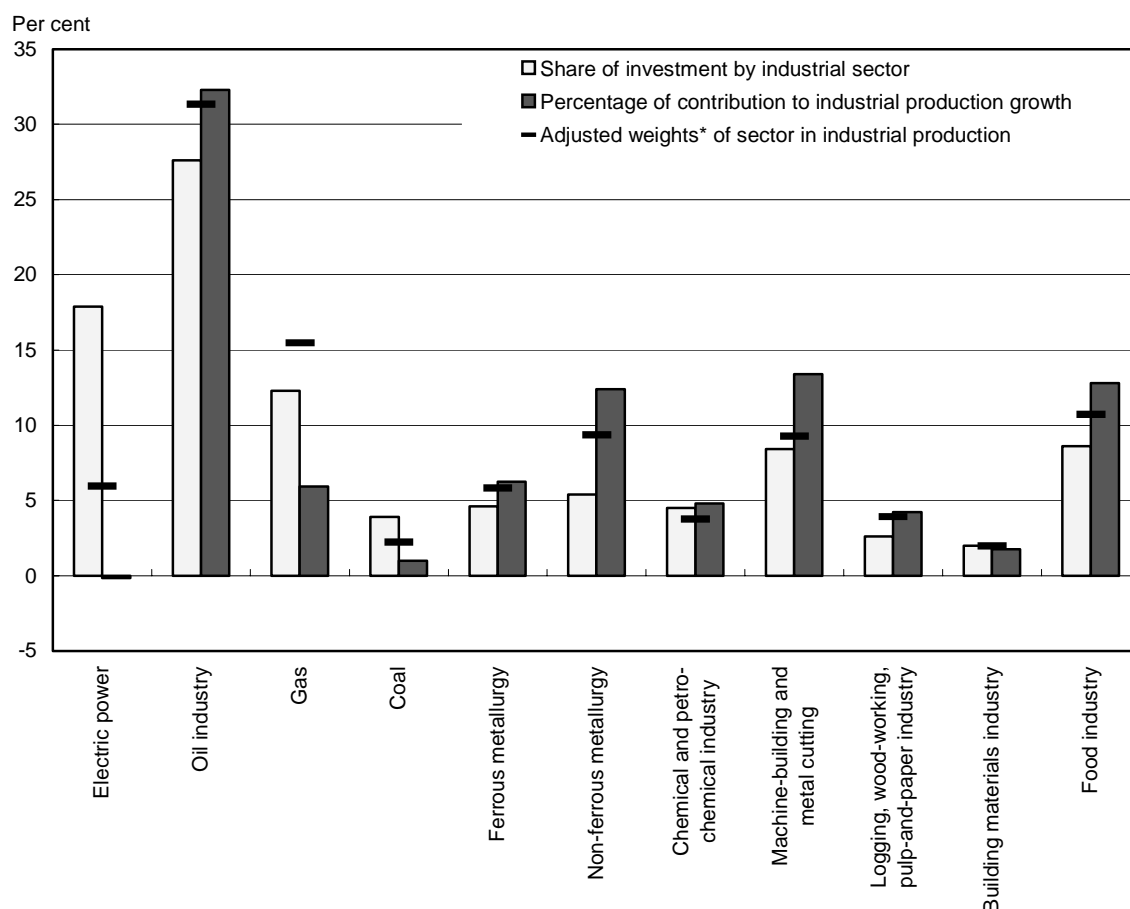
Figure 1.5. Decomposing growth
Percentage growth



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).

**Figure 1.6. Investment share and industrial growth contributions by sector
1997-2003**



* See World Bank, 2004.

Source: Goskomstat, World Bank and OECD calculations.

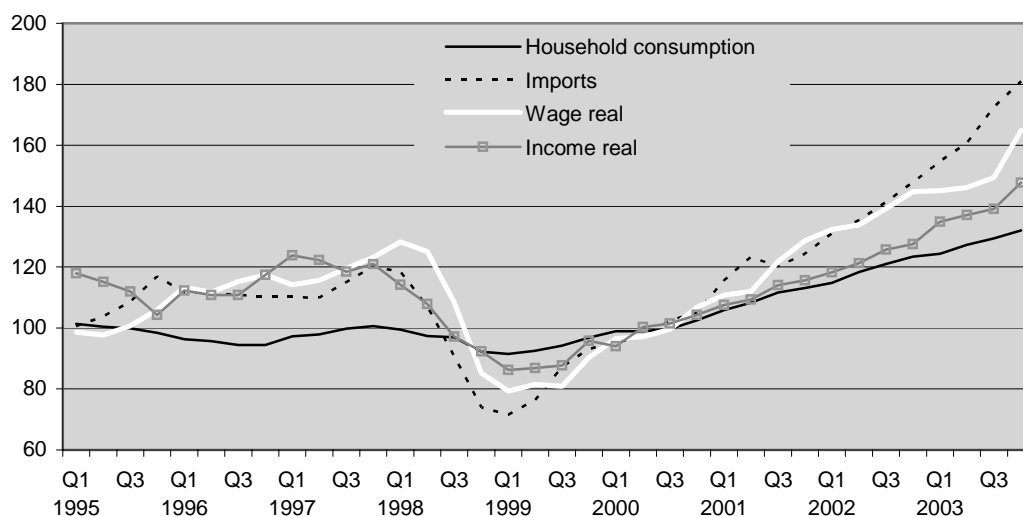
Russia has been able to achieve high growth rates in recent years despite comparatively low investment rates. Investment as share of GDP has been around 18 per cent, which is significantly below the shares found in other fast-growing countries in Eastern Europe or Asia and also well below the OECD average of around 22 per cent (Table 1.A1.2). 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 are 28 per cent above pre-crisis levels.⁹ 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 1.7). 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 1.7. 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.¹⁰ 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 1.5). 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 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 1.4). Such institutional reforms are intended to help entrench fiscally responsible practices.

Table 1.5. 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.¹¹

Tax reform has also played an important role in sustaining the recovery (see Box 1.4 for recent changes).¹² 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 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.

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 levels¹³. This reduction in the spending-to-GDP ratio has coincided with massive reductions in wage and pension arrears, and has not resulted in any substantial deterioration in the provision of public services. This suggests that the creation of a federal treasury, the reform of fiscal federal

relations and the government's overall spending restraint have contributed to more efficient expenditure management. 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 1.7. 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
<i>of which</i> transfers to regions	2.5	1.7	1.4	1.3	1.4	2.6	2.9	2.8
<i>of which</i> 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
<i>of which</i> 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
<i>of which</i> 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
<i>of which:</i>								
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.¹⁴ 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 1.8A). 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 (Table 1.8B).¹⁵ Fiscal discipline has helped reduce spreads on Russian external debt and also helped lower internal real interest rates. 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 1.8). 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 (Chapter 5).

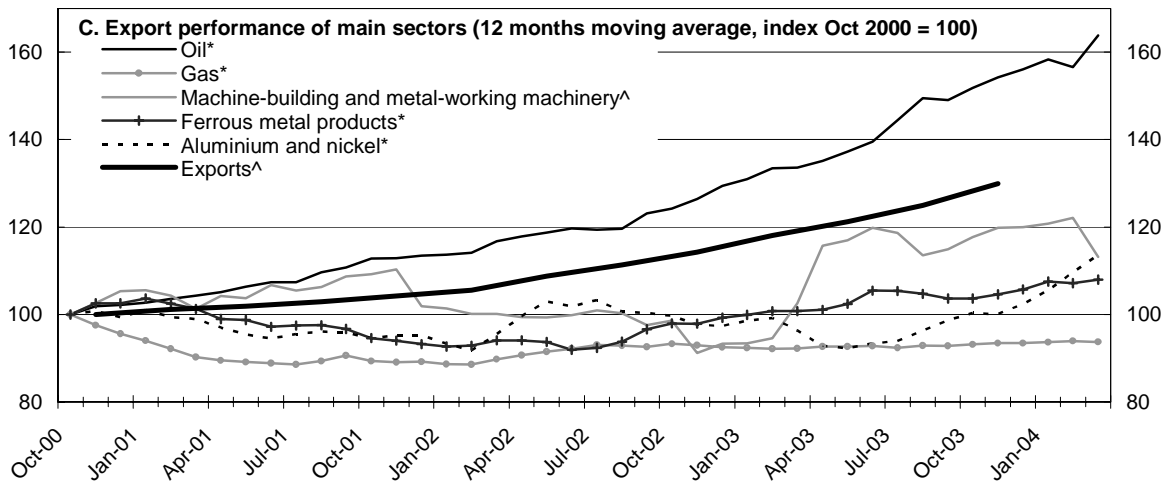
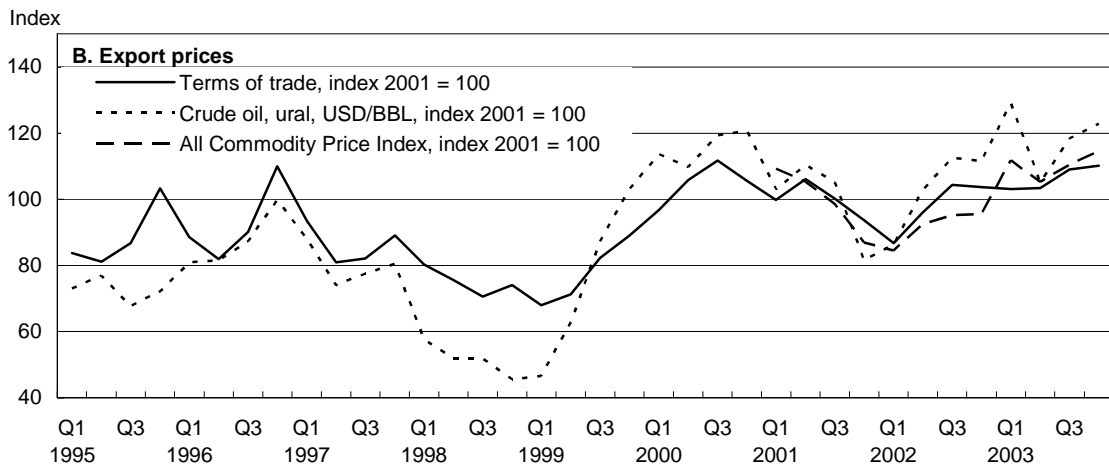
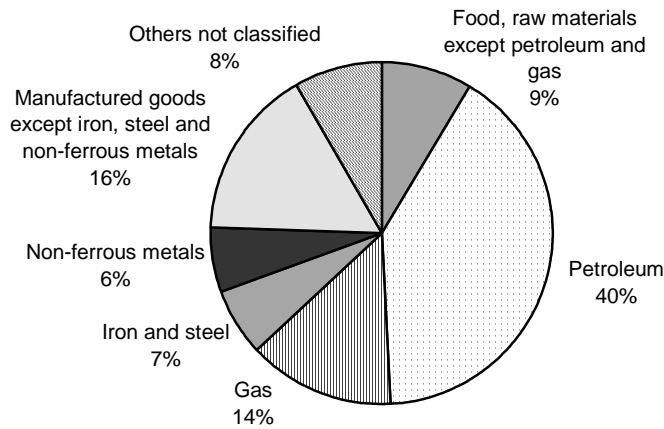
Export growth and favourable terms of trade have generated large current account surpluses

Russia’s export structure is still dominated by commodities and basic manufactures, which account for over three-quarters of exports (see Figure 1.9A). 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 1.9B). 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 1.9C). 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 metals¹⁶, 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,¹⁷ and the export volumes of the gas sector even fell significantly.¹⁸

Given that import volumes increased by an average of 21 per cent per year between 2000 and 2003,¹⁹ 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 1.10). 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.

Figure 1.9. 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.

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 1.9; see also Annex 1.1, Tables 1.A1.3-1.A1.5). 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. 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 1.9. 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	
<i>of which 3 largest</i>	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
<i>of which 3 largest</i>	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
<i>of which 3 largest</i>	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, Renaissance 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-controlled oil companies and of other important state-controlled companies (see Chapters 2, 3 and 4) 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.

1. For an exception to this view, see Ahrend (1999) and Breach (1999).
2. 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.
3. 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.
4. 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.
5. 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.
6. See Tshuklo (2003) and CEFIR (2003).
7. 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 1.A1.1).
8. 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.

9. Averages for the years in question.
10. See Kwon (2003).
11. 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 GKO (OFZ-PD) fell due.
12. For an overview of tax changes in 2000-01 see OECD (2002a)
13. 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.
14. See, *e.g.*, Ahrend (1999).
15. 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 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. Clearly, high oil prices were another major factor.
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.

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